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HIGHER EDUCATION: HANDBOOK OF THEORY AND RESEARCH

Volume XXII

Edited by

JOHN C. SMART

University of Memphis

HIGHER EDUCATION:
Handbook of Theory and Research
Volume XXII

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HIGHER EDUCATION:
Handbook of Theory and Research
Volume XXII

Edited by
John C. Smart
University of Memphis

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TABLE OF CONTENTS

CONTRIBUTORS	VII
1. A CAREER OUT OF CONTROL (MAYBE) James L. Bess <i>New York University</i>	1
2. ACCOUNTABILITY, ASSESSMENT, AND THE SCHOLARSHIP OF "BEST PRACTICE" Alicia C. Dowd and Vincent P. Tong <i>University of Southern California and Gateway Community College</i>	57
3. STRIVING FOR WHAT? EXPLORING THE PURSUIT OF PRESTIGE KerryAnn O'Meara <i>University of Massachusetts Amherst</i>	121
4. 'OUTSIDERS', STUDENT SUBCULTURES, AND THE MASSIFICATION OF HIGHER EDUCATION Richard Flacks and Scott L. Thomas <i>University of California and University of Georgia</i>	181
5. TEACHERS' NONVERBAL BEHAVIOR AND ITS EFFECTS ON STUDENTS Elisha Babad <i>Hebrew University of Jerusalem</i>	219
6. THE PELL PROGRAM AT THIRTY YEARS Bradley R. Curs, Larry D. Singell, Jr. and Glen R. Waddell <i>University of Missouri-Columbia, University of Oregon and University of Oregon</i>	281
7. THE POLITICAL ECONOMY OF REDISTRIBUTION THROUGH HIGHER EDUCATION SUBSIDIES William R. Doyle <i>Peabody College of Vanderbilt University</i>	335

TABLE OF CONTENTS

8. ADJUSTING FOR NONRESPONSE IN SURVEYS	411
Gary R. Pike <i>Indiana University Purdue University Indianapolis</i>	
9. NEOLIBERAL POLICIES AND COMMUNITY COLLEGE FACULTY WORK	451
John S. Levin <i>University of California, Riverside</i>	
10. SIGNALS AND STRATEGIES IN HIRING FACULTY OF COLOR	497
Franklin A. Tuitt, Mary Ann Danowitz Sagaria and Caroline Sotello Viernes Turner <i>University of Denver, University of Denver and Arizona State University</i>	
11. MARKETING SAMENESS: CONSUMERISM, COMMERCIALISM, AND THE STATUS QUO	537
Deron R. Boyles <i>Georgia State University</i>	
CONTENTS OF PREVIOUS VOLUMES	583
SUBJECT INDEX	597
AUTHOR INDEX	601

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1. A CAREER OUT OF CONTROL (MAYBE)

James L. Bess*

Professor Emeritus, New York University

PROPAEDEUTIC

As an academic, I do love big words! In this case, I wanted to begin by explaining my aim in this autobiography and the form it will take. The reader will find a fairly lengthy introduction to my early years, prior to entering the field of higher education because I believe these details will make more understandable the trajectory of my professional career. In turn, I hope to provide a reminder, perhaps gratuitous, that examining one's personal life reveals the unintended impacts of earlier circumstances on later decisions. We, academics especially, like to think we know and understand why we are behaving the way we do, but it is largely in hindsight that we come to understand how and why our lives evolved and whether in toto we were as successful and happy as we might have been. Aristotle, who preceded me by a few years, taught me this lesson. (I've also come to know that some theories of organizational strategy take this same retrospective position – see Hardy, Langley, Mintzberg, & Rose, 2003.)

I should also note that I debated whether to make this autobiography more of an academic exercise. I might have used human development theory, career theory, and organizational theory, for example, to understand better how I got into various personal dilemmas at the places I worked; teaching and learning theory to explain how I conducted my classes; etc., etc. (see Brockmeier & Carbaugh, 2001). But in the end, as I began to write, I found that who I was and am flowed more honestly and directly from a straightforward narrative, modulated by my own feelings and impressions of what was going on as

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it happened. I guess later I may try to figure out what it all means; but to spare the reader, here is the unadulterated “me.” (Well, doubtless biased by how I have come to see “me.”) As for most faculty members, my academic life was divided between the challenges of finding satisfactions inside my department and school and the quite different and separate work and rewards from associating with colleagues around the country and world. As will be seen, I was less successful with the first than the second.

EARLY DAYS AND EDUCATION

It all began in Mount Vernon, New York, a suburb of New York City, where I led a rather unremarkable life in the local school system. I was reasonably successful in high school, but not without great effort. I have a terrible memory and am not a “quick” learner. In those pre-computer days, I spent countless hours making 3 X 5 cards with notes on assigned readings, then more cards with notes on the originals, then a mnemonic with the first letters of the key points of the different cards. Those reminded me of the list of required answers that I was to parrot back on the tests. (I’m sure these learning methods are not unfamiliar to many readers.) I did have an active imagination and a busy non-academic life – different sports (tennis team in high school), orchestra (violin), chess club, and lots of unrequired reading. My tastes were (still are) protean. I love good literature, art, drama, science, music, golf, languages, travel – the whole gamut. I subscribe to the *New York Review of Books*, among quite a few other publications.

My family background is, I believe, particularly relevant to my career in higher education. Neither of my parents earned a college degree. My father and his family emigrated from Ukraine; my mother’s family from Belarus. My father’s family settled in Springfield, Massachusetts, while my mother grew up in Hartford, Connecticut. My father was an extremely creative, smart, charismatic, ambitious, unscrupulous, volatile, and irascible individual. He was also a workaholic. His life in some ways became a negative role model for me, while in other ways, he was inspirational. I learned from him how hard one must work to succeed. As with most sons, I could never quite please him enough. I am the eldest child by six and nine years, with a brother and sister, who had their own ways of dealing with him.

My father’s avenue to success was through trial and error experience, and the medium for measuring his success was money. He

was extremely successful at times, but also periodically a disastrous failure. My way of learning, on the other hand, was – and still is – from books. I would rather interact with the giants of literature than with friends; but that unfortunately prevents me from learning what I really believe by testing my thoughts in public. It also limits the number of friends that I have.

From the time I was quite young, I have been curious about all of life and have striven for “understanding.” Playing with ideas was a perfect way to spend my days. My father, however, never quite understood the academic life or why I chose it and was forever criticizing me for not pursuing a more lucrative career in business. Both parents, I should add, were loving and caring. I felt from the start well protected, secure, and optimistic about the future.

THE UNDERGRADUATE YEARS

From high school in Mount Vernon, I went to Cornell University in 1952. At my father’s urging, I majored in economics for the usual reasons – it would come in handy when I went into business. I was unhappy at Cornell. Even then (maybe not so now), it was a party school. I joined a fraternity, as that seemed by far to be the optimum route to popularity and status. Comparatively few students at Cornell cared seriously about learning. I, on the other hand, audited a number of courses. For example, I did not believe I should graduate from college without having had a course in American history. I debated switching to a smaller school where the learning atmosphere would be taken more seriously. But the disruption and change seemed too daunting, and I decided, partly out of inertia, I suppose, to stick it out. In hindsight, I received a pretty good education at Cornell, studying literature with Nabokov, for example, which set me up for life of reading and appreciating good books. I also had some wonderful art and philosophy courses whose content and messages to this day guide my life.

Cornell and the fraternity experience were disappointing. (I am only now learning how to enjoy good scotch!). I had to work as a waiter and dishwasher to help my parents with expenses (my college years were years of financial failure for my father). My social life suffered, as I did not have a car, which would have enabled me to find lady friends at nearby colleges. I was somewhat socially introverted (which evolved into what some have called anti-social dispositions later in academic life) and could not compete with upperclassmen for the local

freshmen and sophomore women at Cornell. I did become president of my fraternity in my senior year, an activity that was to provide me with many insights about leadership, a subject I will address below.

MILITARY SERVICE

I applied to Harvard Business School in my senior year at Cornell, but was told that they could not accept me without more business experience. Since while at Cornell I had been a member of ROTC, I elected to serve as an officer in the Army for two years (with limited reserve duty afterward) immediately following graduation – another leadership experience at which I think I failed, but from which I learned much. I was in an artillery guided missile unit for which I was given scientific and technical training at Fort Bliss, Texas (my economics background at Cornell to the contrary notwithstanding). We were being readied to detect Russian missiles that might fly over the North Pole on their way to attacking the United States. I studied very hard, but learned only that our missiles were incapable of intercepting anything going faster than the speediest United Airlines propeller-driven planes, and then only when we knew their exact flight path. Moreover, even if we knew where they were, our missiles were shown to be defective when tested on the range.

Though I had assured the Army that I spoke French fluently (an exaggeration of my Cornell learning) and would be pleased to serve in France, I spent most of my military life near Youngstown, Ohio, where French toast was the closest I got to foreign fare. Near Youngstown was an Air Force radar station in Sharon, Pennsylvania with an associated squadron of Air Force fighter planes ready to take off when danger approached. This was in the early 1950's, when the cold war was real. I was sent to Sharon to be an Army liaison officer, passing information that the Air Force radars detected to six Nike missile batteries surrounding Cleveland. I had eight enlisted men under my command, as did my two fellow officers, a staffing complement that allowed 24/7 coverage. The enlisted men monitored a computer screen with blips indicating aircraft in the area, but essentially, they watched the Air Force trackers who, with earphones and felt-tip pens, traced commercial and military plane flight paths on a huge (room-size) plexiglass screen at the front of the room. When the Air Force saw fit to designate an "unknown" plane as a potential enemy, they alerted we Army people, and we, in turn, alerted the Cleveland NIKE

missile batteries. There were occasions when Canadian geese stimulated alerts that caused the fighter planes to scramble and the local Army, thousands of them, to prepare all of the missiles for launching. This usually happened at 2:00 a.m. in the morning.

Of special significance to my education (and later teaching and research) was the way that I tried to lead my “troops” – all eight of them. Taking a cue from my father, who was distrustful of everyone, I made sure that I watched and supervised them “by the book.” My inspections were with white gloves. My men hated me. What frustrated me, moreover, was that one fellow officer rarely oversaw his contingent of enlisted men. Yet they performed much more conscientiously and at higher quality. I just could not understand how he could leave them unobserved, unsupervised, and undisciplined. It was not until later in graduate school that I understood (at least somewhat better) who I was, what my beliefs about human nature were, and what my philosophy of leadership was then – and is now.

Two events in my Army time were especially significant. One was that I was “fired” from my post for (allegedly) being too aggressive in personally securing better radar equipment than the Air Force controllers themselves had. In point of fact, I was a good “scrounger,” but what precipitated my dismissal was something else. I lived on the base in Sharon at a BOQ (Bachelor Officers Quarters) at which one day a theft of money occurred. I entered the BOQ one afternoon and asked if the “strawberries” had been found. It seemed that the base commander had initiated a thorough investigation of the theft, calling in the Inspector General of the Air Force. The mode of examination resembled that of the *Caine Mutiny*’s Captain Queeg, a fictitious character on a naval vessel. Queeg was an obsessive-compulsive, and the Sharon commander interpreted my remarks as comparing him to Queeg. The Air Force commander called my own Army commander in Cleveland and asked that I be reassigned because I was, he claimed, too aggressive on behalf of the Army unit. My commander immediately telephoned me with sincere congratulations (for beating out the Air Force) and told me he was recalling me to Cleveland. In this particular case, my indiscrete and ill-timed outspokenness at the BOQ was not a cause for punishment, but it is indicative of a way of behaving that has gotten me in trouble throughout my academic career.

The second important event for me in Youngstown was my decision to enroll in non-credit evening courses at Youngstown University, my first non-required post-graduate formal learning

adventure. It was there that I bought my first “serious” dictionary, and it was then that I knew that education was something that I needed to pursue diligently for all of my life.

GRADUATE BUSINESS SCHOOL

Toward the end of my two-year stint in the Army, I reapplied to the Harvard Business School and this time was admitted – presumably because of my work experience. The first year at HBS was extremely stressful, in part because the admissions standards were so high that the class was composed of genius types, many with executive experience in the business world. I was quite intimidated. No grades were given out until the end of the year, so it was difficult to get a fix on how well one was doing. We went to school five and half days a week (Monday through Saturday), and on each day were required to be able to make a presentation – or respond to one – in each of three classes about the business case we had been assigned for that class. The cases sometimes were hundreds of pages long, including exhibits with data. We organized ourselves into study groups of five or six persons each and at roughly 11:00 p.m. nightly assembled to discuss our interpretations of the cases. In class the next day, we were asked to make contributions and so had to be thoroughly prepared. We were evaluated by the instructor on our participation and its quality. As I noted at the outset of this piece, I was not (am not) a quick learner, so suffered through many anxious classes and examinations. I did manage to finish somewhere in the middle rank of the class of 5–600 students in the first year, so the second year was somewhat less anxiety producing. Equally important, my self-confidence was enhanced somewhat, and I realized that slow and steady may, in fact, be sufficient for success. At this point, however, I didn’t know what success meant for me.

One other fortuitous event for me occurred between my two years at HBS. An executive (maybe the president – I forget) at Swissair in Zurich, Switzerland whose nephew was one of my fellow students, invited Harvard to send six students to work for Swissair for the summer of 1959. The idea was that Swissair would benefit from the latest management techniques being touted by Harvard. We six were split up across six departments, then rotated half-way through the summer. Swissair flew us over (at no cost, of course, when there was an empty seat), then paid us essentially a secretarial wage. I lived in a pension, studied and learned enough German (high German, not Swiss-German) to get around, and found myself exposed at work and play

to an entirely new culture. Indeed, we were permitted each weekend to fly (again at no cost in an unreserved seat) to any of the regularly scheduled Swissair destinations. As a result, I traveled throughout Europe to virtually all of the capitals. I also spent time during and after the summer traveling by train in Switzerland itself. This adventure was the beginning of my interest in and (partial) understanding of international affairs and led me later to comparative higher education. (I also played a lot of noon-time tennis!)

THE FIRST “REAL” JOB

Though Harvard’s Business School’s second year students were deluged with recruiters from the most prestigious large corporations in the world, I was not particularly interested in working as a corporate executive for just any business firm, regardless of employment inducements. I had decided that given my interest in literature and books, I would enjoy working in publishing. Fortunately, I received a job offer at what was then called Harper & Brothers publishers – also publisher of *Harper’s Magazine*. Before starting at Harper’s, I had visions of having fascinating interactions with writers and editors and considerable involvement in planning and management. My official title at first was Assistant to the Treasurer, then later Assistant to the Executive Vice President. Compared with my former compatriots at Harvard, I started at a relatively low salary – but, after all, I would be doing what really interested me. Alas, the best laid plans... My first office – small and windowless, but with a bright blue rug (for status!) – was in the accounting division. I was surrounded by accountants and bookkeepers – who were most gracious and helpful – but my primary initial role was keeping track of the expense account reports of traveling salesmen. From time to time, I was permitted to sit in on strategy meetings with my boss, but all of Harvard’s promises that I would be a key executive within months of my arrival were unkept. I did manage, however, to make myself known to the Executive Vice President, who eventually made me his assistant and gave me entree into somewhat more interesting tasks. For about three months, I became acting personnel director for the Harper’s, which afforded me some good insights into personnel policy, among other things.

One incident in particular was critical. I was asked to recruit a secretary for the College Text Division. That Division, however, had never hired an African American person, and I was advised that it would be futile to send African-American candidates to them.

I persisted, nevertheless, waiting for a candidate whose qualifications they could not possibly reject. When I found one, I so informed the Division that I would be sending this person to them for consideration. It caused a great deal of consternation throughout the company. Unfortunately, the candidate I had selected found another job, and I never had an opportunity to pursue the issue again, as the company hired a permanent personnel director. What was significant for me, however, was the reaction of the top executives at Harper's when I informed them that I myself planned to move on to another field and organization. I was interviewed by the president and many of his staff who asked me to stay on – probably at least in part because of the personnel issue. Harper's soon became Harper & Row, after it merged with Row, Peterson, a publisher of elementary and secondary education books. Harper's offered me an opportunity to learn the production side of the business by moving me to Pennsylvania (or was it Ohio?) to their fulfillment plant. I declined on several grounds. First, I knew that "out-of-sight," out of mind would make me invisible to the top management of the company. Second, as a bachelor, I had no wish to leave New York City. Third, and perhaps most important, I had come to realize that big business management was not the field that I wanted to make a career of. (Harper and Row and its subsequent corporate incarnations were eventually absorbed by an international conglomerate in England. Had I stayed with them, I might now be rich and enjoying the London theater scene – but without ASHE!)

MOVING INTO HIGHER EDUCATION

I began to look for jobs in education and found one at New York University's School of Continuing Education, at that time, along with UCLA, the most innovative school in the area of non-credit course offerings. Its dean was Paul McGhee, the nationally acknowledged progenitor of the new wave of continuing education in the 1960's and assisted by Milton Stern, who revolutionized the modes of promoting adult education courses in California. I was hired partly because of my background, but mostly because I informed them that I had been taking non-credit courses for the last three years just for my own edification. I remember with pleasure one literature course with Alfred Kazin at the New School for Social Research and another in sixteenth century counterpoint music theory, for which I bought a second-hand upright piano to hear what I was composing. (I didn't and don't play the piano,

so getting my fingers in the right places to play chords sequentially made for some slow and difficult homework). But I loved it and learned a lot about harmony and counterpoint. It's an area for metaphorical use in the organization and administration of colleges and universities that I have never fully explored (though I know of research using the musical idiom in other organizational settings).

I began at NYU with the unassuming title of "Program Associate" in a tiny division called, "Liberal Arts in Extension." The aim of this division was to provide non-credit liberal arts courses to sixty or so communities in the New York metropolitan area outside of New York City – namely, Westchester County, Nassau and Suffolk Counties on Long Island, and (mostly) Bergen County in New Jersey. I had four regional coordinators reporting to me. They identified the markets for course offerings, located the sites for the classes, promoted them locally, did the on-site registrations, and handled other administrative details. They worked with great fervor and imagination and, with my everlasting thanks, extraordinary skill and efficiency. My own role was curriculum design, faculty recruitment, and direct mail promotion (as well as more important tasks such as ordering books and packing them up in boxes to be shipped to the site locations for sale to the students). Our offices were on the fourth floor of an NYU walk-up, and I credit NYU with keeping me in good shape in those years as I lugged heavy boxes of books up and down the stairs. My bosses were, for better or worse, from my perspective relatively unengaged with this particular program and let me do virtually whatever I felt was educationally sound. I learned how to design a course catalog and how to get the word out to prospective students.

The curriculum design work was enlightening, to say the least. Not only did I have to become more knowledgeable about virtually all subject matters in the liberal arts, but, since many of the arts, music and drama courses involved having students travel to New York City to see current exhibits, concerts, and plays, I had to become acquainted with the fantastic cultural opportunities and amenities of the City in order better to integrate the visits into the course syllabi. Recruiting and hiring (and sometimes firing) faculty was also enlightening (for me), as I learned how to evaluate credentials and to match them with the curriculum and student body types. We often had faculty with Ph.D.'s whose initial proposals for these non-credit courses would have scared me as a prospective student in a graduate level course. Other faculty were practitioners – e.g., up-and-coming painters and sculptors

(some now quite famous) – who knew relatively little about how to teach what they so skillfully did professionally. I also organized (and attended) weekend workshops off campus.

THE BIGGER PICTURE

Despite the wonderful learning opportunities at NYU – oh, by the way, I also earned a second Master's degree at night, this time in the Social Foundations of Education – I realized that I was part of what at that time was a relatively small, segment of higher education – continuing education – though it was a cash cow for the University. I was not, however, getting experience at or learning about running a large institution of higher education – something that my Harvard Business School education made me think I might do reasonably well. I began searching for upper-level opportunities at other institutions and, after a short while, heard of an opening back at Cornell, my alma mater. It was as Assistant to the President. The post description was advertised in very general terms, but I took it to mean that when the President was away, I would be in a position to make important decisions. (I guess I didn't learn too much at Harvard Business School!) More seriously, I knew that I would be exposed to the problems of higher education that were faced by top executives, especially at an Ivy League school.

I applied for the position, even though the pay was less than what I was earning at NYU – which wasn't very much anyway. I was flown up to Cornell by the Director of Personnel for an interview with the then President, James A. Perkins. I realize now that the low salary meant they were looking for someone with lesser qualifications than I had, so I had something of a competitive advantage over others applying for the job. Perkins liked me and told the personnel director to hire me. When the latter called, I told him I could not/would not come for the advertised salary. I had to receive at least what I was earning at NYU. They conceded, and I proceeded up to Cornell in June of 1965. I took with me in a U-Haul all of my possessions, sans piano, plus the motor scooter that I owned and used in New York City.

I arrived in time to enroll in two summer courses whose credits I needed to finish my Master's degree at NYU. The president was away that summer, and I very much enjoyed sitting out on the quad under a tree in the delightful Ithaca summer, learning about political science. My first real contact with the President was via a somewhat angry telephone call from him at La Guardia airport asking me why I

hadn't sent the Cornell airplane to meet him. It was then that I realized why the job called for a relatively low salary. The duties were to be commensurate with the salary. I quickly arranged to rent a Lear jet for him – which, it turned out was the standard practice in a contract he had made with the Cornell Board of Trustees. The Cornell plane was an old C-47 used to transport the basketball team, but the president used it whenever it was available.

Despite the lowly duties I was usually required to perform, the job did present the overview of higher education that I was looking for. I read and sorted all of the President's mail and handled as much of it as I could. This kind of access to the nitty-gritty of the presidential role was most helpful in my later research. I did also have an opportunity to attend all of the presidential staff meetings. I took on the responsibility of preparing minutes of the meetings and included with the minutes for each member of the president's team the work assignments that emerged from the discussions of the meetings. This task required careful attention to the exchanges and a conscious effort to try to understand the policy differences among the staff. The latter, by the way, comprised an extraordinary crew. There were many who had been leaders of the government's various scientific agencies (e.g., NASA) and still had connections in Washington that were beneficial to Cornell. At least half of the staff eventually went on to become college presidents themselves – at Johns Hopkins, the University of Rochester, and many others. I was also privileged to attend all of the trustee meetings (except for the executive committee meetings), which gave me access to the interactions between President and Board and to the unmitigated use of specially selected data and of flattery by the President to induce or enhance the Board's support of him. I mention this not as an indictment of President Perkins in particular. That was the way that power worked in those days and for the most part still today – though it need not have.

I think it is fair to say that Perkins was largely an absentee president, spending much time away from the campus (for which he was much criticized by faculty and students). He was formerly the Vice President of the Carnegie Corporation and had many influential friends throughout the country and around the world with whom he continued to work on various charitable and educational projects. He could, and did, call his friend, the President of Carnegie, to ask for funds to ferry his international educational colleagues to a "conference" on higher education – more, as I recall, a general discussion of contemporary issues. He then called another friend at the Rockefeller

Foundation and asked if they would provide the Villa Serbelloni on Lake Como in Bellagio, Italy as a conference site – which, of course, they did.

Perkins' presidential style left his staff with great responsibility, but frequently without firm leadership and planning. When he returned from trips, he would ask his staff at meetings what the current problems were. He would then lead a discussion of possible solutions and would make an informed "executive" decision. From Perkins, then, I learned about one style of leadership. One could argue, of course, that his brilliant staff decided what problems to bring to him and were themselves orchestrating his leadership style. But I think not.

I should make note of the fact that from 1965–1967, my tenure at Cornell, the national student protest movement was inchoate or starting its momentum toward becoming a powerful influence on higher education. The protests at UC-Berkeley which became known later as the free speech movement began for the most part in 1964 when students began using campuses as a locus for demonstrations against the Vietnam war. At Cornell, students could be found either "sitting in" the President's outer lobby or locked out of it. There were many days when I had to step over bodies to get to my office. Discussions about how to deal with the protestors – in terms of long-term institutional policy as well as practically in response to their physical presence and insistent demands – occupied the President's staff frequently. We learned, for instance, that students were planning to parade around the football field before an alumni weekend game with Princeton armed with banners against the war. Was that a legitimate use of University property? What would our loyal (and wealthy) alumni think? In another case, after I left Cornell, students carried loaded guns into (and later out of) the student union, a case that was covered copiously by the media. How should this crisis be handled? I wrote a case study, published by the University Council on Educational Administration, describing some of the issues I encountered at Cornell (Bess, 1978). But, in truth, in hindsight, I must confess to not being fully engaged philosophically with either the war or the related higher education issues. My perspective was framed by the immediate "management" problems with which Cornell's executive staff was confronted. I am still not quite sure how I might have been more instrumental at least in clarifying issues for Perkins and his staff. I suppose, since I was closer in age to the students who were protesting, I might have made it my business to understand their perspectives which might then have been used to "teach" the older generation (Mead, 1978).

Another incident at Cornell poignantly taught me another lesson about leadership. In 1964, a terrible fire destroyed one of the dormitories in the middle of the night. Many students were killed. The President was away at the time, and the provost, Dale Corson (later himself a president of Cornell) had to deal with the extremely sensitive relationships with parents of deceased students as well as with the extensive negative publicity that surrounded the incident. I told myself at the time that if I were ever to become an executive of a college or university, my very first task would be to ensure the safety and security of the campus. Nothing else matters if this effort fails. In my teachings about organizational theory later, I found theories supporting this view and could and did illustrate their utility with this heart-rending example from Cornell.

At the end of my first year at Cornell, the President hired an “executive” Assistant to the President, a woman (twenty years my senior) with considerable experience at the executive staff level and someone whose social skills would permit the president to use her in ways that he could not use me. I found myself with relatively little to do. I spent much time, at my own choice, critiquing the president’s numerous commencement addresses delivered around the country which he had planned to publish. In fact, the speeches were never published as such, but much of the wisdom in them appears in his *The University in Transition* (1966). I also enrolled part-time in Cornell’s School of Education, where I took a philosophy seminar with D. Bob Gowin who led me in great depth through Plato’s *The Republic* and later let me do an independent study of Marshall McLuhan’s theories which were “hot” (sic) at that time. The School also allowed me to take courses in organization and administration at Cornell’s business school. That gave me my first introduction to empirical research and gave me immediate feedback about how little I knew. With the great help of the then Editor of the *Administrative Science Quarterly*, Tom Lodahl, we co-authored my first article, “Career Patterns and Satisfaction in University Middle Management” (1969), which was published in the *Educational Record* after I had left Cornell.

I should say, finally, that at Cornell, I met and had many an intellectual colloquy with an extraordinary co-student, Bob Silverman, who subsequently became not only a lifelong friend, but a professional colleague, and in many respects, one of my greatest teachers. His eminent service as editor of *The Journal of Higher Education* made him a mentor to some of the greatest minds in our field (as well as the rest of us!). So, we benefited enormously in primary and secondary ways.

MORE FORMAL EDUCATION

In 1967, having been exposed to higher education as an administrator at NYU and as Assistant to the President at Cornell, it became obvious to me that if I wanted to move up to more responsible positions, I would need the credential of the Ph.D. and the more systematic and organized knowledge of higher education that goes with it. Accordingly, I applied to the doctoral program at the University of California at Berkeley and was accepted in the higher education program in the School of Education. In September, I drove out, again trailed by a U-Haul with my motor scooter and all of my belongings in it.

It turns out that it was a particularly fortuitous time to be entering the program. Not only was the program faculty outstanding, but Clark Kerr had just established the Center for Research and Development in Higher Education, funded by large grants from the U.S. Department of Education. The program faculty comprised among others Paul Heist, the humanistic and wise overseer of the curriculum concerning students, Leland Medsker, former college president and long-time and highly respected expert in community college affairs and higher education planning, Dale Tillery, whose field was the community college, Joseph Axelrod, a particularly genial curricular genius whose work on teaching in higher education was extraordinarily insightful, and T. R. McConnell, himself a former chancellor at the University of Buffalo and the author of countless insightful books and articles on the organization and administration of colleges and universities. McConnell directed the Center, which had numerous associated erudite luminaries including Bud Hodgkinson, Burton Clark, Robert Berdahl, Martin Trow, Pat Cross, Warren Bryan Martin, and Jerry Gaff, many of whom had close affiliations with Berkeley's program in higher education, if only through their being accessible to students like me who sought them out for dissertation advice. Only Hodgkinson, Martin and Gaff played tennis with me, but I didn't hold the others at fault for their athletic indifference.

Joining the faculty that same fall was Lyman Glenny, who came from being the executive director of the Illinois Board of Higher Education and whose area of expertise was statewide coordination of higher education. He had participated in the study of Nebraska's higher education system and in the master plan for Illinois. His book, *Autonomy of Public Colleges: The Challenge of Coordination*, published in 1959, was an eye opener for most of the academic community.

As I pursued my graduate studies in the program, I soon realized that my own interests lay in the internal organization and dynamics of colleges and universities. I was offered a position as a research assistant to T. R. McConnell who, in addition to his other administrative duties, was conducting a research study of the sources and uses of authority in colleges and universities. It happened, however, that McConnell also had the services of another graduate student, one year ahead of me, Kenneth Mortimer, with whom McConnell ultimately co-authored the now classic *Sharing Authority Effectively* (1978). While McConnell had wanted me to work with Ken on the study, it was clear to me that the study was well under way and that my own participation would have been limited, in part at least because I was just beginning my own studies. Instead, I worked with McConnell on a number of his other projects, especially doing research for speeches on professional education that he made around the country. For example, I spent countless hours collecting information about social work education and writing a draft of a speech. I don't think McConnell used much if any of it, but from my perspective, just experiencing his thinking processes and organizing skills was of considerable value.

I proceeded through the academic program at Berkeley, enjoying it immensely and learning at a prodigious rate, not only content, but the norms and values of the publishing field. In fact, with another student, I published my second article (Bess & Bilorusky, 1970). Its origins were in the Berkeley student culture, which at that time was aflame with student activism. One of my most vivid memories of life at Berkeley was the diurnal overhead hum of police helicopters as I left my house in the morning – said helicopters observing and reporting the aggregations of students who might cause disturbances later. The School of Education at Berkeley, however, was on the north side of the campus and relatively tranquil – as were its students, compared with the activists in the social sciences near Sather Gate. Again, I must confess to a lack of involvement with the issues and the “movement.” We education students had only occasional encounters with tear gas. I did learn, by the way, that while I thought I was a “liberal” when I was working at NYU, when I arrived at Berkeley, I discovered that in that culture, I was something else. Uncertainty or ambivalence about any topic was deemed unacceptable – indeed almost immoral – among Berkeley students. One had to be unequivocally for or against. I envied those who could be so certain of the validity of their ideas all of the time, but I couldn't bring myself not to question their or my own beliefs. Indeed, my Socratic style of questioning (well, I've put myself

in a bit too elite a scholarly category!) still causes offense to many people. Nobody likes to be asked to defend a shaky belief that is alleged to be definitive. Socrates, by the way, was often quite sarcastic in his queries, and I'm afraid I share that proclivity, though I try not to.

I should reveal that though graduate education was edifying, I very nearly didn't make it through. At Berkeley, one must submit to the usual oral examination at the conclusion of coursework. Part of the assignment for the exam was the submission by the student of three questions on which he or she chose to be examined – by a panel of five faculty (four from outside of the department). In my naiveté, I thought to myself, what a wonderful opportunity to discuss intriguing topics with a group of internationally known and respected scholars topics in which I am interested. I chose tough subjects about which I had a number of questions. One area was “the structure of knowledge” (involving Aristotle, Kant, Plato, Sapir-Whorf, Ausubel, Bruner, Comte, Bell, Schwab, Phenix, and the like), “transitional authority” (many organizational theories to study in this category) and John Dewey's philosophy, a subject that I had long admired and studied. When, however, during the exam, I was asked by one of the examiners, the Associate Dean of the School, James Jarrett, a Dewey expert himself, what Dewey meant by “warrantable knowledge” – a very basic concept in Dewey's theories, I could not provide the answer. I failed the oral, to my considerable embarrassment, not to speak of fear of a career end. Fortunately, the School permitted a re-examination, which I did pass, thanks in part to the kindness of the Associate Dean who in private tutorials guided me through the areas of Dewey's philosophy of which I was ignorant. I'm sure my chair, Lyman Glenny, was also instrumental in persuading the others to give me another chance. The moral of the story: in matters of professional life or death, choose your battlefield well, have your weapons at the ready, and know your “enemy.”

While McConnell's background as a psychologist and an organizational theorist would have made him the logical choice as chair of my dissertation committee, his other commitments prohibited him from taking me on. Instead, I signed on with Lyman Glenny as chair, even though I had little interest in statewide coordination. A second member was Leland Medsker and a third was noted organizational scholar, Raymond Miles, from the School of Business at Berkeley. Glenny, to his credit, recognized his own limited scholarly knowledge (at that time) of internal organizational theory, and left to me and Ray Miles the development of a dissertation proposal.

The proposal and final dissertation name – I spell it out here because its subject matter is what occupied me as a scholar (and person) for the rest of my career – is: “Patterns of Satisfaction of Organizational Prerequisites and Personal Needs in University Departments of High and Low Quality.” I published excerpts from the dissertation in an article in *Sociology of Education* in 1973. The basic question (very basic!) I was addressing was whether it is possible to create organizations whose structure, culture, and leadership permit individuals to pursue their own personal interests and satisfactions while at the same time meeting the organization’s needs. The dissertation integrated the conceptual frameworks of Talcott Parsons (on the nomothetic or organizational side) and Abraham Maslow (on the idiographic or individual side). I still think that the individual and organization integration is possible (see Argyris, 1964), but as my father often told me, I never had to meet a payroll.

Doing the research for the dissertation was a joy. I lived for much of the time in a small cottage behind what is now the Chez Panisse restaurant in Berkeley. My study overlooked a small garden. My books surrounded me. It was quiet. I could walk to classes and the library, where I spent a great deal of time. I also taught for a semester or two at San Francisco State across the Bay. My research was an empirical study that involved both the collection and computer-assisted manipulation of data. In those days, we used IBM punched cards – thousands of them – which contained both the data analysis programs as well as the data themselves. The turnaround time between submission of jobs and retrieval of results at Berkeley’s computer center was at least 24 hours. One mistaken key stroke in the program we wrote (e.g., a period instead of a comma) meant the loss of a whole day; one dropped box of cards, at least a week. My motor scooter was of incalculable benefit as, using Bungi cords, I strapped onto the rack in back of the scooter seats many boxes of IBM cards (always with duplicates at home at the ready). And I was able to find a parking space!

Berkeley was also notable for another important reason. It was there that I met the lady who was to become a year later my wife of 35 years (as of 2006), then Nancy Moore. She had several claims on me in Berkeley. First, of all, I fell in love with her, *of course*. But in addition, her apartment was closer to campus than mine, and, also relevant, after working at the Educational Psychology library, she became the research librarian for Clark Kerr’s Carnegie Commission on Higher Education. In that capacity, she was responsible for securing many of the academic resources that Kerr and his colleague, Virginia Smith,

needed for their own research. Hence, she (Nancy) was the recipient, mostly through her own sleuthing, of both the latest research findings in higher education, as well as some of the most abstruse and recondite reports. She now claims (in jest, I hope!) that I married her for her willingness to pass on these materials to me, a mere graduate student.

ARE MY NEW SKILLS MARKETABLE?

It took me about three and a half years to do my doctoral work at Berkeley. In the fall of 1970, I began my search for a position in higher education. In hindsight, I see that I really was unsure what kind of work I wanted to do. I still harbored ambitions ultimately to become a college president and hence scoured the usual job opening announcements for position openings that might represent both interesting challenges as well as provide a useful credential for upward mobility. I also found myself with an interesting offer by Alan Jossey-Bass, whose company began about the time that I arrived in Berkeley but was growing rapidly – thanks in part to Alan's skill in lining up authors from the Center and to his marketing savvy. He said, come work for me (at virtually a secretarial wage); you'll grow with the company, and, besides, I (Alan) take home only a small salary. If Harvard Business School gave me anything, it was the knowledge that an owner of a business had more potential for income than a mere salary recipient, and Alan offered me no stock incentives. So I said no, but thanks. Maybe a mistake?! I had wanted to be in publishing, after all, and Jossey-Bass is now huge.

By the spring of 1971, when my dissertation was signed by my committee members (no oral defense at Berkeley, thank goodness), I had found a position at the State University of New York at Stony Brook (now Stony Brook University). It was on Long Island, close to the homes of my parents and siblings who persisted in thinking that my motive in choosing the job was to be near them. But it was just luck. Having met Bud Hodgkinson at Berkeley, I accepted his invitation to stop by on my way East to say hello to him in Chicago at the annual meeting of the American Association for Higher Education (AAHE). That was my initial introduction to the pleasures and advantages of involvement in professional associations. I was later to become active in a number of associations.

Stony Brook was the youngest of the four universities in the State system, located about sixty miles from New York City. Its initial location in 1962 was at an estate called Planting Fields in Oyster Bay,

New York, which it occupied while its main campus near the town of Stony Brook was being built. By the time I arrived in 1971, many of the major buildings at Stony Brook had been erected, but many more were in progress. The physical state of the campus was in perpetual disorder and turmoil, with large earth moving equipment constantly shuffling noisily through the dirt roads between buildings.

Stony Brook was led by President John Toll, an eminent physicist, who surrounded himself primarily with other scientists as staff members in his administration. The aim of the State University and of the local administration was to make the institution a world-renowned locus of “big science” research. In addition to top scientists, Stony Brook hired an extraordinarily talented complement of faculty in virtually all of its disciplines, with promises of ample resources and spectacular facilities. But then there came the problem of finding students for them to teach. Ideally, the talents of the students would match the levels of the faculty. However, it was difficult to recruit students to a new State campus in what was then a rural or semi-suburban area with none of the usual social and entertainment amenities students wanted. The residential halls, for example, were cramped and boxlike in structure. As a result of the shortage of students, the University, to put it crassly, was forced to recruit local students with much lower academic credentials than would fit the faculty profile. The University became a commuter campus drawing from local towns, with most students leaving on Thursday night and returning Monday morning. Those who remained helped give Stony Brook its reputation as a drug Mecca with students out of control (or/and sick) much of the time. As historian Joel Rosenthal wrote:

In the first decade of [the first president's] presidency the university experienced (and suffered from) drug busts and days of student protest; the aura of a half-built, confrontation-oriented campus...(p. 16)

The years of growth were rough and unpolished; the campus was a construction site as well as an ivory tower, and vocal segments of the local community were upset about the vast public institution that had sprung up in “its” neighborhood. (p. 17)

And there were many students needed, since the funding formula of the State set parameters for continued building expansion that depended on the numbers of students attending. At some point, it became obvious to both students and faculty that an informal accommodation would suit everyone. It involved unspoken agreements by the faculty that

they would not demand much from the students if the students would, in turn, not ask much of them. It was a formula that did a great disservice to both groups, but especially to students, since the faculty could continue their research with more free time.

When I arrived at Stony Brook, I was hired to work in the Office of Institutional Research to collect data and write reports on the qualitative state of the campus. My boss, Bill Moran, several years earlier had hired a quantitative counterpart, “Woody” Troutman, to manage the counting and government reporting functions. I liked Bill very much and felt I could work well with him. Alas, he left to become president of the University of Michigan at Flint the week after I arrived! That left Woody in charge of the office, but Woody had no interest in the kind of work that I was hired to do and asked me to shift to the quantitative arena.

About this same time, on the academic side of the administration, Vice President Sidney Gelber (whose book on the history of Stony Brook [2001] was/is extraordinary) recognized the need for qualitative research and formed an entity titled, the Research Group for Human Development and Educational Policy (HUDEP). It was headed by Joseph Katz, a brilliant psychologist/ psychiatrist/ philosopher and author, subsequently, of a number of innovative books and articles very well respected today in our field. I joined the Group, as did David Tilley, then Vice President for Student Affairs and Editor of the *NASPA Journal*. Together we set out to try to figure out what was wrong with Stony Brook and what might be done about it. As a research team, we conducted many interviews and sent out many questionnaires to different groups of faculty, students, and administrators. We made ourselves available for consultation to others who were worried about the direction the University was taking and the troubles it was encountering. In addition to a number of “working papers,” three comprehensive studies were published by the Group, with each of the three of us taking primary responsibility for one.

Stony Brook was/is under the accreditation umbrella of the Middle States Association of Colleges and Universities. It had undergone a partial examination in the 1960's, but was scheduled for a complete visit and evaluation in the early 1970's. I met with Vice President Gelber and expressed my interest in taking an active role in the preparation of the campus for the evaluation and was given release time from the HUDEP to take a leadership role. An executive committee was formed, with Gelber as the titular head, and with representatives from almost all of the campus constituents. A particularly astute and energetic and wise faculty member from

the Department of Philosophy, Patrick Hill, was extremely helpful both in articulating the vision of the objectives for the self-study, for developing a new “philosophy” of student and faculty interaction, and, perhaps most important for maintaining the high level of motivation and commitment of the members of the committee (Hill, 1985).

We undertook an institutional “self-study,” as recommended by Middle States. A great deal of excitement across the campus was generated as the committee spread out to collect data and prepare reports. We met initially every two weeks, then weekly. The final complete report was sent to Middle States so that the anticipated visitors to the campus could review it prior to arrival. The report pulled no punches. As we stated in the report, we felt it would be far better if we were honest up front about the faults of the campus than to cosmeticize the state of the system and have the visiting team discover the truth when they arrived. When the team visited, we wined and dined them and escorted them around the campus. Not unexpectedly, they found what we had written about and, in their report to Middle States made many recommendations for change. They also called for a re-accreditation visit two years hence.

The executive committee which had spent so much time preparing the report, and, indeed, the campus as a whole received the Middle States recommendation without surprise and viewed it as a mandate for change. To make a long story short, however, very few of the changes were made. As is well known, the value of the accreditation process is in the integrity and fullness of the preparation process and the courage of leadership to execute the will of the campus, supported by the external evaluation. That value was wasted at Stony Brook.

By the time I left in 1976, Stony Brook had a bit less dirt and mud on the ground, but the intellectual and cultural climate of the campus remained the same. The students continued to be sacrificed on the altar of growth in number of new buildings and faculty research. (I understand that under different leadership later, there were significant changes for the better.) The implementation of a grandiose plan for change would have necessitated the enthusiastic and sincere adoption of the plan by the formal leadership as the committee was disbanded. Instead, the institution reverted back to the *status quo ante* with the initial high status science priorities reinstated. Needless to say, I learned a great deal about institutions of higher education and their constituents, about leadership and planning, and about institutional norms of integrity – many problems in higher education with which I have been occupied in my research and writing.

Some of my work for HUDEP and for Middle States reflected my new awareness and knowledge of students and student life, but some also was an indication of some personal interests that were emerging during that period. In 1971, I began to realize that I was getting older (not much of an insight, I admit) and, apparently – from what I could read, about to undergo a “mid-life” crisis. It occurred to me that it might actually be dangerous for someone like me in such an insecure mental state to be interacting with 18–20 year-old students whose own “development” was also very much in progress (or so one would hope as an observer of research on college and university students). And so, in my usual “academic” approach to my own dilemmas, I wrote an article called “Integrating Student and Faculty Life Cycles” for the *Review of Educational Research* (1973). I probably knew what I meant then, but I must confess in reading it today, that the idea was probably better than the explication.

As might be expected, our small study group suffered from a lack of funds to carry out the kinds of research that we believed were necessary. We were encouraged, consequently, to seek outside funding. At about this time, the government was establishing the Fund for the Improvement of Postsecondary Education (FIPSE). I made an application for a grant to conduct research on the roles that faculty play contrasted with the roles they prefer. FIPSE awarded me the funds, and I proceeded to conduct the study. The assumption of the research was that many faculty are required to perform tasks as part of their regular responsibilities in which they have little interest. The central question of the research, then, was whether there were in fact sufficient numbers of faculty, who, given the proper rewards (including appropriate equivalent social approval and status) would be willing and satisfied with performing a more narrow range of personally selected faculty roles such that all the roles would be filled. A list of 320 faculty roles was generated and validated, and questionnaires were sent to 2,400 faculty at six universities. A quick answer to the central question is, yes, if the faculty roles and reward structure could be changed, faculty as a whole could perform a smaller set of roles that that gave them personal satisfaction and collectively still met the total needs of the institution. These findings appear in my first published book, *University Organization, A Matrix Analysis of the Academic Professions* (1982). I might add that the grant that I received was of considerable general assistance to HUDEP whose funds for simple supplies were quite limited.

I should note briefly that at Stony Brook, I also had my second exposure to teaching in higher education. I was able to secure an

adjunct appointment in the Department of Education and offered a course in the introduction to American higher education. Serving a class of approximately 20 undergraduate students one semester, I assigned them a final project to conduct some research on a topic of their choice. Three young men came to see me to say they had no idea what they should write about. Using the “start where they are” learning theory, I suggested that they seek something they would find personally interesting. I rejected their first plan to study the graffiti in women’s rest rooms (they couldn’t have gained access anyway), but I did encourage them to study graffiti to gain insights into the culture of the student bodies of that era, especially the culture at Stony Brook. Fine, they said, but where do we start? And so began a process of self-education for them - to figure out (and study about) what research meant, how to collect data (especially when it was in writing or drawing form on walls), how to interpret data, etc. At my urging, they also set out as supplementary research questions the determination of the differences in graffiti in residence halls versus classrooms and differences in graffiti in buildings in three disciplines – humanities, social sciences, and sciences. They uncovered some interesting findings, which Dave Tilley agreed to publish in an issue of the *NASPA Journal* that was focused on sex on college campuses. I believe my students learned a great deal, and I certainly learned much about teaching. The article itself, was, I must confess, only moderately informative. I detail the process here largely to reveal how I became interested in teaching. I did, however, publish a number of other articles and book chapters during that period on an interesting variety of subjects, including the use of educational technology and the integration of classroom and residence halls as learning environments.

I also began working on the collection and editing of a set of original papers on the organization and administration of colleges and universities. It was a special summer issue (published ultimately in 1983) of the *Review of Higher Education*, at that time a tri-annual journal publishing under the auspices of the Association for the Study of Higher Education. I managed to secure some modest funding for the issue from the Exxon Education Foundation and a bit more later from NYU. I discovered then that I had some skills in recruiting the most prolific and admired authors in the field of organizational theory. The chapter authors included Karl Weick, Kim Cameron and David Whetten, Barry Staw, Greg Oldham and Carol Kulik, Ed Locke and some of his colleagues, Victor Vroom, Michael Driver, Cynthia Hardy and Henry Mintzberg and their colleagues, and John Van Maanen –

people who then and especially now were/are giants in the field. The summer issue came in longer than I had anticipated, a problem that caused some friction between ASHE and me because of the extra expense that was incurred. John Smart, Editor of the *Review* at that time, was especially helpful in providing editorial suggestions and in moving the production processes along swiftly. I learned much (the hard way) from this experience – lessons that I would use later in publishing other edited collections. The papers from the *Review* were later expanded and accepted for publication as a book by New York University Press (Bess, 1984) now available through I & I Occasional Press (2003).

Before leaving the topic of my stay at Stony Brook, I should mention two personal matters that greatly affected my life and my work there. First, my wife (of whom more later) became the coordinator of the Program in Crafts at the Stony Brook museum. Simultaneously, with a little initial input from me, she brought into being our two sons, Isaac and Ivan. Nancy's museum job required great professional esthetic judgment as well as interpersonal and management skills, both of which began to equip her for a highly successful later career. Our boys brought both joy and time consuming obligations, the former fortunately far outweighing the latter.

It might be of interest to make a quick note of one way that I juggled my family and work obligations. I was scheduled in the fall of 1971 to make a presentation at the annual meeting of a professional association in San Francisco. It happened that the timing of the annual meeting overlapped with the anticipated birth date of my first child, and I very much wanted to be present at that occasion. So, with the help of the Stony Brook video technicians, I made a videotape of my planned presentation, and I sent it out to the conference with a colleague. In my place at the presenters' table, a monitor was placed. When it came time for my presentation the chair switched on the tape player, and I thus managed for the only time in my life to be in two places at the same time. I should note that the tape I made was somewhat longer than the time I was allocated. I do not know to this day whether the chair waived his "Five Minutes Left" paper in front of the monitor, or simply turned me off when my time had expired. At the other end of the country, it was an exquisite birthing experience!

LEAVING STONY BROOK FOR TEACHERS COLLEGE

In 1976, the central administration at Stony Brook found itself under unusual budget constraints, and HUDEP came to be seen as expendable. It is quite possible also that the persistent messages of the group

became redundant and certainly contrary to the administration's priorities. In any case, Dave Tilley and I were informed that our contracts would be terminated at the end of June, 1976. Joe Katz had a tenured appointment in the Psychology Department, so he remained at Stony Brook as an advisor to the Academic Vice President.

I found myself under considerable pressure to find a new position. It was late in the year, and my credentials were "ambiguous." I was neither administrative fish nor faculty fowl. During the summer, we sold our house and were given a date by which time we had to move. I applied for unemployment insurance in June, but was told that I had not actually been dismissed. Since "presumably" I would be reemployed at another institution of higher education in September, this hiatus was just a natural part of the employment pattern of academics. Even though I had no job prospects or contract, I was not eligible for government insurance.

After looking into a number of possible positions, including one in Washington, DC, I was very fortunate to find a position at Teachers College Columbia University in their Department of Higher Education. I was assigned the usual range of courses and associated responsibilities. I was given the rank of Associate Professor, though I would still have to earn tenure over the next six years. My family was offered a lovely, spacious apartment in the TC faculty apartment complex. In fact, my wife was given studio space in an adjacent building. Moving from a roomy house in Stony Brook to a New York City apartment proved to be no small feat, but we managed and soon became accustomed to life in the big City. In fact, when my wife was visiting her parents in California some time after we arrived, I discovered the ready availability of fine vegetarian restaurants in the Upper West Side of Manhattan – leading me to become a non-meat eater, a habit I still maintain. (The alleged reduction in aggressiveness from the absence of red meat in one's diet, however, did not seem to reduce my growling at students and colleagues!)

It was immediately apparent to me that the cultures of Stony Brook and Teachers College were dramatically different, but the mini-culture of the work group in which I worked turned out to be remarkably similar to the one that I left. Tolstoy's famous, oft-cited observation about unhappy families comes to mind, but apparently does not apply to dysfunctional academic departments. This one had the same problems that my old one did – an insight that led me later to my research on academic departments.

The Department of Higher Education at Teachers College had a reasonably full complement of six or more full-time faculty members

and several adjuncts. Max Wise was still active, but was about to retire. An aging Walter Sindlinger was chair and had just completed a very large training and development program for community college administrators for the Kellogg Foundation. But the grant was out of money and was on its last legs. Jack Mezirow, now a world renowned and respected scholar in the field of transformative education, headed up a small contingent of part-time faculty in a program in adult and continuing education which had been unrecognized if not frowned upon by the College's leadership. Jack struggled mightily for adequate resources to support what would later become a highly respected source of innovation in the field. Two other faculty members attended to finance and student personnel administration.

When I arrived at Teachers College, renowned historian Lawrence Cremin was its president, and the institution sparkled with a vigorous intellectualism that suffused its hallways and departments. I met and interacted with scholars with intellectual curiosity and depth of knowledge. My exchanges with Maxine Greene were especially warm. I learned much from her. Initially, I was given much latitude in my teaching and research, but as all new faculty know, one has work extremely hard to develop syllabi and learn how to teach new courses. Indeed, learn how to teach. (I'm not sure I ever mastered that art.) I became heavily engaged in the Teachers College governance structure, serving on a number of committees and becoming known among the faculty.

In 1978, I organized a two-day conference for higher education administrators that attracted over 160 attendees from all over the country. There were too many to be accommodated in the TC facilities, so part of the conference took place at the famous Riverside Church, a block and a half away from the College, a setting conducive to noble thoughts and quiet conversations. So loose were the controls that no one asked for a preliminary outline of the conference agenda, and I was given exactly the budget that I asked for virtually without a requirement for details on how it was to be spent. Fortunately, we broke even financially, but I doubt if such an arrangement would fly in these days, though grant administrators have a degree of freedom to spend their funds. The proceedings were never published (though they should have been), but they are in ERIC under the title, "Academic Work: Doing It Well/ Doing It Better" (ED180 289, 1980).

The presenters at the conference were well-known authors and/or administrative leaders from around the country. I do not know how I was able to convince them to participate in the conference (aside from the fact that it was in New York City, and the conference paid a

stipend and expenses). I have found throughout my career, however, that I have been able to attract collaborators of considerable renown to work with me. Perhaps I should have been a real estate salesman.

Now as a faculty member at Teachers College, I became much more involved, then and in subsequent years, in a number of professional associations, including the American Association for Higher Education, ASHE, AERA, the Academy of Management, the AAUP, and the Comparative and International Education Society. I presented many papers, served on panels, was a member of study committees. My research (alas, unfunded) during my years at Teachers College resulted a number of publications, three of which profoundly affected the direction of my future research. The first was an empirical study intended to understand how graduate students came to adopt the norms and values of faculty – how the students were socialized. I conducted some research on graduate students and faculty asking about values and found that by the time doctoral students were in graduate school, they were already faculty members “by culture.” I wrote “Anticipatory Socialization of Graduate Students,” which was published in *Research in Higher Education* in 1978. I now understand better why it is so difficult to initiate and implement change in higher education. “Group think” generated from the homogeneity of professional and pre-professional socialization permeates the profession and blocks out much creative deviance. I’ll say more about this later.

A second strand of my research interests was directed toward my emerging interests in the organization and administration of colleges and universities. In my prior work at Stony Brook, I began to wonder on what empirical grounds administrative leaders made policy decisions. For example, what kinds of data on students were being regularly collected, analyzed and distributed to potential users in the administration and faculty on the campus. Coincidentally, I was invited by Clif Adelman then at William Paterson College in New Jersey (now famously at the U.S. Department of Education) to consult with them in the development of a student information tracking system. I did so, but as is my wont, went deeper, developing eventually an omnibus conceptualization of the range of student data needed by the major faculty and administrative decision makers in colleges and universities. The result was a publication of “Classroom and Management Decisions Using Student Data” (1979). In that article, I also listed the sources of externally available published tests that could be used to collect student data that would be of use to decision makers at all levels of the administration.

Perhaps the most intriguing of my research efforts at TC came out of my own frustrations, disappointments, failures (and occasional successes) at teaching. In the light of the enormous effort and knowledge required to be at least an adequate teacher and in view of the competing demands on one's time – research, service, and family – I began academically to ask the question of how faculty members handle their professional and personal time. I wrote up my conclusions in “The Motivation to Teach, which was published in *The Journal of Higher Education* in 1977 and later in my edited collection for the *New Directions* series: *Motivating Professors to Teach Effectively* (1982).” The original article also appears in the ASHE Reader (*Foundations of American Higher Education*) and has been cited quite frequently. I hope others benefit from my analysis of my own musings during this difficult period. In hindsight (this may be a shocker – except to my students!), I have concluded that I really was not cut out to be a classroom teacher. Besides the enormous energy needed to teach well, especially with my poor memory, the trauma of performing in front of a large number of students was usually somewhat unpleasant for me. Furthermore, the ambiguity of the student responses was unsettling and unsatisfying. An old Chinese proverb says, “good teaching is one-fourth preparation and three fourths theater.” I once contemplated doing some research on “stage fright.” As I wrote in one of my publications, most faculty members have never learned formally how to discern the often subtle effects of their words and actions on students and hence are deprived of the satisfactions that they might derive from the feedback cues that are actually available.

In my own case, I believe that the great pleasure I derived from academia stemmed from my love of ideas – the beauty and symmetry of the connections among concepts, the logic of sequential thought, and the embeddedness of smaller ideas in larger systems. I am, in Myers-Briggs terms, a dyed-in-the wool “NT” (intuitive-thinking) type. For NT's, it is relatively easy to convey our excitement about ideas, but much more difficult to evoke a parallel thrill in students. They need the “S” – the concrete sensation of experience to make concepts real and meaningful. As William James, pragmatist though he was, wisely observed, “concepts without percepts are empty; percepts without concepts are blind.” I always had to work extremely hard to generate examples to illustrate my ideas for students in class. (Am I also a dyed-in-the wool Philistine, lacking in emotion and feeling? I certainly hope not! Out of class my tastes include generous helpings of art, music and

theatre. Among other cultural activities, I started a great contemporary fiction book club in my home town.)

While I very much valued my new collegial relations with faculty at Teachers College who were in other departments, by the end of my third year there, it was evident that there was a serious leadership gap in the Department of Higher Education and that the Department was not a successful one. We had far fewer doctoral applicants than we should have, and the quality of those applicants did not come up to the TC standards in other departments. The central administration of the College – President Cremin, especially – chose to revitalize the department by bringing in from outside a new faculty member as chair. That new person was Robert Birnbaum, then a former college president and a well-published scholar in higher education. Bob came into the program in the fall of 1979, I believe, and immediately instituted reforms that had long been needed. Unfortunately (for me), some of those reforms boded ill for my career at TC. Since Bob's and my field of expertise – the organization and administration of colleges and universities – overlapped, the College asked me to shift my emphases in research and teaching to the community college. I was reluctant to do so, since I had invested much in my prior studies of my own field and had little interest in beginning fresh in a new area. When it came time for the Department to evaluate my application for a third two-year term of employment prior to the tenure decision, a vote of the then four tenured faculty members was tied, with Bob and one other faculty member voting against. Under those conditions, the determination of the outcome is up to the department chair, who, of course, was Bob Birnbaum again, and who in that capacity again voted no. I was told that I would not receive a reappointment for the final two pre-tenure years and would have to seek employment elsewhere.

Needless to say this was a blow to my ego as well as a threat to my financial status, since the decision came in the spring of the year, and I would need to find another position for the fall. I did not immediately accept the College's decision, however, and began a series of grievance steps as outlined in the TC by-laws. The grievance was based on what I felt was an outstanding record of achievement and on the double-counting of Birnbaum's vote – once as faculty member, and second as chair. When word of my situation got around to my colleagues in other departments, I received strong and widespread support in the College for my effort to reverse the decision. Had I persisted in my grievance, it would have been a *cause celebre* but also source of unpleasantness at the College.

Furthermore, with a family to support and not wanting to put all my eggs in one basket, I began looking around for other positions. Fortunately, there was an opening at New York University, a couple of miles down the block from Teachers College. I applied and was selected from a number of candidates.

I should hasten to add at this point that what happened to me at Teachers College was not and is not unusual. It is the responsibility of institutional leadership to recruit and appoint the strongest faculty that they can find. It is not uncommon for a president or dean unilaterally to override a weak faculty which, because of its weakness, is not able to attract a strong colleague. Bringing Bob Birnbaum in was perfectly in line with that leadership strategy (though the human relations tactics employed left something to be desired). I'll have a little more to say about this later when I describe a situation at another institution. Alas, for me, the decision meant a loss of momentum and of the warm relationships with fine colleagues at TC. On the other hand, it forced me to take stock of my professional situation and gave me an opportunity to establish myself in a different setting with an agenda that met my needs.

BEGINNING AT NEW YORK UNIVERSITY

I was recruited and interviewed by the small faculty in the higher education program at NYU, itself a part of a larger department, which came ultimately to be named the Department of Administration, Leadership, and Technology (ALT). Like many organizational homes of higher education programs around the country, it comprised a hodge-podge of programs, including Higher Education, Educational Administration, Sociology of Education, and Business Education. By far the largest component was Educational Administration. I made it through the preliminary interviews and standard research and teaching test presentations and proceeded to the final interview with the leadership of the School. The Dean was Daniel Griffiths – a very tall, imperious-looking man with an outward style of superiority and intolerance, but in reality a caring and considerate leader. Griffiths was a highly respected and well-published scholar in the field of organizational theory, applied to educational institutions. I approached the interview with some trepidation, as Griffith's personal and scholarly reputation preceded him. We chatted amiably at first, and we discussed some current scholars in organizational theory whose work I greatly admired. One was Charles Perrow, whom I knew from Stony Brook. I asked Griffiths if he was familiar with Perrow's work. He nodded impassively, yes. The interview

concluded, I went home to await the outcome – which, fortunately, was positive. I remained at NYU for the next twenty years. I learned later, shortly after my initial interview with the dean, that two weeks prior to the interview, Griffiths had invited Charles Perrow to address the NYU School of Education faculty at the next faculty meeting. How much does luck play in the employment game?

We (my wife and I) suffered through a number of weeks of serious concern about housing and schooling for our children – we had to leave Teachers College naturally. We wanted to remain in New York City for many reasons, not the least of which was the opportunity to continue to enroll our two children in exceptionally well-regarded schools for the gifted. Private apartment housing in or near New York's Greenwich Village was way out of our price range. The University did own several apartment complexes, some of which had been converted from student housing. They had long halls and typical dormitory room configurations. Other NYU apartments were nicer, but had long waiting lists of faculty desiring them. Somehow, however, we were eventually offered a very small (for two adults and two children), two-bedroom, one-bath apartment right on Washington Square Park. With pressure to leave Teachers College increasing, we were prepared to accept, though with great reluctance. The week before the date when we had to give our decision, we received a telephone call from the director of housing offering us a much nicer, bigger apartment in the same Washington Square building. The rent was much more than we could afford, but we quickly accepted it, figuring (as many do) that we would “grow into it” financially with the salary increases from my work at NYU. Never happened, of course. But there we were in the Village, five minutes from my office (and from the six tennis courts on top of the athletics building!). As a side note, I will tell you that while having no commuting time has its advantages (my wife would call me when dinner was on the table), it also has its disadvantages. There is no “come-down” time. When I opened the door to my apartment, my kids would immediately jump on me and say, c'mon dad, let's wrestle! I, of course, was still thinking about theory “Q” for my work. But I discovered that in New York City, one must re-park one's car every night on the other side of the street so that street cleaning can take place. So, I “commuted” after dinner, with the car stereo softly playing classical music, as I looked, often for a long time, for a parking place in the neighborhood.

The Program in Higher Education at NYU in 1980 when I arrived was surprisingly small and weak. One would have imagined that as one of the

two universities in the New York metropolitan area offering the doctorate in higher education administration, there would have been a great demand for places by middle-level administrators in the large number of colleges and universities in New York City, Westchester County, just north of the City, New Jersey and Long Island, across the rivers. The higher education faculty in 1980 comprised Deane Bornheimer, who served also as Program Director, Arnold Goren, a long-retired University administrator, and one other faculty member in the Department who had a joint appointment in the Educational Administration program. By 1984–85, Floyd Hammack, a specialist in the sociology of education, joined the Program half time, and by 1995, the *NYU Bulletin* shows that Joshua Smith and Carolyn Griswold had joined the faculty as full-time members.

Many courses were taught by adjuncts, some of whom were outstanding. For example, the instructor for the course in the history of higher education was Professor Paul Mattingly from NYU's history department. I personally taught the introductory course for masters and doctoral students – the American College. I also taught (initially co-taught) the Department's two semester course in Organizational Theory, Institutional Research and Assessment, and several other common higher education courses. During summers, I taught short courses in college teaching, curriculum, and topical issues.

After some time and the retirement of another department faculty member, I was given the assignment of teaching the “dissertation proposal seminar.” In point of fact, this course eventually came to be the course that was required by all doctoral students in the School of Education whose own departments did not have such a course. The range of students and subject matters was broad. And I loved doing it! First of all, it gave me an opportunity to teach students how to identify topics in which they were interested and to locate literature that was relevant to it. That task involved me in the perusal of preliminary proposals on a wide variety of subject matters. Each proposal was, of course, unique, and I was forced to learn at least something and often quite a bit about fascinating subjects undergirded by disciplines and subdisciplines about which I myself initially knew little. Meetings with students were exciting and stimulating explorations of ideas, clarifications of meanings, narrowing of ideas into conceptual frameworks that employed theory. Seeing students through this process, and later successfully defend their proposals and dissertations, was one of my greatest sources of the joy of teaching.

As might be guessed from reading this, I had no interest in qualitative research and declined to accept students into the course who

planned that kind of research. A separate course was created for this group. My feeling was then and is now that graduate students are not qualified to identify areas needing qualitative research. They simply have not had time to read and think enough about a particular subject. As a result they come to believe that the subjects they want to study have never been researched and that no research using conceptual frameworks in other fields is relevant. My initial contact with students who asked me to become involved with qualitative research revealed that the proposals were naïve and the conclusions from the research almost invariably reiterated some commonsensical finding that had already been reported on. Something like: “therefore, faculty who have Type A personalities are likely to spend more time at work than others.” In point of fact, in my experience, they typically rediscovered the wheel. (I know I am going to offend many readers with these observations and conclusions!) By no means do I intend to suggest that qualitative research is not critically important to the discovery and understanding of social phenomena. It’s just that the process is complicated and difficult to do well, and, most important, graduate students are not prepared intellectually to make a meaningful contribution to the field using qualitative methods. As I used to tell my own students, don’t try to solve the problems of the world in your dissertation. Pick an area where the addition of a small increment of knowledge will be useful.

The NYU Program in Higher Education had been limping along for many years, mostly in the shadow of the adjacent educational administration program. The ALT department was headed by Lloyd Bishop, himself from ed admin. The higher education program lacked curricular philosophy and integrity, and many of the required courses were also required for educational administration students and staffed by faculty from that program. As a result, most of the classes were dominated by that program and by the ideologies and problems of elementary and secondary education. A small master’s degree program serviced NYU’s student services administrators. Again, with so many colleges and universities in close proximity to the University, there was a significant doctoral degree market ready to be tapped. NYU, by the way, offered a Ph.D., while at Teachers College, the doctoral degree was an Ed.D. There was no long-range plan and certainly no funds for recruitment. None of the faculty had published anything in years, and none was interested in research. Lots of work to do!

I was prepared to engage in a significant recruitment effort and went so far as to secure from the publisher of the *Higher Education Directory* a computer disk and a set of labels with the names and

addresses of 15–20 administrators at every college within a 50-mile range of New York City. I prepared promotional materials that invited inquiries and visits and offered institutions the opportunity to invite members of the Higher Education Program to make presentations about the graduate program. I encouraged the NYU administration to establish a “presence” at ASHE by holding receptions at the annual meetings. Very little resulted from these efforts. The School of Education and the Director of the Program were not supportive, either in spirit or with finances. They were more interested in building up the Master’s degree program that could generate enrollments from among NYU student affairs staff. In fairness, the Program Director, Deane Bornheimer, exercised considerable effort and imagination in building the Master’s program – and, in hindsight, probably saved the Program from bankruptcy and extermination.

In the meantime, my course load consisted of three courses a semester and two during the summers. There was no release time for service – at least for me. I served on many Departmental and School Committees and was active on the national scene in AAHE, ASHE and AERA. I also made it a point to attend the annual meetings of the Academy of Management, since many of my interests and the courses I taught partook of the theoretical paradigms that were discussed at those meetings. In addition, I had opportunities to meet with the authors of books I was using in my classes. The best part of the Academy meetings, however, was the enormous book publisher exhibit (far bigger than AERA’s) specifically in the area of my greatest academic interest.

For many years before I arrived at NYU, the ALT Department, which housed the Program in Higher Education, had been offering graduate courses to students at NYU’s Puerto Rico center at the College of the Sacred Heart in San Juan. The Program began to offer the doctorate there in the 1970’s (I believe); it ceased operations in 1991–92, and part of my teaching load from time to time included offering courses in San Juan. The classes were held on alternate Saturdays for six hours. The semester was twelve weeks long, so I would fly down six times during the semester. Sounds idyllic, but it actually was a killer. Invariably, because of the press of other work, by the end of the week, I found myself unprepared to teach on Saturdays. On Friday afternoons, I had to throw everything that I “might” need for my teaching into a large suitcase. I prepared for class on the plane on the flight down; I prepared in my hotel room, spread out on the floor and two beds on Friday nights. I taught for six hours straight on Saturdays. It’s hard to keep students’ attention for that long a time

without expending a lot of one's own. Then, desiring to be home with my family on Sunday, I would race out to the airport to catch a Saturday 6:00 p.m. flight back to New York, arriving at home close to midnight. I loved the students. They were warm, fun-loving, and conscientious, and I genuinely enjoyed teaching them. But it was a grind for me, and, frankly, I do not believe the program was viable. It is just not possible to teach well in that format. More important, Puerto Rico had a surplus of administrators in its relatively few universities; hence, we were preparing students for non-existent jobs. Needless to say, I tried to make this point to the NYU leadership, but the fact of the matter was that the NYU Program at Washington Square was so short of students that Puerto Rico represented a way to provide "load" for faculty. It was quite embarrassing.

Back in New York, although I had no formal administrative responsibilities, I did try to get NYU's program in higher education better known in the local geographic area. I started a "Colloquium on Higher Education" and recruited speakers from colleges and universities to make presentations. Participants came from all around the metropolitan area. I tried to organize meetings of the NYU alumni so that they could act as recruiters. I visited nearby colleges and universities which, at my suggestion, had set up meetings for their junior administrators who might be interested in learning about NYU's advanced degree programs. All of these activities – and others – were time consuming, boring, rewardless, and largely unsuccessful.

In the meantime, I was becoming quite active on the national scene. I was fortunate about this time (circa 1988) to be chosen to be the Chair of the Editorial Board of the *Journal of Higher Education*, an honor that I cherish greatly. I very much enjoyed the annual meetings with the Board and with Editor, Bob Silverman. Some of the most interesting discussions about higher education that I ever have had occurred during those meetings.

My professional service activities at ASHE and AERA increased substantially beginning in the 1980's. I served on various committees, sometimes as chair, usually not. I have a copy of my 1985 letter to Patricia Crosson, then head of ASHE's curriculum committee suggesting that ASHE get itself up to speed in the burgeoning electronic media field for teaching. Given the overwhelming number of small (3–5 member) programs in higher education around the country, I reasoned, there were never enough specialized faculty in any one program to cover well most of the subject matters that were basic to all programs. (Same for many other liberal arts subject matters covered by small

numbers of departmental faculty – e.g., archeology.) I suggested that it ought to be possible to bring in as “electronic adjuncts” (I don’t think they would like that appellation!), the giants of our field to teach courses in their specialities. (Today, there are many such electronically enhanced graduate programs for part-timers, especially in the business field.) If the schedules of the programs across the country could be coordinated (“If it’s Tuesday, it’s student development day), then we could ask the Sandy Astins and his ilk to teach live by telecommunication (in those days, “slow scan” video). His presentation would be augmented by a local adjunct faculty member at each receiving campus. Pat Crosson presented the idea to the ASHE curriculum committee and received a positive response. Jack Schuster was especially enthusiastic. However, as with most innovations, it needed money (grant money) and an active leader. Although I submitted a grant proposal to the NYU Challenge Grant program for a pilot project, I was not prepared at that time to devote a great deal of my time to an area that was not an essential academic interest. As I had learned earlier at Stony Brook and relearned at NYU, innovative organizations need more than good ideas. They need “pushers.” In my view, the pushers at a professional association like ASHE or AERA should come from the elected officers and their appointed committee chairs, not from the idea people. On the other hand, ideas are a dime a dozen (or whatever they’re worth after the Federal Reserve decides on the discount rate). Throughout my professional life, I’ve always had just a bit too much faith in the power of reason and logic alone to convince people to change their behavior, and relatedly, not enough concern for individual perspectives that stem from their values and priorities.

As might be expected, I was constantly on the lookout for funding for my academic research. Usually, the questions I sought to find answers to were conceptual and theoretical, without too much immediate practical application possible. I applied to the usual foundations, including Spencer, Ford, Pew, Mott, Carnegie, OERI, National Institute of Education, NSF, and many other possible sources. For the most part, I was not successful. I had great ideas (he said immodestly), but they were not in the priority areas of the funding agencies. I never learned what so many of my colleagues in the field did learn – give the funders what they want and piggyback your own research onto the research that has to be done for the funders. Much of my writing and publication has not, therefore, been based on my own empirical research, but on my research and reading in the library. I made many proposals to the AERA and ASHE annual meetings, most of which

were accepted. The critiques that I received from my presentations helped me expand the papers into articles or chapters or books for formal publication.

TWO NEW DEANS

The tale of my career and its sources of satisfaction and dissatisfaction can best be described in terms of the bifurcation of my inside and outside activities and colleague relationships. I will describe these two sectors separately, though occasionally there is an overlap.

The School of Education at NYU had prospered under Dan Griffiths' 18-year tenure, but, largely due to declining enrollments and other economic circumstances, was sliding badly by the time he retired in 1982. The School had suffered through significant budget cuts from the central NYU administration and was operating at an annual deficit of over \$1 million. In 1983, the central administration at NYU brought in Robert Burnham, a highly respected and successful upper-level university administrator from Ohio to be the new dean. Burnham, through extraordinary effort, but in his low key way, completely reorganized the School and brought in a great deal of money from external grants. Unfortunately, the reorganization and its not unexpected disruption resulted in a culture of disillusionment and poor morale, despite Burnham's direct and open, participative leadership style. Burnham left NYU in 1989, having personally suffered through the worst of times, while preparing the School well for a new start on sound footing.

I and many others very much looked forward to the arrival of the new dean, Ann Marcus, a long-time NYU administrative leader (Vice President for Student Affairs, Dean of the School of Continuing Education). We faculty soon learned that Marcus had very strong ideas about how the School should be organized. In fact, she had strong ideas about everything, imposed her ideas on the faculty, and micromanaged. Marcus was not a "walk-around" dean. She practically never visited the faculty in their offices – except perhaps to decide on space allocation and paint color. She acted unilaterally and brooked no dissension from the faculty. For example, despite our Department's objections, she insisted on changing the merit reward system on which we had diligently worked and with which we were completely satisfied. She also arbitrarily controlled the allegedly participatory faculty merit evaluation system by holding out a significant proportion of the funds budgeted for faculty compensation for her personal decisions to reward her favorites. She even changed the name of the department over the

objections of the faculty. Whereas at the beginning of her tenure, I had an opportunity to meet occasionally with Dean Marcus, after about five years, I apparently became one of the “enemy,” and I had no more meetings with her until I left the institution in 2000.

My point in detailing this phase is to illustrate the environment in which I was working – i.e., in one of the least successful programs in the School and one with inadequate funding and leadership. Further, as I noted earlier, the Program in Higher Education was located in a department that was formally led (and dominated) by the Program in Educational Administration which, in turn, embraced the modes of governance of elementary and secondary schools. The Department Chair, a brilliant organizational behavior theorist, was chosen in the mold of the Dean, agreed mostly with her administrative orientations, and did her bidding – or exceeded it. Nevertheless, whatever promise the Program in Higher Education had was initially enhanced, we thought, by the appointment as Program Director of a former college president twice over and the head of the California Community College system. That promise, unfortunately, was never fulfilled as the Director utterly failed to exercise any initiative and lacked the imagination to take advantage of NYU’s potential in the region.

In short, I spent the last ten years of my career disenchanted with my local colleagues and with the School of Education as a whole. I learned that my interactions with my own doctoral students and with the University’s reference librarians were most to be valued and that my outside professional relationships with colleagues around the country were the source of my greatest satisfactions. I am by nature a “loner.” I never went out to lunch with local colleagues, preferring to eat while working at my desk. I cannot pin all the blame for my dissatisfactions on the School, Department and Program cultures; but I would have come out of my shell much more often under a more salubrious social climate.

SCHOLARLY WORK

I have already noted a number of the scholarly projects and professional activities in which I had been engaged during the twenty years prior to my arrival at NYU. The culmination of a number of papers presented at national conferences over a five year period was the publication of my book, *Collegiality and Bureaucracy in the Modern University, The Influence of Information and Power on Decision-Making Structures* (1988). The book borrowed generously from many extant theories from the

field of organizational theory and behavior which I felt had generally been ignored in our field. It also allowed me to think carefully about the appropriateness of those theories and the caveats to wholesale adoption by leaders of colleges and universities. I was able to modify, adapt, and create theories that I thought were more suitable and ultimately more useful. For example, I worried through issues of participation in institutional governance by students who were naïve clients of the university, while at the same time often being affected intimately by the policies and procedures of the institution. They were also “closer to the action” and in some social constructionist interpretation “owned” the institution. In the book, I was able to articulate some of my ideas about “rationality” and “collegiality” in institutions of higher learning, subjects that would occupy my thoughts and writing until the present day. They are in part contemporary labels for the age-old dichotomy that the Greeks posed between modes of being represented by Apollo and Dionysus and, relatedly to *some* extent, in more contemporary social thought between positivism and social constructionism. This autobiography is not the place to expound on these controversial issues, but my personal and professional life has been torn (yes, that’s probably the right word) between actions called for by one or the other perspective.

COMPARATIVE HIGHER EDUCATION

As I noted earlier, my interest in other cultures was initially stimulated by my travel between years at the Harvard Business School. Subsequently, in my academic career, I tried periodically to pursue in a more scholarly way the cultures of other countries. In the 1970’s, I was invited to give a series of lectures at Ben-Gurion University in the Negev desert in Israel – an occasion for me to learn how a tiny country can maintain a cosmopolitan professionalism in its institutions of higher learning. Israeli scholars are well-funded for frequent sabbaticals to be taken in other countries and are encouraged to participate globally in academic conferences. Money to bring in scholars from outside is also liberally available.

In the mid-1980’s there came a significant shift in my professional orientations and activities that matched my latent interest in comparative higher education. Partly at the urging of my wife, who is an internationally known fiber artist and author (Bess, 2001), I began to explore cultural differences across nations and the impact of national culture on organization and administration of colleges and universities.

In 1985, I began a serious study of Japanese language and culture. During this period, I wrote many grant proposals for funding both my travel and planned research. I made proposals, for example to the Social Science Research Council, the Japan Society for the Promotion of Science, the Japan-United States Educational Commission (Fulbright), the National Institute for Research Advancement (NIRA of Japan), the U.S. Japan Foundation, Xicom (a New York state publisher of an research instrument I wanted to translate into Japanese), and the Toyota Foundation.

In 1985, I had applied for a Fulbright for research in 1986, but it was not funded. Fulbrights for research in contrast to teaching were/are extremely rare. My wife, however, had also applied for a Fulbright, and to our delight, she received a letter from the Fulbright office in New York saying she had been funded, pending final approval by the Tokyo office. We prepared to leave, only to find two months later that the panel in Tokyo that made the ultimate funding decisions had reversed the New York decision. Needless to say, we were shocked and at a loss as to what to do. We had taken our children out of school and rented our New York apartment.

We decided to go to Japan anyway, scraping together enough funds at least to live on. Three institutions ultimately invited me to spend time with them in Japan: Fukuoka University, Kyoto University, and the National Institute for Educational Research (NIER) in Tokyo. The latter invitation was at least prompted by NYU's agreement to host a visiting Fulbright scholar, Tatsuo Yamada, from NIER in 1985. Yamada had an office in our Department and enlivened our local environment. He became a good friend, with whom I still correspond. (Alas, his tennis was lacking somewhat – but more on that later.)

NIER was Japan's premier government funded educational research agency, with well over 100 professional researchers plus associated staff housed in a modern edifice in Tokyo. As my "official" host during my stay in Japan, NIER was exceptionally generous in providing both facilities and advice throughout the year. I was given a large office, a typewriter (in those days pretty sophisticated technology), duplicating equipment, telephone, library access, and mailing privileges. Professor Yamada graciously accompanied me on visits to key people in education and the government, arranged for meetings, assisted in literature searches, and, equally important, made life for my family most pleasant and satisfying. I learned the Japanese way of "sharing" as I participated in the noontime tennis matches on the court that was located outside of my window. It seems that how much time one gets to play depends on how many show

up to play. If there are many, each person plays at most three games before others are entered into the rotation. Women are equal to men in priorities. Weaker players played with the stronger, with the latter making accommodations for talent differences. My only regret in my tennis encounters was that much of the fun of tennis, not only in Japan, comes from the repartee and teasing that accompanies the play, and since my Japanese was limited, there was much mirth that I could only smile at with my best Japanese face on. More seriously, from tennis (among other interactions, of course) I learned much about the Japanese social system in its organizations and the relation of that system to work and authority – lessons that I could apply to my understanding of higher education in the States.

In fact, it was Yamada who found us an apartment – in Yokohama, a “short” (by Japanese standards) daily one-way commute to my office in Tokyo of about an hour and forty minutes. My children, however, went to Nishimachi International School in Tokyo and had a complicated, multi-train/subway commute from Yokohama even longer than mine. There was an international school in Yokohama, but my children would have to have worn uniforms, and the school was quite strict. Nishimachi’s enrollees came from a wide variety of countries and required the children to learn Japanese. The commute and attendance at Nishimachi opened my children up to new cultures, made them more tolerant, and developed in them a strength of independence and initiative. Needless to say, as a family we learned much from each other as we recounted our daily adventures on returning home each evening.

While in Japan, I enrolled in two separate language classes/schools – one for grammar, located in Yokohama, where I lived; the other for conversation, located in Tokyo. I continued my study of Japanese for many years, but never quite mastered enough to use it in my scholarship. My academic reading was of translations or original books about Japanese organization and education written in English. Nevertheless, the gradual understanding and appreciation of the Japanese language itself was critical in my apprehension of the culture.

While NIER provided facilities and aid, I still needed funding for the research. Fortunately I received a fairly substantial grant from the National Institute for Research Advancement (NIRA) in Tokyo. NIRA was a government funded social science “think tank” in Japan (actually a “meta-think tank,” as they usually contracted out almost all of the empirical research projects they elected to fund). In my case, however, NIRA provided me with funds to conduct the research, a base of operations at the NIRA offices, and, importantly the NIRA imprimatur. NIRA’s reputation throughout the government, industrial

and academic communities was extraordinary, thus offering entrée to otherwise unavailable national leaders in these fields. NIRA also staffed my research enterprise with a secretary, an administrative assistant, and an interpreter/translator who accompanied me at interviews. I worked mostly out of my Tokyo office at NIER.

The major focus of my research was inquiry into the nature of the leadership of scientific research in Japan. Much had been made in the early 1980's of the exceptional success of the Japanese in adapting new theoretical discoveries in science to the technological demands for new product development. In 1986, Japan's economic success was awakening the business world to the possibility of new ways of organizing. The theoretical underpinnings of the research that I conducted were centered in three areas: leadership, conflict management, and worker motivation. I spent a great deal of time looking for research instruments that I could have translated validly.

With the assistance of an extremely competent and hardworking research assistant (who later went on to become a research scientist), I selected a sample of roughly 3,600 researchers and 600 leader/managers of research and development centers at universities, corporations, and government laboratories in four domains – chemicals, transportation, iron and steel and electronics. I will spare you the details of the full research plan, but they conformed to the usual methods of survey research. Of course, there were cultural differences that I had to take into account. For example, Japanese workers will not answer questionnaires from outside without the permission of their supervisors – another step in the research strategy that I had to deal with.

While in Japan, I was interviewed on national television (NHK) and I gave a lecture on my research activities. I made other presentations to the NIER and NIRA staffs and to the members of a Japanese educational professional society. With the help of some funding assistance from NYU, I also attended a conference in Osaka organized by the United States/ Japan Teacher Education Consortium on teacher education and educational administration. Some of my lectures were later published in Japanese journals. I gave many papers back in the United States about my research in Japan. One presentation I made to the NYU's School of Education graduate student organization was titled, "Non-Leadership in Japanese Research and Development Labs: When and Why It Works." I'm not sure I remember what I said, but I still like the title!

My interaction with Japan did not end with my sabbatical. Toward the end of the sabbatical year, I received a telephone call from the Fulbright office asking if I wanted to resubmit my application. There would be no additional application work involved; they would simply consider the application from the previous year. I agreed, and, *mirabile dictu*, I received the award! Now, this created a problem, since I had just spent a year away from NYU and doubted that I could receive permission to spend another. Moreover, before we left for Japan one of our children had been accepted at another unusually good school in New York, and he would lose his place if he could not take his place in the sixth grade class. Fortunately, I was able to work out with Fulbright an arrangement whereby I could complete the grant in three months via separate visits over the next year (e.g., during holidays) and summer, though they would pay for only one transportation expense. I made many trips back that year and in subsequent years.

In 1992, I was entitled to another sabbatical leave, but delayed taking it until 1996–97. To continue my research on Japanese higher education, I elected to return to Japan for at least part of the sabbatical year. This time, I was fortunate in becoming associated with the National Institute of Multimedia Education in Chiba, Japan. NIME was in part responsible for research on telecommunications in Japan. In fact, the University of the Air, an affiliate of Japan's television network, NHK, was a component of the institute. Part of NIME's activities involved putting together educational programs authored by faculty in universities around the country for broadcast throughout Japan.

Chiba was/is a small community located about 30 minutes by train from Tokyo. My wife and I arrived in Chiba in the fall and were allocated an apartment on the Institute campus. Needless to say, since the tennis courts were directly across the street, I found the living conditions quite pleasant. I had relatively few formal assignments at NIME. I believe they were pleased to have an American academic spend some time with them if only for the purpose of learning a bit more about our country and ways of behaving and thinking. They were most cordial and accommodating, and I became friendly with a number of families who later visited us in New York. Life outside of Tokyo is, of course, much less cosmopolitan, and we were enabled to understand and participate in the traditional Japanese rituals more freely and frequently. Of course, we continued our Japanese lessons. Because of the absence of work requirements, I was able to continue my research and writing on Japanese higher education, as well as other

subjects. I stayed at NIME from the fall of 1996 to about March of 1997, when my wife and I left for Hawaii, where I spent the last third of my sabbatical. More on that later.

At some point during this period, I was contacted by the Middle States Association of Colleges and Schools and asked whether I would be willing to do an evaluation of a branch campus of the Sullivan County Community College in New York State. The branch was located in Toyama on the west coast of Japan near the city of Kanazawa, allegedly the “Kyoto of the West” in its cultural richness (and seafood!) and located in a valley surrounded by tall, snow covered mountains. I hastened to accept and spent a delightful week there learning about their campus. During one period in the 1980’s branches of a number of U.S. campuses were in the process of being constructed. Usually, they operated in cooperation with a Japanese university so that credits for students from each participating institution could be linked. Just when the trend was at its height, however, virtually all of the institutions in this country with overseas aspirations began to have second thoughts as it became evident that coordinating the systems was difficult and expensive – as was recruiting students. The initial plan was to give American faculty an opportunity to spend a year or two in Japan teaching English and other Western subjects, then for the students to come to the home campus in the United States to finish their degrees – and, of course, to improve their English language skills. To my knowledge, few colleges or universities were successful – Temple University in Philadelphia lasting the longest. At any rate, I learned much from this evaluation experience. For one thing, I found that Japanese educators have the same worries about accreditation as their American counterparts and engage in the same kinds of preparations for and courting of visitors. The word “accreditation” does not adequately convey the formal procedure nor impact that institutional evaluation has in Japan.

I was to have yet another opportunity to return to Japan, this time in the summer of 1998. I was invited to spend time at the Research Institute for Higher Education in Hiroshima. Again, my responsibilities were light. I was asked to give a few lectures. Mostly, I did my own work on Japanese subjects and interacted with the RIHE staff to add to my knowledge of Japan. I hope my hosts learned an equivalent amount about our country and American higher education from me. I had occasional lunches with the staff at local restaurants and through those informal social opportunities learned much that could not be garnered from books. As in my prior settings, I made many friends who came to New York to visit.

I believe that most of what I learned about Japan is contained in my book, *Creative R & D Leadership: Insights from Japan*. It permitted me to discuss my observations about Japanese society and culture and its impact on organizations, especially leadership. As is well known about cross-cultural study, one learns as much about one's own culture and institutions as the one one visits. We in higher education here in the United States make many unexamined assumptions about "necessary" organizational principles that guide our practices – assumptions that could well be challenged so that our institutions could be improved.

OTHER EDUCATIONAL TRAVEL

As noted earlier, only about two thirds of my 1996–97 sabbatical was spent in Japan. The last third was spent at the University of Hawaii. Since I have been teaching and writing about the organization and administration of colleges and universities, I have continually worried about my lack of direct experience and line responsibility. The best I could do was careful research and observation. Hence, when my sabbatical was coming up, I wrote to Kenneth Mortimer, then President of the University of Hawaii and Chancellor at its Manoa campus, to ask if I might have an opportunity to observe the operation of the university from the perspective of his office. With my everlasting gratitude, he graciously assented to my spending time with him and his staff. It was a particularly difficult time for the University as its fiscal status was perilous, its relationship with the State ambiguous and in transition, and its main campus at Manoa and its related satellite campuses in political turmoil. Ken was faced with monumental problems, almost all of which he inherited. Because of the delicacy of the situation, discussions among the President's executive staff had to be kept confidential. Accordingly, I wrote and signed a statement pledging not to reveal in publications or otherwise the substance of anything I heard or observed, so all I will say here is that my experience was extremely edifying. As with my tenure with President Perkins at Cornell, I attended staff meetings and retreats, talked with the vice presidents and other officials, and read documents relevant to the governance of the University. There was much public information available about the relations between the President and his staff and the Board of Trustees and other officials of the State because of the Hawaii "sunshine" law that prohibited private conversations among them without the presence of a member of the press.

Again, with the President's good graces, my wife and I were offered an apartment near the campus. We both had access to the library, and my wife was able to pursue her own professional interests through her association with the Bernice Bishop Museum and Honolulu Academy of Arts. I had the good fortune to be given an adjunct faculty appointment (and an office and computer) in the University's School of Education, where I met some outstanding faculty working in the field of higher education and other specializations, many of whom I continue to delight in encountering each year at professional meetings. I asked for and was given permission to teach a summer course on the American college through the University's distance learning program, which offered courses by television to UH's branches on its various islands. This was truly an educational experience for me, even though I had had some prior experience with distance learning between NYU and Puerto Rico. The preparation for a course, the pedagogy, the delivery, and the interactions with students were completely different from what I had been accustomed to. Thank goodness for the good advice I received from my local colleagues. I did have an opportunity to fly to another island and "teach back" to my students at the main campus on Oahu – another good learning experience – at least for me!

In general, my time in Hawaii was both edifying and extremely enjoyable. I bought (and later sold, of course) a motor scooter so that I could move easily around the Island. My new colleagues in the administration were generous with their time. I hope in turn I made at least a small contribution to their thinking. The climate, cultural ambience, and people were warm and friendly. And did I mention that I played a lot of tennis with people of many different nationalities – who, despite the language barrier, managed to handle my serve quite well?

BELARUS

My interest in foreign cultures having been sparked by my Japanese experience, I was pleased to be invited to be part of a team of NYU scholars, led by Professor Philip Hosay, to consult with the government and educators in Belarus. The study was funded by an agency of the U.S. Government and was sufficient to enable six to eight educators from various departments in the School of Education to travel for two consecutive summers (month-long visits in May of 1993 and 1994). Our primary host was the Belarus Institute for Educational Administration, an agency of the federal government in Minsk, the capital of

Belarus. Each team member was given travel money plus a per diem allowance and a small stipend, more than enough to live comfortably in an exceptionally poor country.

During the first year, I lived alone in an apartment in the building formerly occupied by the KGB. In the second year, I lived with another faculty member, Millard Clements, who was an ideal compatriot in the exploration of another part of the world. He was inquisitive and curious, continually issuing expressions about his experiences such as “Isn’t that interesting!” Besides he was an excellent cook who managed to put together nutritional and tasty meals from the typical root vegetables that were likely to be found in the markets. He also was engaged in a serious effort to connect Belarus (and other countries) through telecommunications to the United States by setting up formal linkages among elementary and secondary schools in the two countries. Besides this noble effort, his computer connection afforded me the opportunity to stay in communication with my family. I tried to learn a little Russian before and while I was there, a practice which I believe may not have been too successful in my communication efforts, but did much to open up local residents to try their English language skills. (I did learn to compose and give (read) at least one vodka toast of five minutes in very bad Russian. Mine was not the first toast of the event, however, so my grammar and pronunciation went uncriticized.)

My role in Belarus was to work with the government and with higher education institutions to set up a plan for modernizing the system. Belarus had at that time an excellent system of education from kindergarten to higher education (indeed to continuing and professional education), though the percentage of students going on to higher education was unremarkable. Still, education per se had an extremely high social and cultural value in the country.

The system, however, was dominated and controlled centrally. In fact, all of Belarus was a victim of the authoritarianism of the former Soviet Union. Since “perestroika” was a recent phenomenon, the culture of individual initiative and risk taking was absent in all domains of the culture – education, government, economics (e.g., capitalism). My conversations with the Ministry of Education and with heads of educational institutions revealed a desire to loosen up the central controls, but the culture of centralized command persisted. I was fortunate to have as a colleague a young scholar, Vassily Selechev from the Belarus Educational Center for Leadership Development, who not only introduced me to the system and its incumbent leaders, but as a scholar worked assiduously to produce a report that might be

useful to the Ministry of Education. Alas, our report, some 91 pages in English with lots of data and, I hope, insights, never made the light of day. My efforts to have it published in the United States failed (except for a short blurb in *International Higher Education*. It was too long for a journal article and too tangential to the interests of most in comparative education. It still remains an extremely useful historical documentary about Belarus during this period. (Readers: if you're interested, I'll send you a copy!) Belarus today, has reverted back to its totalitarian ways, joined at the hip to Russia and unable to become the independent nation that it deserves to be.

CONSULTING

I'll mention briefly some of the consulting I have done in my career, as in a number of ways it was significant in its relationship to my scholarly work. There hasn't been too much, alas, and I've noted several assignments above. Despite many requests to and encouraging conversations with Middle States and NEBHE, except for one visit as an adjunct member of a team, I was never able to get onto the "circuit." My feeling was and still is that such assignments are invaluable opportunities to learn deeply about how other campuses operate. I believe the reason I was never chosen to serve is that my credentials are too broad and general. Had I served as a vice president for academic affairs or for research, for example, I could have made a more specialized contribution to the team.

Perhaps the most rewarding of my consulting jobs was with Cooper Union in New York City which asked me to help them design a comprehensive assessment program for their students. Cooper Union, a private college founded in 1859, is unusual in that they charge no tuition. The institution is divided into three major specializations: art, architecture and engineering. Each has an exceptionally fine reputation for turning out highly qualified and imaginative students. When I began consulting at Cooper Union in the mid-1990's, I found that they had no systematic mode of assessing their students' goals, attitudes, values, levels of maturity – concerns that might have helped the faculty better design the students' educational experiences, both curricular and extracurricular. Through a series of weekly meetings with faculty in different departments and with larger groups of faculty and administrators, I outlined some of the possibilities for a program of assessment in which the School might engage. I soon learned, however, that much of the thrust for the introduction of such a program came from

the president, not the faculty. The latter were unionized and fiercely defensive of the curricular and teaching prerogatives to which they had grown accustomed and had institutionalized through a comprehensive and somewhat cumbersome bureaucracy. In addition to resistance to top-down initiatives and an entrenched union, there was an odd disjuncture among the faculty with which I had to work. First, there was a faculty in the arts with strong individual desires for control over their freedom of expression. Then, there were the engineers and scientists, whose ideas about teaching and learning were quite different from the arts. I worked assiduously with both groups alone and together for about a year, at which time the Cooper Union president announced that he was resigning. It would take at least two years to recruit and appoint a successor, during which time, the school would be in limbo – without direction or a mandate for change. In a joint decision with Cooper Union, we decided at that point that I could no longer be of assistance until a new president was appointed. So ended my association with the institution. Looking back, I see that I learned much about governance in a unique institution. Because of the extremes of the positions, the issues were made clearer as were the difficulties of instituting change in any institution of higher education.

SCHOLARSHIP

By far, the most intriguing and satisfying part of my career has been the research I have conducted on a variety of subjects and the writing that evolved from it. I've noted earlier a number of the research projects in which I've been engaged, but let me here describe several others that were particularly challenging and rewarding. I will be brief, partly because of space limitations, and partly because the publications are available for reading in the public domain.

About half of the books I published were collections of original articles written by others that I edited. I did very much enjoy both the conceptualization of an original idea for a collection, the recruitment of the best scholars in the field, and the exchanges with those scholars in the editing process. Fortunately, I had to do very little, except learn a lot and ask questions – things I obviously very much like to do. As a matter of fact, in the late 1980's, I was one of two finalists for the editorship of the AAUP journal, *Academe*, a post that would have fit in with my predilections toward editing. But the other guy got it.

At any rate, in 1991, the first edition of *Foundations of American Higher Education* was published as part of the ASHE Reader Series. As editor, I served with the most able assistance of an extremely talented and knowledgeable Advisory Board. Barbara Townsend was followed by Daryl Smith as head of the ASHE Reader Series. Both made many suggestions for changes in my and the Board's selections of articles (a number with which I strongly disagreed but came later to see the wisdom of). The original conception of the purpose of the Foundations reader was somewhat problematic because the aim was unclear to some, but quite clear to others who did not always agree with one another. My own view was that the Reader would comprise "classic" articles and book chapters that were not readily available to beginning students in the field of higher education. Many trips to the library by beginners would have been necessary to access all of them. My thinking was that the Reader would very rarely be updated, since after all, classics are classics. Individual instructors would use the Reader as a basic text and would supplement it with more contemporary material. I did include in the Reader a feedback form to tell us whether the selected choices "worked" for instructors and students.

I recruited an outstanding group of Associate Editors in thirteen key domains of higher education, asked them to make suggestions for material to be included in the volume, and to write a brief introduction to the domain for which they were responsible. Rereading those introductions now fifteen years later, I realize how wise and prescient the authors were. They mark clearly a place in the history of ASHE's thinking at that time.

Despite my philosophy about the classic character of the articles in the Foundations reader, there were a sufficient number of readers who felt that a number of the articles were dated and not suitable for understanding contemporary issues to warrant our considering a revision. Somewhat reluctantly, I agreed to edit a second edition, with David Webster as co-editor. It was published in 1999. Some of the same editors updated their introductions to the selections, some of which were new to this edition. We added several new editors as well. The second edition is still in print in 1999 (Bess & Webster, 1999).

The experience for me of editing a collection of readings comprising the whole of higher education was of course both daunting and edifying. It goes without saying that I have memorized all 726 pages of the second edition, so I can tell myself how smart and knowledgeable I must be! In truth, I would ask that ASHE members at the next annual meeting not take it upon themselves to test me on the particulars of the articles, nor

even on the general principles espoused in them. As I noted at the outset of this *Handbook* chapter, I have a terrible memory, and even if I didn't, I think that at this point in my life, the lessons of these classics have become merged with my own notions about most of the subjects in the *Foundations* reader. Ask me about a subject, and I'll have an answer at the ready; but I can't claim it as exclusively my own. I suspect that for most members of our profession, this is the case, especially if we continue to do research in new areas, and our brain cells get clogged up with exciting new ideas and theories. Nevertheless, the *Foundations* collection was, indeed, "foundational" for me personally and I hope for others.

As a side note, I cannot resist commenting on the other readers in the ASHE series. As I understand it, these readers are intended more to be compilations of the most contemporary and trenchant of writings on a number of different issues in the specialized domains of the individual readers. It is my impression, however, that there is some considerable danger in the increasing popularity of the readers. Our higher education community can become lazy and homogenized in its thinking, thus narrowing its academic gene pool. Busy faculty may find it overly convenient to assign the reader without doing additional research to make their syllabi contemporaneous and unique to their personal perspectives. Some years ago, I recommended to the ASHE Board that when existing stock ran out on a particular reader, they declare a three-year moratorium on reprinting it. Instructors in higher education programs would then be *forced* to seek out and assign new readings. After the three years, a new reader could be prepared. I wonder what happened to that suggestion. (Not really; I know.)

From about 1995 to 2000, my research interests turned predominantly to questions of the organization of faculty and the effects of organization on their motivation – a subject I had explored some years earlier. I became increasingly intrigued by questions of "sociological ambivalence" (Merton & Barber, 1963), elaborated later in the work of Burrell and Morgan (1979), which I interpreted as a discontinuity or discordance in the norms and values of two or more contiguous social systems. The paper which was published in John Smart's and Bill Tierney's *Handbook* (2001) used the Japanese system as a case study, but my conclusions, abetted by the complementary theories of Cohen and March's "organized anarchy," are, I think, quite helpful in understanding the motivational dilemmas facing faculty in major research universities in this country.

I worried greatly during this period about the increasing mechanization of higher education and wrote a think piece about the probable

negative effects of an increase in “contract systems” for the *Journal of Higher Education* that might replace the tenure system. I was also concerned about the schizophrenia of the faculty role that split faculty allegiances and energies – unnecessarily, I thought. I wrote about that in an article in *Review of Higher Education* in 1998. Two other significant writing projects engaged me from 1995–2000. My edited book, *Teaching Well and Liking It*, brought together outstanding authors from many different fields to address the question of faculty motivation. The chapters covered such topics as intrinsic and extrinsic motivation, flow theory, feminist theory, expectancy theory, behavior modification, leadership and politics, and a host of others. The insights provided by these authors were truly innovative and stimulated completely new ways of thinking about how we need to organize faculty work. I also published in 2000 *Teaching Alone, Teaching Together, Transforming the Structure of Teams for Teaching*. With the help of another group of extraordinary thinkers, we endeavored to break down the faculty role into discrete dimensions so that we could analyze the very different talents and interests needed by *different* faculty if the subtleties of each dimension were to be “professionally” addressed. Among the topics considered, as one example, were the research role of the teacher compared with the lecturer role. Typically, we ask both roles to be performed by the same person, but, in truth, very different personality dispositions and skills are required for each. The book considers how teams comprising faculty skilled and sincerely interested in these more specialized areas might be assembled as a formal organization to prepare and deliver the composite teaching package.

More recently, I have been even more concerned with the mechanization of higher education and the resulting loss of professionalization of faculty. Bureaucratic forms of oversight are creeping into our academic environments threatening traditional faculty prerogatives and institutionalizing the paranoia that characterizes work environments in other settings. In 2006, I published “Toward Strategic Ambiguity: Antidote to Managerialism in Governance,” in John Smart’s *Handbook*. I am hoping that it will be part of a larger work already in progress that I have tentatively titled, “The Mask of Ambiguity – and the Preservation of Academic Democracy.” The general thesis of the book (as was the chapter already published) is that colleges and universities must find ways to reinstitutionalize “ambiguity” as a norm. It may seem counter-intuitive that organizations that wish to become more efficient and effective should avoid trying to be clear and understandable in their authority structures, policies, and procedures, but I would submit that

democratic decision making is a *sine qua non* of efficiency in academia and that democracy is necessarily messy. So also must organizations be so – up to a strategic point. Well, you'll have to read the book, I suppose.

It should be clear that a very different kind of leadership will be required for an institution with these characteristics. With a co-author (Paul Goodman), I took a stab at this subject. We published "Leadership Ambiguity in Universities and K-12 Schools and the Limits of Contemporary Leadership Theory." It appeared in the journal, *Leadership Quarterly* in 2002.

Finally, along the publishing front, I am pleased finally to be nearly finished with the writing of a two-volume (700 pages each) textbook on the organization and administration of colleges and universities. It will be published by Stylus Press in the very near future (Bess & Dee, 2007, in Press). My co-author on this massive (and exhausting!) project has been Jay Dee, who is on the faculty in higher education at the University of Massachusetts at Boston.

SUMMING IT UP

Well, Yogi's cliché is apt. It ain't over – yet. I now live in Amherst, Massachusetts, having moved here after leaving NYU in 2000. We chose Amherst because it is the home of five colleges – Amherst, University of Massachusetts, Mount Holyoke, Smith, and Hampshire. It is also, therefore, the home of many academics and students and cultural activities – as well, needless to say, of many other fine folk that we have met. The culture is pretty much affordable, compared with the choices my wife and I had in New York City. Our house is commodious, the yard amenable to landscaping – and weeds. A few years back, I had an operation on my back, so the sport of choice is no longer tennis, but golf – an activity that gives me access to new friends whenever I play at the public course that is nearby. I have become involved in community service activities and plan a heavy involvement in the state and national elections – something I have been doing regularly in recent years. (Check my bumper stickers!) Financial constraints have limited somewhat my and my wife's leisure travel activities, but I am hoping that within a year, those will be at least partially removed. We have a number of plans.

I intend to remain active professionally, though I will be writing less and with fewer time deadlines. I would like to do more consulting. I will probably make louder organizational noises at ASHE, even

though it remains the professional home of some of my dearest friends. I have been working with doctoral students and young faculty from the University of Massachusetts on their research and would hope to do more of that. Family life is also critically important. Neither of my children, two young men, is married, so the joys of grandparenthood have yet to come. I'm looking forward to that new experience. The rewards of fatherhood, on the other hand, have become even more meaningful in recent years, as my sons have moved successfully into their chosen fields – music and film – and I now relate to them as adults. And, lastly, I can only hope that the great fortune that I have had in finding and marrying my wife, Nancy, will continue throughout our remaining years. She's an unimaginable, sparkling gem and the true source of my tranquility.

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2. ACCOUNTABILITY, ASSESSMENT, AND THE SCHOLARSHIP OF “BEST PRACTICE”

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Political concern for the productivity, efficiency, and quality of higher education is shaping the ways in which academic and institutional researchers evaluate the effectiveness of collegiate programs and institutions. The search is on to identify "best practices" that will increase educational productivity. To motivate that search, accountability standards tend to emphasize the importance of quantitative indicators of student learning outcomes and de-emphasize the need to understand educational processes and institutional contexts. Though a focus on student learning outcomes is essential to the study of institutional effectiveness, it is not sufficient in itself to spur productive change and innovation. In this chapter, we argue that the recent history of legislative accountability (and institutional responses to it), developments in educational research methodology, and theories of learning and professional practice demonstrate the need for equal attention under accountability to educational processes and contexts alongside the measurement of student outcomes.

To address our concern that the search for "best practices" in its current form will be ineffectual, we propose the creation of evidence-based inquiry councils (EBICs) as a central feature of a comprehensive accountability system designed to integrate knowledge of institutional context, educational processes, and learning outcomes for the purpose of increasing the educational effectiveness of colleges and universities. EBICs, as proposed here, are distinguished by an integrated scholarship involving academic and institutional researchers with an inter-related focus on institutional processes (including resource use) and student learning outcomes.

The evidence-based inquiry councils are intended to capitalize on existing features of assessment and accreditation systems, such as self-studies and campus review teams, in support of accountability goals. The proposed EBIC design addresses two primary weakness of results-based accountability plans, namely (1) lack of a clear strategy to understand "what works" in a variety of higher educational contexts and (2) a clear mechanism to promote the adoption by administrators and faculty of educational practices identified as what are often called "best practices." The educational programs and practices that prove to be effective in one setting may not be in another, or may not be effective in the same ways, so we prefer to call these "effective" or "exemplary" practices, meaning they are worthy of examination for potential adoption in other settings. Knowing that

educational contexts are highly variable, practitioners may be legitimately dubious or hesitant about adopting new approaches to improve student outcomes, even if those approaches have been warranted by rigorous academic research. The design of the inquiry councils, as proposed here, takes into account the different decision-making and information needs of policymakers and educational practitioners. We prescribe an integrated set of evaluation strategies to meet those needs.

The search for institutional “best practices” is evident today in federal and state accountability initiatives (Dwyer, Millett, & Payne, 2006; Erisman & Gao, 2006; U.S. Department of Education, 2006; “What Works Clearinghouse,” 2006) and in the philanthropic priorities of foundations with a focus on higher education (see, for example, Dowd, 2005; Dowd et al., 2006; Lagemann, 2002; *Lumina Foundation*, 2006; *What we know*, 2006; Wyner, 2006). Our views are informed by participation in the Community College Student Success Project at the University of Massachusetts Boston, which was initiated with funding from Lumina Foundation for Education. The project involved higher education administrators, faculty members, and institutional researchers in a series of symposia and working papers which reframed the search for scientifically warranted best practices as a search for best practices *of assessment*. The distinction stems from our beliefs that the emphasis of accountability should be on creating a scholarship of effective assessment practices rather than on the identification of specific practices or programs as a toolkit for educational improvement. The entire accountability movement has been decidedly in the opposite direction, a point we explore by discussing the accountability environment for academic research and institutional research. In our view, the scholarship of best practice should be a scholarship of professional development and learning among higher education practitioners that integrates the work of practitioners-as-researchers and academic researchers as facilitators of learning. That said, we see the study of the causal-effectiveness of educational programs using traditional research methods as one of many essential elements of this broader research program.

Our consideration of the current state and future prospects of a “scholarship of best practice” centered on learning and the development of a “culture of inquiry” (Dowd, 2005) is presented to inform academic and institutional researchers, policymakers, and officials of funding agencies who are interested in increasing the quality and productive capacity of higher education. Our argument is presented in

five following sections, with references to the relevant academic and policy literature throughout. The first section provides a brief review of studies of the effectiveness of accountability in bringing about changes in institutional behavior. The second section discusses recent controversies in academic research concerning federal research standards that focus nearly exclusively on experimental and quasi-experimental methods as the kind of research needed to increase educational effectiveness. Consistent with our emphasis on practitioner learning, we argue that evaluation designs using a variety of methods are better suited to achieving accountability goals because ethnographic and case study methods are necessary to develop the "ordinary knowledge" (Lindblom & Cohen, 1979) and "practical wisdom" (Aristotle, cited in Polkinghorne, 2004) of effective practitioners.

Just as federal research policy places high value on quantitative methods and analyses, state accountability policies place great value on quantitative indicators of institutional performance. The accountability climate and the challenges of educational problem solving are similar for academic researchers and institutional researchers. In both settings, we perceive a risk that accountability policies will problematically obscure rather than illuminate the dynamic, context-sensitive nature of teaching, learning, and educational administration. The third section presents the basis for this concern in the realm of institutional research and assessment by comparing the methods and premises of performance, diagnostic, and process benchmarking. While accountability systems do not necessarily involve benchmarking, they often do, and peer benchmarking is the preferred strategy of policymakers hoping to spur institutional change and innovation (see, for example, U.S. Department of Education, 2006). The circumstances under which innovation is likely to occur through benchmarking activities are discussed, emphasizing concepts of individual and organizational learning. This section and the previous one demonstrate that both academic researchers and institutional researchers are responding to accountability requirements by emphasizing the importance of understanding educational processes within specific institutional contexts in order to determine "what works."

The fourth section describes the structure of the proposed evidence-based inquiry councils, which are characterized by the study of student learning and educational outcomes integrated with the self-study of practitioner knowledge and learning. The research and evaluation methods of the EBIC are intended to facilitate synthesis by practitioners of evidence from quantitative and qualitative data

analyses. The purpose of the EBICs is to understand how, why, and when educational practices are effective. Finally, a brief concluding section summarizes our main argument.

I. ACCOUNTABILITY TRENDS AND EFFECTIVENESS

Competing Priorities of Multiple Stakeholders The higher education news has prominently featured a national debate among legislators, business leaders, higher education officials, and higher education associations about the means by which colleges and universities should be held accountable for educating their students (Field, 2005a, 2005b; Selingo, 2006; Strout, 2004). As Congress drafted revisions to the Higher Education Act, which sets federal higher education policy, Republican leaders and the U.S. Secretary of Education's Commission on the Future of Higher Education argued that college accreditation reviews should become part of the public domain, with information about college effectiveness and quality made readily available to the public (Field, 2006; Fleming, 2004; Lederman, 2006; U.S. Department of Education, 2006).

Informed by business perspectives emphasizing consumer satisfaction and economic competitiveness, the watchwords of draft reports issued by the Secretary's Commission on the Future of Higher Education in the Summer of 2006 were "quality" and "innovation." Consumer access to college performance data was highlighted as an important lever for bringing about improvements in educational efficiency and effectiveness. In addition, the accreditation system was viewed as too focused on assessing educational processes, with insufficient attention to "bottom line" results (U.S. Department of Education, 2006). Both the Spellings Commission report, which called for a "culture of accountability," (p. 20) and a proposal for a comprehensive higher education testing system issued by the Educational Testing Service, which called for a "culture of evidence" (Dwyer et al., 2006), advocated using the accreditation system to increase higher education accountability. In presenting evidence-based inquiry councils as an accountability structure, we also propose to link accreditation to accountability but in a manner that values the existing focus of accreditation on promoting effective assessment processes.

These proposals to subsume the accreditation system to the accountability agenda represent a striking change from the existing voluntary and confidential system of higher education accreditation (Bollag, 2004). While unwelcome to many higher education leaders,

these proposals were not unexpected. The advance of public accountability pressures into the previously private domain of accreditation was one step in an ongoing struggle to document the quality and productivity of colleges and universities (Zumeta, 2001). The tensions stem from contrasting values outside and within academia and from the inherent difficulty of the task of quality measurement. External values include institutional efficiency and quality, adherence to performance standards, comparability of measured outcomes, and public reporting to higher education consumers. Internal values also include institutional quality, but then diverge towards an emphasis on mission differentiation, a focus on process improvement rather than comparative outcome standards, and confidentiality of results for internal review (Burke et al., 2002; Burke & Minassians, 2003; Ewell, 1991, 2002; Moore, 2002).

The accountability debate raises questions regarding the appropriate reach of state and federal governments into the operation, management, and core educational activities of higher education. Trow (1996) defined accountability simply as "the obligation to report to others, to explain, to justify, to answer questions about how resources have been used, and to what effect" (p. 310). Based on this definition, he raised the following set of fundamental questions: "Who is to be held accountable, for what, to whom, through what means, and with what consequences?" (p. 310). Burke (2005a) drawing on Trow's framing questions described an "accountability triangle," with state priorities, academic concerns, and market forces as the three basic stakeholders of accountability. Like Clark's (1983) earlier work, which similarly identified state control, an academic oligarchy, and market models as the three forces of contention in the field of higher education, Burke's accountability triangle provides an apt instrument with which to survey the forces of contention in higher education accountability. For example, assessment (e.g. Kuh, 2005), accreditation (e.g. Wolff, 2005), and academic audits (e.g. Massy, 2005) can be located in the corner of academic concerns. State-by-state report cards (Callan & Finney, 2005), the "rules in use" of higher education governance (Richardson & Smalling, 2005), and performance reporting (Burke, 2005b) are in the corner of state priorities; and reputational ratings, such as those in U.S. News and World Report (Volkwein & Grunig, 2005) in the corner of market forces.

Under a paradigmatic shift towards a new form of governmental accountability, in the early 1980s legislators sought to create measurable goals and financial incentives to spur improved results,

as well as to motivate colleges to improved performance through concern for their public relations and market shares (Burke et al., 2002; Dougherty & Hong, 2005). While the external accountability movement stressed institutional efficiency and the establishment of performance standards, during the same era an internal assessment movement focused on the improvement of teaching and learning environments.

While the prevailing political ideologies of accountability has been strongly steeped in business perspectives concerning the need for efficiency, productivity, and economic competitiveness (Alexander, 2000; Ayers, 2005; Dowd, 2003; Leveille, 2005; J. S. Levin, 2001), higher education scholars have warned that business market models cannot be adopted wholesale to the regulation of higher education because they are essentially different organizational environments (Dill, 2003; Gumpert & Pusser, 1995; Toutkoushian & Danielson, 2002; Zemsky, 2005). Dill (2003) and Zemsky (2005) pointed out that the current market conditions of higher education are not typical of business markets. For example, the higher education market is imperfect because consumers cannot differentiate the quality of institutions that are “reputation-” and “prestige-” oriented (Dill, 2003). Not surprisingly, the academic community has been hesitant to identify specific or uniform indicators of institutional performance as bottom line indicators of performance (Burke et al., 2002) and instead emphasized the diversity of institutional missions and broadly defined learning outcome goals (*Greater expectations*, 2002; *Our students best work*, 2004).

Uncertain Effects of Accountability Through a series of surveys of state higher education officials conducted at the Rockefeller Institute, Burke and colleagues have documented the changing forms and uncertain effects of accountability on institutional behavior (Burke et al., 2002; Burke & Minassians, 2003). Using the typology of state-required performance reporting (requiring assessments and reporting of performance indicators), performance budgeting (loosely tying institutional performance to budget priorities), and performance funding (allocating funds based on performance), they have shown that almost all states have experimented with some form of accountability and that legislative preference for these different accountability mechanisms have changed over time. Lawmakers attempted to strengthen early performance reporting requirements, which were ultimately viewed as ineffective, by tying performance to funding. However, the amount of money involved was typically small, in the neighborhood of one-half

to six percent of state funds, and states had a tendency to cancel or suspend performance funding when budgets were tight (Burke et al., 2002, pp. 27, 32–34). More recent state-level case studies of community colleges (Dougherty & Hong, 2005; Erisman & Gao, 2006) provide further evidence that performance budgeting and funding had little financial impact on colleges and that these requirements have lost favor in policy circles compared to performance reporting, which has reemerged as the favored accountability mechanism.

The uneven performance of state accountability requirements on institutional performance led Burke and colleagues to characterize them as “symbolic policies,” which “appear to address problems, while having little substantive effect” (Burke & Minassians, 2003, p. 14). Similarly, a report from the Institute for Higher Education Policy, based on interviews with representatives of state higher education agencies and system offices in eight states, concluded that accountability data do not typically inform or drive state policy, largely due to a disconnection between performance indicators and policy goals (Erisman & Gao, 2006). Dougherty and Hong (2005) summarize their findings by noting that the effect of performance accountability on colleges is “uneven,” “at best moderately strong,” and perhaps undermined by “significant negative unintended outcomes” (p. 12). The policies affected colleges by raising their awareness of state priorities, increasing attentiveness to their own performance, and raising concerns about public perceptions of their quality. However, the case study results provide only weak evidence concerning the effect of performance accountability on the ultimate goal of raising student outcomes and those results were mixed. The possibility that increases in retention and graduation rates, where observed, were due to reduced academic standards could not be ruled out. The almost “mythical powers” of reform ascribed by some to the use of performance indicators as a mechanism for change have not been observed in institutional responses to accountability (Toutkoushian & Danielson, 2002, p. 206). These studies provide evidence that performance accountability as implemented to date in the U.S. has not been successful in improving the performance of colleges and universities. They signal the need for deeper examination of the means and goals of legislated higher education accountability.

According to Burke (2005c), the ideal accountability system will be located at the center of the accountability triangle, implying the equal role of all three types of stakeholders. The recent history of accountability systems adopted, implemented, modified, discontinued, and recycled is a strong sign of the search for that ideal as well as

the competing push and pull of stakeholders with oftentimes different values, goals, and cultural norms. Surveying this field of contention, a recent report by the National Commission on Accountability in Higher Education emphasized the need for new approaches to accountability, particularly ones based on democratic participation and shared responsibility among faculty, administrators, and legislators. (*Accountability for Better Results*, 2005). Our proposal for evidence-based inquiry councils incorporates the emphasis of accountability on evidence-based decisionmaking and the emphasis of assessment on professional judgment. Recognizing the very real challenges facing higher education, the EBIC design is intended to promote shared responsibility among stakeholders as the best strategy for addressing those problems.

Although tuition charges are an ongoing point of contention, the key problem facing higher education is how to educate large numbers of students with diverse levels of academic preparation (many significantly underprepared), speaking many different native languages, and often attending college part time while juggling home and work responsibilities. In many states demand exceeds capacity at the same time public resources are declining, so these educational challenges are to be met with the same or fewer resources. As a result, accountability perspectives have emphasized doing more with less, which implies efficient use of resources.

If news of poor performance in graduating or retaining students motivates practitioners to want to adopt different educational approaches or to change the way they interact with students, they also need to see how current practices waste resources in order to become more effective and efficient. This is difficult when it is a matter of seeing one's own culture, values, and behavior. Theories of practice in the "caring professions," such as education, indicate that practitioners learn through "intelligent inquiry" when faced with having to resolve errors in their own judgment (Polkinghorne, 2004). It follows that college administrators and faculty will need to discover how to educate more of the diversely prepared students more cost-effectively. Accountability can foster such discoveries, perhaps using many of the policies now in place, such as the collection of data on graduation rates, if it is not antagonistic to practitioner inquiry.

However, all research and evaluation is political (Chatterji, 2005; Lather, 2004; Weiss, 1975), and our culture currently places a high value on the technical knowledge of experts (Polkinghorne, 2004). The climate of accountability for academic research and institutional research, using the latter term for simplicity of exposition in a way

that encompasses institutional self-study and assessment initiatives, is similar because they exist in the same culture. Emphasis is placed on data, quantitative measures, and statistics as key mechanisms of accountability. The problematic aspects of this emphasis on technical rationality have been explicitly argued in the academic research literature, where academics schooled in other epistemological traditions point out that what people know and believe and how they behave is mediated through social interaction and is context-dependent (Tharp & Gallimore, 1988). Within the world of institutional research and assessment, this point of view is more often voiced as concern for a lack of attention to the diversity of educational contexts and students, which, it is argued, cannot be appropriately captured in uniform indicators of institutional performance.

In the following two sections, we take a broad view of the culture of accountability as we see it manifested in the worlds of academic and institutional research to explain what we perceive as a clear need for an accountability structure that combines evidence-based decisionmaking and practitioner inquiry. Our review emphasizes that in both realms the fundamental challenge is developing methods for understanding and evaluating dynamic, in the sense of highly interactive, educational contexts.

II. POLITICAL AND SOCIAL CONTEXT OF EVALUATING "WHAT WORKS"

As Lather (2004) has observed "science is, like all human endeavor, a cultural practice and practice of culture" (p. 28). The current political view of the culture of science is perhaps best epitomized by the fact that the No Child Left Behind Act of 2001 (HR1) reauthorizing the Elementary and Secondary Education Act references "scientifically-based research" 111 times, gaining it "acronym status inside the Beltway" as "SBR" (Feuer, Towne, & Shavelson, 2002, p. 4). The No Child Left Behind (NCLB) Act also requires that schools use educational methods shown to be effective through scientifically-based research.

Though higher education is not governed by NCLB, the Act and related definitions of scientific standards and rigor adopted and endorsed by the Institute for Education Sciences (IES) (*Identifying and Implementing Educational Practices*, n.d.; *Scientifically-Based Research*, n.d.; "What Works Clearinghouse," 2006; "WWC Study Design Classification," 2006; "WWW Study Review Standards," 2006) affect higher

educational researchers and practitioners. The issues and priorities of the NCLB are clearly echoed in the draft reports of the Spellings Commission on the Future of Higher Education (U.S. Department of Education 2006), demonstrating the relevance of the research and policy environment surrounding NCLB to higher education. As indicated by recent calls for higher education research proposals issued by the IES, the same federal standards will shape what is funded. Experimental and certain forms of quasi-experimental research designs are endorsed as those most necessary for understanding the effectiveness of educational programs. Some view the emphasis on rigor and objectivity expressed in these new federal standards as an embrace of scientific reasoning (Feuer et al., 2002; Shavelson, Phillips, Towne, & Feuer, 2003) while others decry it as a narrow form of "scientism" (Lather, 2004, p. 28) bereft of insights from the broader world of research, inquiry, and scholarship (Berliner, 2002; Chatterji, 2005; Erickson & Gutierrez, 2002; Lather, 2004; St. Pierre, 2002).

These critics argue the federal standards are uninformed by important methodological and epistemological debates and insights of the past two generations of researchers in education, evaluation, sociology, cultural studies, and other fields. They argue that the claims made to objectivity and scientific rigor in the federal research standards are greatly overstated. Not only because "Time and again, political passion has been the driving spirit behind a call for rational analysis" (Cronbach, cited in Chatterji, 2005, p. 18), but because there are distinct challenges to the generalization of statistical results to educational settings, which are highly variable and constantly changing (Chatterji, 2005; Erickson & Gutierrez, 2002; Raudenbush, 2005). The academic mode of research driven by theory and hypothesis-testing of causal effects, is not sufficient to answer what are essentially evaluation questions of "how, when, and why a program works" (Chatterji, p. 20). Greene (2000), arguing that the content and method of program evaluation are "inextricably intertwined with politics and values" (p. 983), places the current emphasis on examining the effectiveness of social programs as part of a historically dominant tradition, which in its contemporary form she terms "postpositivism."

The omission from the federal definitions of scientific research of other forms of educational research, including the evaluation genres Greene (2000) refers to as utilitarian pragmatism, interpretivism, and critical social science is viewed as particularly problematic because "educational change is accomplished locally" in "local situations of complexity and contingency" (Erickson & Gutierrez, 2002,

p. 23). What "works" in one educational setting may not necessarily work in another. Therefore, practices shown to be effective through causal experimental analysis cannot be replicated in practice in a simple manner. In addition, even if programs can be demonstrated "scientifically" to be effective, the "push" by policymakers for replication of educational practices will require a "pull" from educational practitioners for innovation to actually occur (Zaritsky, Kelly, Flowers, Rogers, & O'Neill, 2003, p. 33). This implies that the federal investment of \$18.5 million in the What Works Clearinghouse (Lather, 2004, note 15), which is a "push" approach to dissemination of effective programs, will require additional investment to put scientifically validated knowledge into use by practitioners. Cohen, Raudenbush and Ball (2003), for example, emphasize that knowledge gained through educational experiments will require consideration by "communities of practice" and well informed "professional conversations" to be put into practice. These insights are the basis of action research and practitioner inquiry (Bensimon, Polkinghorne, Bauman, & Vallejo, 2004), which emphasize the educational practitioner's role as agents of change.

Feuer, Towne and Shavelson argue that "decision makers *at all levels* are clearly thirsting for rational and disciplined evidence provided by science" (2002, p. 4, italicized emphasis added). However, scholars in diverse fields including psychology, philosophy, organizational behavior, and cognitive science have shown that decision making in educational practice is informed by a much broader range of ways of knowing (Bensimon et al., 2004; Polkinghorne, 2004; Sergiovanni, 1992; Simon, 1997; Tharp, 1993; Tharp & Gallimore, 1988). The dominance of "technical rationality," which elevates the knowledge of experts over the knowledge of practitioners, stems from the view that academic science can determine how to "understand and refine practice" and then "transmit" that knowledge to practitioners (Polkinghorne, p. 170). Yet, changes in educational practice come about through changes in the knowledge, beliefs, attitudes, and behaviors of educational practitioners. Effecting change is fundamentally an issue of professional development (Dowd, 2005) and learning, which is known to take place through social interaction (Bauman, 2005; Bensimon, 2004, 2005; Bensimon et al., 2004; Rueda, 2006; Tharp, 1993; Tharp & Gallimore, 1988). Understanding the feasibility of replicating or scaling up programs shown to be effective through scientific causal analysis is an issue distinct from that of promoting the adoption of effective practice among educators. Understanding what

motivates the adoption of “best practices” also requires the study of professional practice in education.

Audiences for Evaluation Results Though it is a critical issue, the way in which scientific knowledge is effectively transformed into practitioner knowledge and put to use in practice is not adequately addressed in the federal standards for educational research. To understand why, in addition to recognizing the role of politics, it is useful to distinguish the primary information needs of policymakers, educators, and academic researchers. As noted, the question of “what works” is essentially a matter of program evaluation. Whereas academic research is traditionally characterized by theory-driven questions and answers (Chatterji, 2005; Cobb, Confrey, diSessa, Lehrer, & Schauble, 2003; Feuer et al., 2002) and institutional, or user-driven, research is characterized by institution-specific investigations to inform administrative decision making and planning (McEwan & McEwan, 2003; Walleri, 2003), evaluation research occupies a middle ground and draws on both academic and institution-specific perspectives to inform different audiences. The field of evaluation uses diverse methods to provide formative and summative evaluations to practitioners and policymakers, recognizing their different decision making needs (Chatterji, 2005; Greene, 2000). Whereas practitioners are primarily concerned about effectively and cost-efficiently using resources at their disposal to operationalize program goals and objectives through specific educational practices, policymakers are rightly concerned with determining the best investment of public dollars among any number of educational programs or policies. The scope and specificity of interest of the two groups differs.

As Raudenbush points out (2005), policymakers cannot intervene directly in classrooms and, therefore, attempt to influence teaching and learning primarily through accountability and governance requirements and by providing resources in the form of incentives. Therefore, the historically dominant tradition of evaluation, with its focus on assessing effectiveness and cost-efficiency and quantifying the magnitude of program effects, is well oriented towards the views and needs of policymakers. Greene (2000) distinguished this set of values from that of organizational decision makers, who, acting as utilitarian pragmatists, focus on program effectiveness and improvement in terms of what is working at an operational level, including whether clients like a program and are satisfied with it. These methods meet the information and decision-making needs of midlevel program managers and

on-site administrators and are often carried out by them through interviews, focus groups, and surveys of program participants.

The Dynamic Educational Production Process Theory-driven academic research informs evaluations of higher education effectiveness conducted in these various evaluation traditions. Synthesizing the extensive academic literature in the area of college student outcomes by higher education scholars such as Pace, Astin, Tinto, Bean, Cabrera, Nora, Pascarella, Terenzini, and many others, Volkwein (2003, pp. 184–185) summarizes four “major assertions” of the higher education literature that are useful in analyzing institutional effectiveness. These four major research-based assertions are centered on (1) organizational characteristics, including mission, size, expenditures, complexity and selectivity, (2) pre-college characteristics, including academic preparedness and goals; (3) student-institution fit, depending on (a) social and academic integration, (b) student involvement and effort, (c) financial circumstances, and (d) competing demands of family, work and community; (4) campus climate, including perceptions of prejudice, discrimination, racial harmony, and tolerance of diversity. These families of assertions serve as models for academic and institutional research by characterizing and focusing on particular factors and processes that influence student learning and educational attainments, such as grades, degrees, certificates, and subsequent job placements. Under accountability, models of this type help to guide data collection and analysis, potentially making the processes of institutional assessment more efficient by avoiding “the expensive trap...of the need to measure everything all the time” (Volkwein, p. 184).

Conceptualizing institutional effectiveness with a basic “I-P-O” model where resources of all types are treated as inputs (I) used in a collegiate production process (P) to produce outputs (O), we can note that the families of research assertions focus attention on different elements of the production process, and thereby frame consideration of the problems and potential solutions of higher education effectiveness in different ways (For a review of the concept of a production process in higher education, see Toutkoushian & Danielson, 2002). Student pre-college ability and goals and certain organizational characteristics such as institutional expenditures can be viewed as measures of inputs, while concepts of student-institution fit emphasize the interaction of students and institutional characteristics in the educational production process. In these models, students themselves are viewed as important inputs, not only based on their levels of academic preparedness but on their level of motivation, effort, and time investments in their studies

as well. Rather than focusing on students as inputs, studies of discrimination and diversity focus on the way resources are used and people behave “inside the box” in educational processes to create supportive or denigrating climates for racial-ethnic minority students.

The difficulties of observing the use of inputs in educational processes and characterizing an institution’s level of efficiency in transforming those inputs to desired educational outcomes are well known, and in fact are the basis for increasing calls for higher education accountability. Cohen, Raudenbush, and Ball (2003, p. 122) argued that understanding the central policy question concerning how the provision of additional resources affects instructional effectiveness has been highly elusive due to the fact that resources are not “self acting.” As they pointed out, “The value of resources is likely to depend on the ways they are used” (p. 138) by teachers in instruction, by students in learning, and by the interactions between teachers and learners, which are mediated by the instructional environment. They observe that “What reformers term instructional ‘capacity’ is not a fixed attribute of teachers, students, or materials, but a variable feature of interaction among them” (p. 125).

Cohen, Raudenbush, and Ball (2003), therefore, advocate greater use of experimental designs, arguing that non-experimental causal analysis is inadequate to observe the highly interactive relationships between resources, users, and outcomes. It is not possible to statistically control for institutional characteristics and features “inside the black box” of the educational production function and relate those inputs to student outcomes in ways that can authoritatively inform policy decisions about resource allocation to improve educational effectiveness. Their call for experimental methods follows mounting critiques and consensus that commonly used multivariate regression analysis techniques have failed to adequately take into account unobservable characteristics influencing students’ choice of educational programs as well as their performance in those settings. Within the field of higher education, major bodies of literature concerning key policy variables such as financial aid are thought to suffer from an inability to statistically distinguish the effects of student characteristics from the effects of program characteristics on important outcomes such as graduation and persistence, leading to biased estimates of program and policy effects (Alon, 2005; DesJardins, Ahlburg, & McCall, 2006; Dowd, 2004; Dynarski, 2002a; Rouse, 1998; Titus, *in press*).

These shortcomings of commonly used educational research methods have provided support for the NCLB research standards

and initiatives like the What Works Clearinghouse (WWC), which was created to identify and disseminate educational “programs, products, practices, and policies” demonstrated to be effective solely through experimental and quasi-experimental studies (see w-w-c.org, “What Works Clearinghouse,” 2006) that are not subject to these estimation biases. The Clearinghouse limits its review of educational studies employing experimental designs with randomized treatment and control group assignment or quasi-experimental designs using regression discontinuity and matching techniques that statistically create equivalence in the characteristics of the treatment and control groups. These techniques are viewed as best for isolating the effects of specific programs on student outcomes. Unlike Cohen, Raudenbush, and Ball (2003), who advocated for the integrated use of ethnographic and experimental field research, the federal standards give minimal attention to non-experimental methods.

Observing Educational Practice in Institutional Context A primary weakness of the experimental and quasi-experimental analyses of program effectiveness emphasized as rigorous and scientific under the NCLB and IES standards is the lack of direct observation of educational processes and social contexts, a task for which other forms of research and evaluation are better suited (Chatterji, 2005; Erickson & Gutierrez, 2002; Feuer et al., 2002; Raudenbush, 2005; Rossi, Lipsey, & Freeman, 2004). Feuer et al. (p. 8), though major proponents of experimental methods, concede the need to understand the role of contextual factors in causal processes: “When a problem is poorly understood and plausible hypotheses are scant—as in the case of many areas of education—qualitative methods...are necessary to describe complex phenomena, generate theoretical methods, and reframe questions.” This point is argued more forcefully by qualitative researchers. For example, Erickson and Gutierrez (2002, p. 23) criticizing the federal research standards wrote, “The variety and changeability of the hierarchically embedded contexts of social life are such that simple, consistent associations between generic cause and generic effect of the sort tested in formal social experiments are not likely to occur.”

Given the relative strengths and weaknesses of experimental and non-experimental research, many argue for the use of mixed-methods of program evaluation (Chatterji, 2005; Cobb et al., 2003; Cohen et al., 2003; Design-Based Research Collective, 2003; Raudenbush, 2005). Cohen, Raudenbush, and Ball (2003) recommended the development and testing of social science experiments, or “regimes” as

they have termed them, using a combination of ethnographic and experimental designs (see also Raudenbush, 2005). Chatterji (2005, p. 17), argued that the quality of evidence concerning educational program effectiveness will be seriously compromised unless what she called “extended term mixed-method” (ETMM) designs are used. She emphasized that, within ETMM designs, theory-driven research informs academic perspectives, while pragmatic program-level research informs practitioners about client needs and social context, quality of program implementation, feasibility of goals, costs, and resource use. While small- and large-scale experimental tests of program effectiveness are necessary to inform policymaking, she argued, pragmatic evaluation is equally essential to inform decision making by practitioners. Similarly, the Design-Based Research Collective, recommends mixed-method use of hypothesis testing, experimental “engineering” of instructional settings, ethnographic observation, and theory development (Design-Based Research Collective, 2003). In design experiments, which have been conducted in secondary schools much more so than in higher education where the approach is relatively unknown, specific instructional technologies are studied within a “learning ecology,” a complex, interacting social system (Cobb et al., 2003, p. 9). Design experiments are intended to address the shortcomings of traditional social experiments by directly examining and seeking to explain why instructional designs work and how they should be modified when implemented in new settings. These methodological debates and developments demonstrate the ways in which academic researchers are attempting to systematically examine and understand the dynamic processes of education in social context.

III. ASSESSMENT: EVALUATION OF INSTITUTIONAL EFFECTIVENESS THROUGH BENCHMARKING

Growing Interest in Performance Benchmarking Assessment is essentially an institutionally-designed mechanism of accountability that aims to improve learning and teaching in a higher education institution. According to Ewell (2005), assessment is “a program of locally designed and operated evaluation research intended to determine the effects of a college or university on its students, centered on learning outcomes, and engaged in principally for the purpose of improving teaching and learning.” (p. 105). Assessment takes many forms, which have been amply documented by Banta, Ewell, Kuh, Peterson and colleagues, and others (Banta, 2004; Ewell, 1991, 2002; Kuh, 2001; Maki, 2004; Peterson

& Einarson, 2001). In this section, we focus narrowly on a particular form of institutional assessment, namely benchmarking through peer comparisons, which has proliferated under accountability perspectives infused with business-minded approaches to governing higher education (Bender & Schuh, 2002; Burke et al., 2002).

The perspective that benchmarking institutional performance will motivate innovation is reflected in the Spellings Commission report, for example, which sets the collection of "comparative institutional performance" data as its first priority for accountability. The purpose is to enable students, policymakers and others to "weigh and rank" institutions and use the information as a "vital tool for accountability, policy-making, and consumer choice" (U.S. Department of Education, 2006). The Commission envisions a central role for accrediting agencies in this effort, charging them to expand accreditation standards to "allow comparisons among institutions regarding learning outcomes and other performance measures" and to collect and disseminate these data as a "priority over inputs or processes" (p. 24).

Similarly, the Educational Testing Service (ETS) recommends the national development of a comprehensive data base measuring student learning outcomes through the use of standardized tests of general education and discipline-specific knowledge and skills in order to measure institutional performance and improvements in performance over time. In a far-reaching proposal, ETS recommends annual collection of standardized test results at all higher education institutions in pre- and post-college attendance administrations to allow comparisons of value added "across institutions or groups of peer institutions" (Dwyer et al., 2006, p. 23). Like the Spellings Commission, ETS would charge the regional postsecondary accrediting agencies with the task of integrating these test results into their accreditation review of colleges and universities as indicators of institutional performance. These proposals show that at many levels, the collection of student outcome data in forms enabling peer performance benchmarking is receiving serious attention and emphasis as a primary strategy to improve institutional effectiveness. Furthermore, accrediting agencies, whose standards set the context for a college's locally designed evaluation research (assessment), are being called on to play a major role in this effort.

Just as the prevailing federal legislative interest in educational research focuses almost exclusively on quantitative data and statistical analysis, accountability standards place great emphasis and value on the "hard evidence" (Dwyer et al., 2006, p. 1) and "bottom line results"

(U.S. Department of Education, 2006, p. 14) of quantitative student outcome indicators. The confidence placed in quantitative indicators and the rejection of assessment processes that are now an important aspect of accreditation requirements reflects the dominance of what Polkinghorne (2004) refers to as “technical-rational” views. Reviewing the historical development of different conceptions of rationality, Polkinghorne observed that “modern Western culture is dominated by means-end rationalization and technology. Technical-rational decision-making is presented by the culture as the only effective way of determining which actions to take in order to solve practical problems in both the physical and human realms” (p. 45). It is important to consider what is lost and gained through the current emphasis on performance benchmarking and to carefully consider the mechanisms by which higher education benchmarking can indeed be expected to increase the educational effectiveness of colleges and universities as a result.

Benchmarking is essentially a process of comparison for purposes of assessment or innovation (Bender & Schuh, 2002). The objective typically is for an organization to understand its own activities, achievements, shortcomings, and environment through comparison with carefully selected “peers.” The peer group may be selected based on similar objective characteristics, such as enrollment size, or by the use of perceived best practices that are to provide a model for improved performance (Hurley, 2002). Benchmarking takes several forms and a number of classification systems exist to differentiate them. Yarrow and Prabhu (cited in Doerfel & Ruben, 2002) define metric, diagnostic, and process benchmarking in a manner that is relevant to the higher education context. Doerfel & Ruben (2002, p. 6) explain that the metric form of benchmarking is simplest and takes place through the straightforward comparison of performance data. This approach focuses “only on superficial manifestations of business practices” (p. 6). Diagnostic benchmarking is like a “health check,” intended to characterize an organization’s performance status and identify practices needing improvement. The third approach, process benchmarking, is the most expensive and time consuming. It brings two or more organizations into an in-depth comparative examination of a specific core practice.

Public higher education accountability systems initially relied primarily on metric benchmarking (Barak & Kniker, 2002), which is also called performance benchmarking, but have become more nuanced over time in response to objections from higher education practitioners

and leaders (Erisman & Gao, 2006). Elements of diagnostic benchmarking are beginning to emerge as accountability systems mature and are revised in reaction to the limitations of a sole reliance on metric indicators. As discussed below, this evolution has taken place in three ways: through greater attention to the identification of appropriate peer comparison groups, through the use of academic theories of student-institution fit as explanatory frameworks for student outcomes, and the development of practitioner inquiry teams designed to investigate the problems associated with metric indicators of poor performance.

Effects and Limitations of Performance Benchmarking Examples of systems designed to facilitate the comparison of higher education performance metrics are readily available. To enable comparisons among institutions by consumers, practitioners, and researchers, the federal government created the Peer Analysis System (PAS) and College Opportunities On Line (COOL) databases. These data analysis tools include a wide range of information from the mandated higher education data collection contained in the Integrated Postsecondary Education Data System (IPEDS). Subsequent to the Student Right to Know and Campus Security Act (1990), all colleges have been required to report the graduation rates of their full-time first-time fall student cohorts and community colleges have been required to report transfer rates (Bailey, Jenkins, & Leinbach, 2005). At the state level, the most common mandated outcome indicators of institutional performance are graduation, retention, transfer, and job placement rates (Burke et al., 2002; Dougherty & Hong, 2005; Erisman & Gao, 2006). The National Community College Benchmarking Project (NCCBP) is an example of a voluntary peer comparison effort that collects metric, as well as other, indicators, and involved 150 institutions and three state systems in 2005. In addition, non-profit agencies such as the Education Trust and The Institute for College Access and Success have created web-based data bases of college graduation rates and indicators of economic diversity, respectively, to enable institutional comparisons (see <http://www.collegeresults.org/> and <http://www.ticas.org/economicdiversity>).

Graduation rates, the most prominent indicator in recent accountability news, have been assailed by college officials as particularly inappropriate and unfair as measures of performance for community colleges, with their diverse missions, (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006; Dellow & Romano, 2002; Dougherty & Hong, 2005; Erisman & Gao, 2006), but the concern applies in the same

way to four-year colleges enrolling part-time students and students with “swirling” multi-institutional enrollment patterns (Borden, 2004; Pusser & Turner, 2004).

Bailey et al. (2005, 2006) summarize objections frequently heard among community college administrators and faculty, for example. These include the fact that many students are not aspiring to earn a degree, that many barriers to degree completion are beyond the control of the college, and that colleges don’t earn credit under the Student Right to Know (SRK) graduation rate calculations for the many students who start at one campus and finish at another. Indicators based on rates of student progress or degree attainment are also undermined by the difficulty of identifying an appropriate cohort for comparison (Dellow & Romano, 2002). The federal graduation rate is based only on the outcomes of full-time students, which excludes a significant proportion of college students at institutions of lesser selectivity. In addition, it is based on a three- or six-year period, 150% of the traditionally expected time at two-year and four-year colleges, respectively, despite the fact that many students take much longer to graduate and are therefore excluded from the statistic.

Other challenges associated with the collection of accountability data include the fact that students may accumulate credits without applying for a degree or certificate; job placement, tenure, or performance information may not be available from employers; and subsequent enrollment at another institution may occur in another state or long after the student’s initial enrollment, making it difficult to track. For community colleges, in particular, the indicators do not capture the multiple missions of the colleges and the extent to which they are responsive to their communities. The fundamental shortcoming of commonly used performance indicators stems from the fact that they are measures of college outputs, for example degrees awarded, rather than of the ultimately desired outcomes, in this example student learning, and therefore divorce attention from the true goals of accountability (Toutkoushian & Danielson, 2002)

Yet, Bailey et al. (2006) demonstrate that the SRK graduation rates nevertheless have value for several reasons. First, the majority of students enrolled do aspire to a degree and, given the high correlation between low aspirations and low socio-economic status, colleges also have a responsibility for raising students’ aspirations. Second, though, community colleges and other open access colleges face challenges in educating academically under-prepared students who are often juggling work and family obligations at the same time they are enrolled, the

data show that some colleges are more effective in graduating students with similar characteristics. Therefore, low performing colleges may have something to learn from their higher performing peers, even if all institutions of lesser selectivity or open access admissions face distinct challenges in educating under-prepared students. In addition, although the SRK institutional graduation rates underestimate longer-term, system-wide graduation rates, this bias appears to be minimal and consistent across institutional peers in terms of their overall performance.

Although measurement issues may be addressed through more sophisticated data collection and analysis strategies, it is also important to consider the mechanisms by which the collection and public dissemination of collegiate performance indicators can be expected to bring about productive change at low performing institutions. Dougherty and Hong (2005) identify four policy levers, with the first, reduced funding, associated with performance funding and budgeting and the others associated with performance reporting. The threat of reduced funding has the potential to be a powerful lever of change, as illustrated by a case study of performance funding in England's further education colleges. Under an extensive and far reaching reform, the budgeting and administration of the further education colleges, which are similar to community colleges in the U.S., were restructured such that ten percent of their total funding depended on student outcomes. Along with other policy tools, this incentive led to a ten percent increase over a five-year period in the rates of student completion of short-course diploma programs (Jaquette, 2006). Though the context of this case study differs in many ways from accountability in the U.S., particularly in regard to the high degree of centralization of authority at the national level, the case demonstrates the manner in which changes in government policy can function as key determinants of higher education performance. Richardson and Ramirez (2005) reached a similar conclusion by examining specific policy components of accountability in six states and rating each of the states against each component. Comparing the relationship between these ratings and performance indicators, they concluded that the governmental "rules in use" do affect institutional performance.

However, as noted above, performance funding and budgeting have declined in popularity and were never associated with significant proportions of institutional budgets in the U.S., with the exception perhaps of Florida (Dougherty & Hong, 2005). Policymakers appear to be hesitant to increase the complexity of accountability plans

with elaborate budgeting schemes, unable to settle on stable and fair performance-based resource allocation criteria, and unwilling to increase higher education budgets sufficiently to fund performance incentives. Therefore, the remaining three policy levers associated with performance reporting are those primarily in use in higher education today. In the absence of financial incentives, the collection and reporting of student outcome data can motivate more effective performance through three mechanisms: by increasing awareness of state priorities at the college level, enhancing knowledge on campus of student outcomes, and promoting status competition. Dougherty and Hong (2005) found that these changes in practitioner knowledge had a more significant impact on colleges than threats of or real changes in funding. This was in part due to the fact that state officials themselves were required to clearly articulate state-level priorities and goals in setting the accountability standards.

However, this new knowledge about and concern for student performance had intended and unintended consequences. Dougherty and Hong (2005) observed positive changes in educational practice in the areas of institutional planning, curriculum, advising, outreach, and student outcomes assessment. But they also found evidence that colleges had reduced their academic standards and adopted policies restricting admission to more prepared students in order to improve their graduation and program completion rates. Their study shows that accountability pressures can lead colleges towards improved data collection, a more nuanced understanding of institutional performance, and decision-making based on data analyses (see also Dougherty, 2002), but they can also create “perverse” incentives that undermine the goals of accountability (Dougherty & Hong, 2005, p. 8). Reviewing the effects of accountability programs, such as mandatory testing, on secondary schooling, Bowen, Kurzweil, and Tobin (2005, p. 240) also conclude that powerful government incentives can have “good and bad results.” The negative effects can be particularly problematic, they emphasize, because “the worst subversions” are often found at schools educating the most disadvantaged students.

Individual and Organizational Learning about Institutional Effectiveness If changes in beliefs and behaviors come about through experiential knowledge, the skepticism of practitioners regarding the validity and fairness of the accountability metrics is problematic. Applying the “carrot and stick” metaphor, learning theory demonstrates that simply using performance indicators as a stick to prod educators is unlikely to be effective in achieving accountability goals. A study of schooling

under accountability involving extensive field research (Abelmann & Elmore, 1999) illustrates why this is the case. In their study, Abelmann and Elmore found that the external accountability system had very little influence on actual problem-solving by school teachers and administrators. They concluded that the personal attitudes, values and beliefs of these practitioners regarding the learning enterprise in school (i.e, what students can do, what teachers expect from each other, and how much student, family, community, and school influence student learning) were the key factors in determining the solutions for the problems targeted by accountability.

Adult learners and experienced practitioners possess established knowledge of their educational contexts and students and this knowledge must be challenged or disrupted in some way before new professional practices will be adopted. Polkinghorne (2004), drawing on Dewey's description of the learning that takes place through reflective problem solving and "experimental inquiry" in "indeterminate situations" stresses the importance of experiences where "one's actions fail to produce the desired result" (p. 121). Based on this insight, Polkinghorne outlined four steps of "intelligent inquiry" necessary for the development of professional expertise and increased efficiency in problem solving. Notably, the inquiry process starts with "an indeterminate situation" (p. 123)—the experience of uncertainty or errors in judgment. Once the practitioner realizes certain practices are ineffective, she or he will subsequently be motivated to identify the problem, determine a solution, and carry out the solution. As Bauman (2005) concluded based on extensive field research involving higher education practitioners engaged in an organizational learning initiative, "When organizational actors doubt what they have traditionally believed to be true, an opportunity for learning arises" (p. 27). In fact, she defined "high learning groups" as those "prepared to doubt and question their own knowledge and practices" (p. 29).

Similarly, Tharp and Gallimore (1988), synthesizing a large body of socio-cultural, psychological, and cognitive research, emphasize the importance of the "de-automatization," of "fossilized" knowledge—what might be referred to more crudely as the "unlearning" of established knowledge—to instigate openness to new learning. When learners, including professionals, realize their established competencies and knowledge are ineffective or incorrect, they become motivated to seek assistance from "more capable others" and to consciously assist themselves in gaining new competencies.

Among the means of assisting learning and the performance of new competencies are strategies in use in the accountability field. These include modeling (e.g. publicizing “best practices”), contingency management (legislative incentives and sanctions), explanation (journal articles, research briefs, and policy reports), and instruction (presentations at professional association meetings). An additional and critically important strategy is creating “activity settings” in which learners are called on to perform actions requiring new competencies. As Thomas, Clark and Gioia (1993) express it, citing Weick, “cognition often begins with action.” Ideally, these activity settings are structured in ways that both draw on and challenge established competencies, placing learners in the “zone of proximal development” where the new competencies are in reach (Tharp, 1993; Tharp & Gallimore, 1988) and obtainable through a process of “situated” inquiry (Bauman, 2005; Pena, Bensimon, & Colyar, 2006). There are two important implications of these theories of professional practice and socio-cultural learning. First, performance indicators must have face validity, or what we might also think of as “experiential” validity, among practitioners before they can be expected to motivate changes in behavior substantive enough to improve student learning outcomes. Second, the learning necessary to improve institutional effectiveness begins with the “cultivation of doubt” (Bauman, 2005) among organizational actors about the effectiveness of their current practices.

Academic Resistance and Engagement in Accountability Many in academia are far from being swayed by the “rational” and “objective” meaning of performance metrics. Miller (1998), for example, who takes a Zen approach to teaching and believes that teaching and learning are deeply personal endeavors, argued that great teachers are those immersed completely in the compassion of teaching and the “intoxication” of their subject matter. Arguing “that’s what counts,” he notes that teachers will “die” under the outcomes assessments and learning objectives of assessment (p. 15). The spiritual nature of teaching and the importance of passion and compassion to the art of teaching have also been emphasized by Palmer (1998), for example.

In contrast, others in academia support the contention that faculty members have been negligent in ensuring successful student outcomes. In an in-depth, historical analysis, Lazerson (n.d.) criticized the professoriate for derailing the issue of student learning. In fact, he suggests that as academic disciplines become more prosperous, their intellectual engagement with student experiences decreases, a view also advanced by Zemsky and colleagues (Zemsky, Massy, & Oedel, 1993).

Bogue (1998), as well as others, advocated self-leadership and responsible partnership with other stakeholders to strive for effective reorganization. This range of responses demonstrates it is not inevitable that accountability will be met by resistance from the professoriate. However, as Hirschhorn observed (1990), social defenses will be mobilized when stakeholders feel threatened and accountability is not managed with care. The axiom "we account for what we choose and what we claim as our own" (Koestenbaum & Block, 2001 p. 10) is extremely relevant to examining educators' responses to accountability. It leads to the conclusion that practitioners must be integrally involved in designing, adopting, and applying the knowledge acquired through accountability plans in order for accountability to have the desired influence on institutional quality and efficiency.

Furthermore, authentic faculty and administrative participation is essential because accountability systems leave the job of identifying effective processes to the colleges themselves. Metric benchmarking on output indicators assumes an underlying optimal "production function" (*Higher education revenues and expenditures*, 1998), in which resources are used to produce the highest quality outputs possible. The benchmarking process is intended to spur colleges to search for and adopt optimal practices once they become aware of their poor performance relative to peers. There is an implicit assumption that these strategies are knowable and attainable.

Therefore, learning must take place "inside the black box" of higher education. The ease with which practices effective in one setting can be adopted into another is debatable, as shown by our review of methodological debates in the educational research and evaluation literature. This is one reason state-level accountability systems have been under constant revision, evolving over time to be more sensitive to differences in institutional contexts (Erisman & Gao, 2006). "Contextualized problem solving" is important to develop "local knowledge" of a problem (Pena et al., 2006, p. 50), without which a college may copy the practices of its peers in a manner inappropriate to their context, leading to negative kind of "institutional isomorphism" (DiMaggio & Powell, 1983). If colleges bypass problem-framing, they may fail to identify the root causes of the problem on their campus and lose out on opportunities to prioritize potential solutions. Bensimon and colleagues (Bauman, 2005; Bensimon, 2005; Bensimon et al., 2004; Pena et al., 2006), drawing on work by Argyris and Schon, have emphasized the need for "double-loop" rather than "single-loop" learning to bring about transformative changes in higher education:

The difference between single- and double-loop learning is that the former encourages individuals to view a problem functionally and search for structural or programmatic solutions. In contrast, double-loop learning entails the ability to reflect on a problem from within, in relations to one's own values, beliefs, and practices. Simply put, the difference is that the single-loop learner locates the problem externally and seeks to change others. Conversely, the double-loop learner is more apt to start from the self and engage in reflection that brings about self-change in values, beliefs, and practices (Pena et al., 2006, p. 50).

If we accept the empirical findings that over and above policymakers' "rules in use" (Richardson & Ramirez, 2005) the personal attitudes, values and beliefs of educators are the key determinants of the solutions practitioners adopt to address the problems targeted by accountability (Abelmann & Elmore, 1999), these distinctions between double- and single-loop learning are critical and cast the entire enterprise of identifying universal "best practices" for higher education in doubt. Investments in the collection of vast amounts of assessment data will not serve to create comprehensive "national resources" (Dwyer et al., 2006) in the absence of equally large investments in professional development activities that engage higher education practitioners in actively identifying and learning about the causes of inadequate institutional performance. This point distinguishes arguments for an accountability "culture of inquiry" (Dowd, 2005) from those advancing a "culture of evidence" (Dwyer et al., 2006).

The Evolution of Higher Education Benchmarking Causal analysis is inevitably necessary if the primary accountability interest is on institutional improvement, but performance benchmarking in and of itself does not provide any data for causal analysis. Though it may be tempting to interpret the higher scores of one institution relative to another in a straightforward way as a sign of a higher quality, more productive college, such an approach is flawed. If an institution (X) scores lower than a peer institution (Y), the comparison has many potential meanings, including that (a) X is, in fact, a lower quality institution than Y, or that (b) X is actually more productive than Y, but its outcomes are also lower because it uses a lower level of inputs, (c) X is better than Y on other valuable outcomes that are not measured, or (d) X obtained a lower score than Y in any given year due to measurement error. In terms of causal validity, a linear I-P-O production function model is inadequate as an explanatory framework for improving college quality. The fundamental stumbling block is the

fact that students themselves are both inputs and outputs in educational processes (Boulding, 1996; H. Bowen, 1996; Toutkoushian & Danielson, 2002), making it difficult to estimate the college's effect on its primary output: students. This is recognized both by educators who object to performance criteria that fail to take entering student characteristics into account and by educational research methodologists (Cohen et al., 2003). Therefore, in addition to collecting outcome data, a diagnostic strategy for improvement must also be adopted.

Informed by such methodological debates and controversies, higher education accountability has evolved in two primary ways. The first entails renewed attention to the importance of identifying appropriate peer groups for benchmarking performance indicators, which is necessary to achieve campus "buy in" that the comparisons are legitimate. The second involves the use of different strategies to contextualize benchmarking results. These strategies add a "diagnostic" element to benchmarking by providing a theory or process for interpreting performance data. As discussed below, diagnostic benchmarking as implemented in higher education often links academic research to institutional research and assessment, using diagnostic frameworks or diagnostic processes based on academic theories.

Identifying Appropriate Peer Groups for Benchmarking Selecting peer groups for appropriate comparative analysis is an important first step in benchmarking and is in itself challenging. The peer selection process is a political one. Naturally, college leaders seek to position their institution well in relation to the peer group for subsequent performance reports and general publicity. Therefore, the selection process often combines objective data analysis and political wrangling. Administrators, institutional researchers, state system analysts, and external consultants are among those who may be involved in identifying a group of potential peers, with administrative leaders, in particular, keeping an eye on potentially negative funding and public relations implications.

Throughout this process, each institution remains aware of its own unique characteristics and those of the communities and students it serves. This is true even when an entire state system is identified as the peer group, because inevitably important differences in institutional characteristics are present. Further, even if peer institutions are similar in terms of structural and environmental characteristics at the time they are chosen, this equivalence may not hold throughout the life of an accountability plan. It is likely no peer group will ever be considered perfect by all interested parties for accountability purposes,

especially when subsequent student outcome indicators will mark some institutions as “underperforming.” These aspects of peer comparison under accountability create incentives to aim low in the selection of peers, rather than including “aspirational” institutions as members of the comparison group (Hurley, 2002).

Grouping colleges by state and institutional characteristics such as size and degree of urbanization are natural starting points for peer comparisons under public accountability. However, concerns that these groupings fail to take into account differences in student characteristics or the economic vitality of the surrounding communities or region have led to the proposed use of statistical modeling to predict a college’s expected performance on an outcome measure such as graduation rates, controlling for such institutional and external factors (Bailey et al., 2006). Colleges would then be held accountable for levels of student outcomes based on statistically predicted performance targets (Dougherty & Hong, 2005).

Statistical controls of this type represent an important development because they can take into account two important types of “inputs” determining a college’s productivity: student quality and financial resources, which particularly in the case of community colleges may differ quite significantly due to variations in local resources and tax support. While results-based accountability has always emphasized outcomes over the provision of resources and politically shifted attention away from questions of equity in resource allocation (Alexander, 2000; Burke et al., 2002; Dowd, 2003; Leveille, 2005), recent reports are again emphasizing the importance of understanding differences in institutional inputs, including governmental funding, on college productivity (Dougherty & Hong, 2005; Dwyer et al., 2006; Erisman & Gao, 2006; Jaquette, 2006).

Contextualizing Performance Results While these developments begin to connect the inputs and outputs of higher education, other provisions of accountability plans begin to look inside the “black box” of the “production function” of higher education. In a simple way, this is reflected by the fact that most states now allow colleges to provide a narrative explanation of problems or inconsistencies suggested by their outcome indicators (Erisman & Gao, 2006; Wellman, 2002). This is arguably an essential step for reducing unintended negative effects of selected performance measures that create disincentives to pursuing other desired goals. Erisman and Gao (2006, p. 15) provide the example that a community college should not be dissuaded from providing a needed GED preparation program because it might

"consume resources but not produce outputs for several years." To some extent, such undesirable trade-offs can be avoided by including a broader range of goals, such as increased access or remedial education, among the adopted performance indicators, as suggested by Dougherty and Hong (2005), or by allowing colleges to select their own customized indicators consistent with a state's strategic planning and long-term goals, a trend observed by Burke et al. (2002). These options move accountability plans towards a diagnostic benchmarking approach, in which campuses report indicators they consider most consistent with their mission and priorities for improvement. They also represent a compromise between the external accountability values of standardized reporting of outcome indicators and the internal academic values of mission differentiation and local autonomy of campuses.

However, these developments also have limitations in that states and institutions themselves would then have to deal with a larger number of indicators, which might proliferate and diversify by institutional sector. Wellman (2002), who studied the accountability systems of five states intensively, described seven principles for accountability effectiveness, including the need for comparability, simplicity, and visibility. She recommended that states link indicators to goals established in statewide plans. This theme is echoed in the Institute for Higher Education Policy's accountability study, which found a "frequent disconnect" between indicators and goals, as well as inconsistent use of the data collected to inform policy decisions. These studies suggest that indicators can be contextualized not only through narrative explanations of performance indicators, but also by relating specific indicators to broader goals for higher education and allowing colleges to demonstrate how trade-offs in their results contribute to those goals.

Diagnostic Frameworks and Processes Through institutional assessments driven by or endorsed as part of accountability requirements, academic theories also provide the basis for contextualizing results on performance indicators. A number of assessment instruments commonly administered by colleges draw on theoretical models of student-institution fit. These models conceptualize the production process of higher education as a set of interactions between students and learning environments. For example, in Astin's theory of student involvement, where the "process" component of the "I-P-O" is replaced by "environment," the model is characterized as "Input-Environment-Output."

Assessment instruments grounded in the student-institution fit literature include the National Survey of Student Engagement (NSSE), for four-year colleges, and its counterpart the Community College Survey of Student Engagement (CCSSE); the College Student Experiences Questionnaire (CSEQ) and its two-year counterpart (CCSEQ), and the Cooperative Institutional Research Program (CIRP) survey. The growth under accountability initiatives in use of these assessment tools illustrates the demand for diagnostic benchmarking strategies designed to assist practitioners in identifying solutions to the problems suggested by outcome indicators (Barak & Kniker, 2002). Other popular instruments such as the Noel-Levitz Student Satisfaction Inventory and the ACT Student Opinion Survey are essentially surveys of consumer satisfaction. These can inform administrators' understanding of student satisfaction with institutional support services, such as parking, dining, and access to timely advising, but do not offer solutions at the heart of the pedagogical process.

One such assessment tool, the CCSSE and its College Student Report, provides an example of the application of the student-institution fit model to diagnostic benchmarking. The CCSSE has been adopted system-wide or at the majority of colleges in five states (Connecticut, Florida, Hawaii, Maryland, and New Mexico). Several consortia, including the Hispanic Serving Institutions/Hispanic Association of Colleges and Schools, have adopted the CCSSE as a shared assessment strategy (CCSSE, 2004) and the CCSSE as well as the NSSE were recommended for institutional adoption by the Educational Testing Service's in its discussion of a comprehensive national system for assessing student learning. Student responses to survey items are grouped into five areas of collegiate experiences—student effort, active and collaborative learning, academic challenge, student-faculty interaction, and support for learners—and standardized benchmark scores obtained for each participating college. The concepts of student “engagement” and “effort” provide explanatory frameworks, based in the academic research literature. These constructs are a lens for interpreting the benchmark scores in relation to a small peer group present in the data and examining institutional practices to determine how institutions can increase their effectiveness.

For example, the survey asks how often a student “Talked about career plans with an instructor or advisor.” The student's response to this and other similar questions about behaviors in and out of class contributes to the college's score on a Student-Faculty Interaction scale (Marti, 2004). Remedies for colleges scoring low on this scale might

include revised faculty advising policies or assignments, with the goal of improving student retention. This benchmarking strategy offers an explanatory framework for "what matters" to student success in ways that offer guidance to administrators about effective practices. College results on the benchmarks are comparable nationally against other institutions participating in the survey, within state systems that adopt the CCSSE as a performance indicator, and over time at individual colleges (CCSSE, 2004).

Whereas assessment instruments based in the student-institution fit literature provide a diagnostic framework for interpretation of outcome indicators, another approach, taken by the Equity Scorecard projects structure a diagnostic process. With its focus on inequities in student outcomes by race and ethnicity, the interpretive lens is provided by the fourth "family" of academic perspectives described by Volkwein (2003). Practitioner "evidence" or "inquiry" teams (Bensimon, 2004, 2005; Bensimon et al., 2004) are instituted to "cultivate doubt" among team members about the equity and effectiveness of current practices (Bauman, 2005) through close examination of student outcome data, such as graduation and persistence rates, disaggregated by race and ethnicity. Institutional barriers to student attainment are conceptualized as stemming from socially constructed beliefs, held consciously or unconsciously by faculty and administrators, about lack of student ability, motivation, or aspiration, particularly among African American and Latino students.

The Equity Scorecard Project, and its predecessor the Diversity Scorecard, is modeled on the business world's Balanced Scorecard Framework (Kaplan & Norton, 1998) and has been implemented in over 35 four- and two-year colleges in six states. In California and Wisconsin, the use of the Equity Scorecard process by groups of colleges was endorsed by state system leaders to meet state accountability requirements and in Colorado it was implemented in collaboration with the Western Interstate Commission for Higher Education (WICHE). The benchmarking process is designed to create an "activity setting" for learning (Tharp, 1993; Tharp & Gallimore, 1988) and professional development among the faculty, administrators, and institutional researchers who constitute the inquiry teams as well as among their colleagues with whom they interact in professional settings.

The Scorecard process engages team members in a series of meetings that initially revolve around "vital signs" (indicators of student degree progression and student outcomes) but proceed to examination of "fine-grained measures" of the same types of indicators.

An important difference between the vital signs and the fine-grained measures is the fact that the teams themselves select the latter indicators and request that they be provided for discussion to the team by the institutional research office. The selection of “fine-grained” indicators often involves narrowing the focus to student progression between particular course sequences, for example from developmental to college-level coursework, or to particular groups of students, for example African American males, who may have progressed through the curriculum at lower rates. The process of defining the indicators and specifically requesting the data is intended to promote problem framing and ownership of the assessment results. Theoretically, the plausibility of this assumption is supported by sociocultural and organizational learning theories that indicate that learning is essentially a social process that takes place in “communities of practice” through engagement in collaborative and productive activities (Pena et al., 2006; Rueda, 2006; Tharp & Gallimore, 1988). The Equity Scorecard project provides “assisted performance” to the inquiry team members by structuring the inquiry process and providing instruction to team members in the dynamics of productive group processes and social learning (Bauman, 2005; Rueda, 2006).

These examples illustrate the diverse approaches to higher education benchmarking intended to assess and improve collegiate educational quality, productivity, and efficiency. They reflect different strategies for finding a model or explanation for “what matters” in achieving positive student outcomes as well as different assumptions about the best strategies for bringing about institutional change and improvements in educational effectiveness. That some type of diagnostic process is needed to achieve accountability goals is suggested by the uneven performance of various accountability indicators and plans to date, which empirical studies of accountability have shown to have effects that are moderately positive at best, inconsequential or uncertain at the mode, and negative at worst due to unintended consequences that undermine other valued higher education goals. Further, although the value of diagnostic benchmarking is supported through educational and learning theories, empirical studies of the effects of these types of assessments on organizational learning and change are also needed to demonstrate their capacity to improve student outcomes.

None of these benchmarking strategies is designed to measure the “productive efficiency” (DesJardins, 2002) of educational processes, which would entail understanding an organization’s ability to convert inputs to outputs, or resources of many different types to student

outcomes in the form of learning and degree completion. Process benchmarking, which involves the in-depth comparison of core "production" processes for the purpose of improvement and innovation among two or more organizations (Doerfel & Ruben, 2002), has been largely absent from accountability plans. While the accountability movement has primarily asked institutions to report metric indicators of student outcomes, the assessment movement has focused on characterizing specific aspects of instructional environments and institutional practices that support learning. The design of the EBICs, discussed in the next section, is intended to be comprehensive in capitalizing on recent developments in the theories and methods of accountability and also to introduce a process benchmarking dimension. Process benchmarking is an important missing piece of what is needed to identify and disseminate effective educational practices in such a way that they will function as "best practices" not only under empirical study or in the eyes of individual practitioners who promote them based on their experiential knowledge, but at colleges of varying characteristics and institutional contexts where they might be adopted.

IV. EVIDENCE-BASED INQUIRY COUNCILS

In the previous section, we have argued that practitioner inquiry is an essential component of an accountability-driven research agenda. Furthermore, we contend that the theories and empirical results of the organizational and sociocultural learning literature demonstrate that much is known about the kinds of accountability structures needed to increase practitioner knowledge, motivation, and efficiency to meet accountability goals. To create a "pull" for change and innovation complementary to the "push" created by accountability policy (Zaritsky et al., 2003), educational practitioners should be involved in assessment activities that will cause them to question the effectiveness of their current practice and that will offer new information as the starting point for collaborative learning and increased productivity.

The design of the Evidence-Based Inquiry Councils (EBICs) is particularly attentive to the practitioner role within an integrated strategy of assessment and accountability and provides structures for user-driven research that will promote innovation. It treats the collection of student outcome data and the institution of practitioner inquiry teams as equally essential aspects of accountability. In addition, recognizing direct study of the efficient use of resources as a missing piece of accountability, the EBICs incorporate processes to audit the use

of resources within colleges and to compare those resource allocation decisions among peer institutions. The comprehensive research and evaluation agenda of the inquiry councils is intended to promote practitioner knowledge, organizational learning, instructional design innovation, and the integrated study of causal effects and mediating contexts.

As outlined in Table 2.1, the EBIC structure and activities are conceptualized as four inter-related phases, with different types of research and evaluation in the foreground at different points in the assessment and accountability cycle. Phase I involves determining a content focus for the council, such as developmental mathematics education, writing, critical thinking, engineering, or nursing, and convening member institutions. Phase II draws on multiple approaches including statistical data analysis, ethnographic observation, resource audits, and descriptive data analyses to reach a collective understanding of the nature of the problem to be addressed.

At Phase III the inquiry team adopts a “programmatic intervention,” broadly defined as changes in the instructional materials, methods, settings, and interactions, as well as changes in the preparation and ongoing professional development of instructors, administrators, and student services personnel. The intervention, for example the adoption of computerized software and peer tutoring to teach developmental mathematics is implemented and the member colleges begin to test the effectiveness of the instructional changes through a design-based experiment (Cobb et al., 2003; Design-Based Research Collective, 2003) and, where warranted, experimental field research. Phase III is a period of formative evaluation, which also yields valuable information about how to implement the solution in a variety of contexts and how to achieve a high degree of uniformity in the “instructional technology” for testing in an experimental “regime,” a highly structured instructional program conducted among peer colleges with variation in institutional contexts and resources (Cohen et al., 2003).

Phase IV provides a summative evaluation in three main forms. First, the results of the design-based research are presented as narratives providing rich descriptions of program design, implementation, and outcomes. These enable “naturalistic generalizations” (Stake, 1995) by practitioners to inform their decision to adopt the solution in other settings. The design-based research results also inform theories of teaching and learning that explain how, when, and why the intervention is expected to be effective. Second, quasi-experimental statistical analyses of the factors affecting student outcomes measured in

Table 2.1: Structure and Activities of Evidence-Based Inquiry Councils (EBICs)

Structure and Activities	Primary Mode of Inquiry and Research Methods
Phase I: EBIC Request for Proposals and Council Formation 1. Call for participation in one or more EBICs focused on a specific domain of educational practice (e.g. developmental mathematics or two- to four-year college transfer) issued by a state higher education coordinating body, a consortium of colleges, the IES, an accrediting agency, or a philanthropic foundation. 2. Colleges submit proposals to demonstrate preparedness for participation. Criteria for participation include data analysis capacity, commitment of personnel (including institutional researchers, faculty members, and administrative leaders), endorsement of the academic governing body and (where applicable) faculty and administrative unions, and allocation of physical and financial resources. 3. Academic and evaluation researchers submit proposals to serve as evaluators and facilitators.	<i>Mode of Inquiry</i> User-driven institutional research <i>Methods</i> Document review; Descriptive statistical data analysis.
Phase II: Problem-Framing 1. Analysis of course-level descriptive quantitative student enrollment, progression, and outcome data disaggregated by race/ethnicity, gender, and income. 2. Audit of current practice and resource allocation. 3. Self-study of institutional culture. 4. Cross-institutional metric benchmarking of inputs (e.g. financial resources, faculty qualifications, student characteristics) and student learning outcomes using available institutional and state-level data. 5. Review of extant literature characterizing effective practices in the educational domain of the EBIC, including studies of causal effectiveness in peer-reviewed journals, web-based clearinghouses, and archival sources. 6. Identification of a small number of promising practices as exemplary and review of the program logic (or theory) for consistency with institutional missions. 7. Advice gathered through expert testimony regarding evidence of effectiveness of the exemplary programs in the peer-reviewed academic literature. 8. Comparison and benchmarking of self-study findings among EBIC colleges.	<i>Primary Mode of Inquiry</i> Action research Practitioner inquiry Ethnographic case study <i>Methods</i> Document review; Descriptive statistical data analysis; Unobtrusive observation; Interviews

Table 2.1: (Continued)

Structure and Activities	Primary Mode of Inquiry and Research Methods
Phase III: Adoption of a Programmatic Intervention and Formative Evaluation 1. Council adoption and detailed description and of a programmatic intervention warranted by existing research and practitioner knowledge as an exemplary educational practice in the content domain of the EBIC. 2. Adoption of learning assessment instruments. 3. Field research by external evaluators examining the process and fidelity of program implementation. 4. Where warranted by consensus within the council of the potential effectiveness and fidelity of implementation of the instructional interventions, design and assignment of colleges to treatment and control groups for a small-scale randomized clinical trial. 5. Dissemination of findings and practices to other campuses through mobility of experienced faculty and administrators, presentations at professional association conferences, peer-reviewed journals, archival data bases, and EBIC web sites.	<i>Primary Mode</i> Extended-term mixed methods evaluation; Design-based research and social science experiments. <i>Methods</i> Design experiments; Randomized assignment field experiments; Ethnographic observation; Interviews; Document review; Narrative analysis.
Phase IV: Summative Evaluation 1. Statistical analysis of student learning outcome data to determine treatment effects. 2. Institutional self-study reports of program effectiveness and costs, including social context. 3. Cost-benefit analyses. 4. Dissemination of reports on EBIC member campuses. 5. Dissemination of findings and practices to other campuses through mobility of experienced faculty and administrators, presentations at professional association conferences, peer-reviewed journals, archival data bases, and EBIC web sites.	<i>Primary Mode</i> Inferential statistical analysis; Evaluation <i>Methods</i> Statistical analysis; Narrative analysis; Thematic and categorical analysis.

terms of course grades, tests scores on standardized assessments, and completion rates in courses and degree programs provide evidence of the relationship between student characteristics and outcomes in the programmatic intervention. When there is strong consensus in an EBIC

that the adopted intervention is expected to be effective and can be implemented with a high degree of uniformity and consistency, experimental research is conducted with volunteers from EBIC member or non-member colleges. A comparison of the outcomes of students in the experimental treatment and control groups provides evidence of a program's causal effectiveness.

Phase I: Call for Participation and Council Formation Under an integrated accountability, accreditation, and assessment system with the EBICs as a central feature, both private and public institutions would be required to participate in at least one EBIC per accreditation cycle by their accrediting associations. However, they would have the opportunity to choose among multiple possibilities which EBIC to participate in. For public institutions, EBIC participation would also meet state requirements for performance accountability. States and regions would have reciprocal recognition of each other's EBICs to enable the in-depth, sustained study of the most pressing problems facing higher education. When states require reporting of numerous outcome indicators, there is an implicit assumption that reporting on those indicators will motivate colleges to adopt solutions to improve performance across the board. This expectation is not well supported by empirical studies of the effects of accountability on institutional behavior, which is not surprising given that progress on longstanding problems is likely to require focused and collaborative effort. Therefore, states would coordinate the content focus of their EBICs with the assistance of the regional accrediting associations to enable a number of problems to be addressed simultaneously but without redundant effort in each state.

For example, if one state were to commission an EBIC to identify effective practices in developmental mathematics education, another an EBIC focused on writing-across-the-curriculum, another science education, and so on to address a wide range of issues including civic education, critical thinking, service learning, nursing, teacher education, etc., resources would be better directed both towards problem-solving and dissemination of evidence from the EBIC evaluation of program effectiveness. A call for participation in an EBIC would come from a state or regional higher education coordinating body, at the federal level from the IES (for example in critical national security areas such as foreign language study), from consortia of colleges and universities, or from a foundation seeking to improve institutional performance in a specific area of practice (for example, as in the Jack Kent Cooke Foundation's focus on increasing transfer from community

colleges to highly selective institutions (Wyner, 2006). In issuing the call for participation, the coordinating organization would name a steering committee and specify the content focus. The types of institutions eligible for participation would be specified, for example, all public or private, all four-year or two-year, or a cross-sample by sector and type. The number of participating colleges would vary, with a maximum number established at about twenty to allow for coordination and communication among the colleges. Conceivably, multiple EBICs would be established nationwide on the same topic to accommodate both the demand for participation and the need for an intensive problem-solving effort. The EBIC steering committee would seek to balance the participant group to enable peer and aspirational-peer comparisons among institutions with a range of existing practices.

In responding to the EBIC call for participation, each college would be asked to describe their current curriculum and assessment activities in the focal area, their data analysis capacity, and the titles and backgrounds of those who would be appointed as member of the college's inquiry team. All members must be willing to participate as collaborative learners, as the team is intended to support inquiry within a community of practice focused on understanding institutional effectiveness in the EBIC's content area. This team would coordinate activities on their campus both to gather input to the EBIC and to disseminate its findings. Each college would also submit a budget identifying their in-kind contributions of human and physical resources, as well as their resource needs, particularly in the area of data management and analysis. To ensure faculty participation, endorsement of the proposal to participate in the EBIC would also be required of the governing bodies of the college's faculty.

The EBIC will be effective only if it has the full support of the college leadership and it is allocated sufficient resources, including data, information, and time. The formal charge to the council to leverage resources for problem-solving in the EBIC content area should set high expectations for performance. Although there is no magic number for the size of the group, to facilitate effective participation at the college level, it should be relatively small and the members must have relevant and complementary expertise. Lipman-Blumen & Leavitt (1999) indicated that "hot groups" can range in size from three to thirty, but the optimal size depends on the degree of complication of the group task. The designation of advisory teams or sub-committees of the campus-level inquiry groups would be desirable, particularly for conducting specific tasks such as the cultural audits or cost analyses

of Phase II (discussed below). Goal clarity is essential for effective work groups, so the initial EBIC goals should be well specified by the steering committee and endorsed at the college-level at the proposal phase.

The entire multi-campus inquiry council, comprising all the campus-level inquiry team members, would be considerably larger than an effective work group and would function more as the EBIC's governance, communication, and decision-making body. At council-wide meetings, college-level teams would report the findings of their research concerning effective educational practices, benchmark their initial and ongoing educational processes, interpret outcomes of quasi-experimental and experimental tests of programmatic interventions, and share strategies for disseminating findings. In Phase III, where the council is asked to adopt and test a programmatic intervention warranted by existing research as effective or designed by the EBIC based on the extant literature, it might well be difficult to reach a full consensus among competing programmatic solutions. Therefore, the full inquiry council would also require a governance structure similar to an academic senate to vote on proposed solutions put forward by the teams. This governance process should stimulate debate about the range of options for selecting an intervention, because the debate itself, in promoting rigorous professional conversations (Cohen, Raudenbush, & Ball, 2003) and intelligent inquiry (Polkinghorne, 2004), may be as valuable in promoting organizational effectiveness as the identification of effective practices in the instructional regime. Both at the campus level and at the cross-campus EBIC level, the goals and tasks of the EBIC are intended to create structured "activity settings" (Tharp, 1993; Tharp & Gallimore, 1988) for organizational learning about institutional effectiveness.

The call for participation in an EBIC would also solicit proposals from academic researchers and professional evaluators to serve as facilitators and evaluators of the EBIC inquiry process and of the effectiveness of programmatic interventions adopted by the EBIC. Although studies of sociocultural learning have most typically involved subjects in experimental tasks rather than in everyday decision making, the insights of this field provide support for the integration of certain types of "assisted performance" (Tharp, 1993; Tharp & Gallimore, 1988) that would structure the inquiry councils as groups with a capacity for peer-assisted teaching and learning surpassing that of ordinary committees and task forces. EBIC evaluators external to the member colleges would serve as facilitators to the inquiry council to create task structures and

inquiry team member roles necessary for professional development and learning. Researchers with methodological expertise in ethnographic case study, design-based research, evaluation, and statistical analysis would also be needed to carry out the formative and summative evaluations of the EBIC's programmatic intervention as well as to disseminate generalizable results of the study.

In addition to being in a better position to reach summative judgments of program effectiveness, external researchers and evaluators are needed at times to assist practitioners in the iterative process of identifying problems and evaluating solutions. Tharp and Gallimore (1988) describe several inhibitors of learning in professional settings: practitioners do not always see their own social (eco-cultural) context; supervisors and those with bureaucratic authority mistakenly focus on assessing rather than assisting performance; practitioners face real or perceived constraints on professional development and learning from authorities in their professional life; habits of interaction ("interaction scripts") are unconscious, deeply embedded in professional culture, and taken as a given; errors or weaknesses are not well tolerated as opportunities for learning in everyday professional life; and in-house training programs may simply perpetuate the existing culture and strengthen counter-productive entrenched knowledge. Based on these observations, the key principle for designing effective professional development programs is to ensure that effective assistance for learning and professional development occurs among peers, among authorities and those whose professional actions are regulated, and between external facilitators and participants in the activity setting. Some of these positive features already exist in the self-studies and external review team visits of accreditation, which can serve as a starting point for integrating assessment and accountability.

Phase II: Framing the Problem and Identifying Potential Solutions

Once the focus and goals of the EBIC have been established and the inquiry teams convened, Phase II involves the inquiry teams first in self-study and problem-framing at the campus level and then in cross-institutional benchmarking of resources, educational processes, and student outcomes among all the EBIC member colleges. The self-study involves descriptive data analyses, audits of resource use, and ethnographic observation. The use of a variety of audit instruments serves several purposes. First, they collect initial data for benchmarking change in practices through the course of the EBIC. Second, they help the inquiry team see and consider their own practices in new ways, in order to introduce the new ideas that stimulate learning.

And third, they structure the activity settings of the inquiry group, as cultural "artifacts" or mediators of interaction. (Design-Based Research Collective, 2003; Rueda, 2006).

In an EBIC focused on developmental mathematics education, for example, the college inquiry team would first examine student enrollment, performance, and outcome data in the mathematics curriculum. The relevant data, when available, include high school mathematics grades, standardized placement test scores, college course grades and completion rates, both in the developmental course sequence and in college-level courses in the curricular sequence, and the ultimate transfer (for two-year colleges) and graduation rates for students starting at the developmental course level. These data would be disaggregated by race and ethnicity and socio-economic status to observe inequities in participation and performance (Bensimon, 2004; Bensimon et al., 2004). The correlation among a variety of assessments of student learning (for example instructor-designed examinations, standardized placement or achievement tests, course grades, progression to higher level courses) would also be examined at this stage and disparities examined to determine if certain outcome indicators function better than others or can be improved through modification.

The resource audit process essentially involves creating an inventory of current personnel and physical materials allocated to instruction in the EBIC area, where "instruction" is broadly defined as inclusive of administration, teaching, and student support services. The costs associated with these resources would be estimated using an inventory tool such as the "ingredients method" (H. L. Levin & McEwan, 2001, 2002), which requires a systematic accounting of all the ingredients of instruction. Design-based researchers should be called on during Phase I when the EBIC is being convened to devise assessment instruments to facilitate the inquiry teams' work on this task. Through a case study of a small number of purposefully sampled institutions, the researchers could, for example, identify both typical and atypical, but potentially exemplary, ingredients of instruction in the EBIC content area.

A number of examples exist in higher education to provide models for the development of assessment instruments designed to benchmark educational processes. These include the Campus Compact's Indicators of Engagement Project (IEOP, n.d.), the Council for Adult and Experiential Learning's (CAEL) Adult Learning Focused Institution (ALFI) Assessment Toolkit (*ALFI Toolkit*, n.d.; *Serving Adult Learners*, 2000), and the Transfer Access Self-Assessment Inventory developed

in support of the Jack Kent Cooke Foundation's Community College Transfer Initiative (Dowd, Bensimon, & Gabbard, 2006; Gabbard et al., 2006).

The Campus Compact's indicators, which are derived from survey data, document exemplary practices for colleges whose mission and values include service learning and civic engagement. Based on a process benchmarking study of six institutions identified as highly focused on adult learners, CAEL's Assessment Toolkit includes a series of practices identified as particularly effective for serving adult learners. The Transfer Access Self-Assessment Inventory was developed through a literature review, document analysis, and case study of eight pairs of community colleges and highly selective colleges which appeared to have exemplary practices in the area of transfer. As recommended for identifying peer benchmarking groups and performance goals (Bailey et al., 2006; Dougherty & Hong, 2005), the initial case study sample of exemplary colleges was identified through statistical regression analysis comparing the predicted and actual number of transfer students (Dowd & Cheslock, 2006).

These standardized assessment tools provide examples of audit instruments needed to delineate core educational practices, which is an essential component of process benchmarking. These tools can be paired with cost reporting using the ingredients method of cost analysis to estimate the instructional costs per student expended at each EBIC college. In addition, they should be supplemented with self-study activities using the ethnographic methods of interviews, focus groups, and observation to enable the inquiry team to systematically study their own institutional culture. Examples of inquiry team activities conducted as part of the cultural audit include sitting in on classes, participating in students' study groups, observing patterns of use and interaction in the mathematics tutoring center, reading the course catalog to look at information about the curricular sequence from the student's point of view, and interviewing students either individually or in focus groups.

In this phase, EBIC member colleges would also exchange campus visits and observations to initiate the process of seeing their own campus from a new perspective. In addition, this evaluation would be informed by a review of the research literature concerning effective practices, factors affecting student outcomes, and variation in learning and outcomes by student characteristics. Peer-reviewed journals and archival data bases of "what works" will be useful at this stage to gain a comprehensive understanding of current educational theories and practice. This research review may be conducted by a college-level

subcommittee or advisory committee of the inquiry team who may be assisted by academic researchers, but it should not be conducted primarily or solely by external researchers. The inquiry team members must be knowledgeable decision makers regarding the design of the programmatic intervention to be adopted in Phase III and must also take ownership of the research and evaluation process to effectively implement the intervention and disseminate the findings of the EBIC throughout its life cycle.

The full inquiry council should convene at two points in Phase II, once to plan the processes and define the desired outcomes of the resource and cultural audits and once to compare the findings of their audits and research. The manner of benchmarking the inputs, processes, and "outputs," or student outcomes, of the colleges should be specified by the adoption of audit instruments and reporting formats. At either or both of these meetings, a panel of content and methodological experts should be convened to advise the EBIC members in the inquiry and evaluation process. Consistent with theories of socio-cultural learning and the conceptualization of the inquiry teams as learning teams, the role of the expert advisory panel and of the external team of facilitators is to assist the performance of the inquiry teams by helping them to acquire new ideas and cultivate doubt in their current practice.

For the inquiry council to function as a learning group, the content experts and academic researchers serving as facilitators and evaluators should not impose an educational "solution" on the EBIC, but rather assist decision making by using all "seven means of assisted performance" (Tharp, 1993). As stated, these include explanation and instruction, common forms of communication by experts interacting with practitioners. However, other necessary modes of interaction include modeling processes of program evaluation, questioning decision makers about their rationale and evidence for adopting new programs or practices, and helping to segment decision processes to bring appropriate evidence to bear on decisionmaking.

The benchmarking process of Phase II should move the EBIC towards adoption among member colleges of an instructional "regime" in Phase III, where following Cohen, Raudenbush, and Ball (2003), a regime is defined as "systematic approaches to instruction in which the desired outcomes are specified and observed, and in which the intended outcomes are rationally related to consistent methods of producing those outcomes" (p. 133). It is important to note that instruction is construed broadly as a "collection of practices, including

pedagogy, learning, instructional design, and managing organizations” (p. 124). Therefore, the intervention is conceptualized not solely as the adoption of a specific practice or program, but also as the development of a learning system with its own complex ecology (Cobb et al., 2003; Design-Based Research Collective, 2003). Therefore, the underlying theories of program effectiveness also need to be articulated in order to ensure “authentic” (Chatterji, 2005) implementation of the intervention in a variety of sociocultural settings. In order to enable process benchmarking and improvements in Phase III, the resource and cultural audits of Phase II should, therefore, precisely document the existing “production” processes, resource use, and contexts of instruction among the member colleges. These activities provide the foundation for formative and summative evaluation of the educational effectiveness of the practices of the EBIC colleges.

Phase III: Adoption and Formative Evaluation of an Instructional Regime While Phase II is a period of “informed exploration,” Phase III is an “enactment phase,” (Bannan-Ritland, 2003) in which the EBIC adopts, refines, and tests an instructional regime. This may center on a new curriculum, a tutoring program, a learning community of integrated teaching and advising, or computer-aided instruction, but also requires attention to the social context of implementation, including the values and beliefs of practitioners at the colleges regarding student success. The adoption of an intervention entails a commitment from EBIC members to follow a specific instructional program with a high degree of uniformity and consistency and to allocate resources in particular ways (Cohen et al., 2003). The regime is broadly conceived in a way inclusive of its human, physical, and social resources. It is implemented as an intervention in this phase with an initial design that is subsequently modified through formative evaluation and theoretically informed “engineering” of the instructional program and learning ecology (Cobb et al., 2003; Design-Based Research Collective, 2003).

Developing Communities of Practice with Evaluative Capacity The benefits of this iterative and collaborative process of program definition are not only the development and testing of the specific set of practices that constitute the regime, but the development of communities of practice involved in evidence-based decisionmaking. EBIC activities in Phase III contribute to practitioner knowledge about program effectiveness in local settings, provide comparative estimates of cost-effectiveness across institutions, and aid in developing audit instruments for comparing resource use and institutional cultures. They are also intended to motivate practitioners to see their own practices and

sociocultural contexts in order to stimulate learning and a willingness to change. The simple fact of closely observing ineffective practices can create the "indeterminate situation" (Polkinghorne, 2004) that challenges established practitioner knowledge and spurs new learning.

The dual objectives of the EBIC are to generate evidence of effective educational practice to inform policymaking and to increase organizational capacity for evaluation in order to bring about regular use of multiple forms of evidence to inform practitioners' everyday decision-making. Cohen, Raudenbush, and Ball (2003) describe this approach as "developing professional knowledge and norms around a skeleton of objectives and tasks" in a community of practice. They describe the purpose of developing communities of practice organized around an instructional regime as fostering "professional conversations" as a form of rigorous evaluation (p. 138).

The audit processes of Phase II are intended to help EBIC member colleges observe their own institutional culture, particularly the ways in which decisions about resource use affect student learning. In Phase III, colleges are asked to adopt more uniform use of resources in order for systematic comparisons to be made across EBIC members about the effectiveness and efficiency of resource allocation decisions. Evaluation and research in Phase III is intertwined to determine both what works in the local context of the participating colleges and to develop theories of teaching and learning that explain how, when, and why the instructional program works in order to enable successful innovations at other colleges. The evaluation is focused on determining if the intervention works as designed and if it works in ways that make sense to the participants in the assessment process, which Bannan-Ritland refers to as its "ecological validity" (2003, p. 23). Undoubtedly, variations will be observed in the extent to which the practices selected for evaluation are effective. These variations are themselves instructive in clarifying why certain practices are effective in certain settings. "Lethal mutations" of innovations, which superficially share program characteristics but deviate upon implementation from the underlying principles of effectiveness (Zaritsky et al., 2003), can be instructive in emphasizing the how, when and why of "what works." In addition, the logic of program effectiveness becomes better specified through structured observations of program implementation in multiple settings.

Obtaining evidence of effectiveness and ineffectiveness through the problem-framing and formative evaluation stages of the EBIC, faculty members and administrators would begin the dissemination of the EBIC questions and findings through presentations by inquiry team

members in their departments, colleges, universities and professional association meetings. In addition, faculty members might very well inform their research, writing, and teaching in other settings through their experiences in the EBIC. The involvement of practitioners in user-driven research is more likely to spur the “word of mouth” dissemination that is critical to creating a demand for information about innovative practices (Zaritsky et al., 2003).

EBICs and Experimental Field Research The quality of the summative evaluation possible in Phase IV will be affected by the types of formative evaluations conducted in Phase III, including whether the EBIC conducts experimental field research. Although a well designed experiment is considered the “gold standard” for evaluating the causal effectiveness of educational programs, the majority of EBICs would not likely include a “true” experimental component, because it is administratively demanding and expensive to conduct experimental research with random assignment (Feuer et al., 2002). Nevertheless, valuable information about program effectiveness would be obtained to meet the dual objectives of generating results to demonstrate “what works” to both policymakers and practitioners.

Even in the absence of experimental field research, the formative evaluations of Phase III would be valuable to inform the experimental research agenda. Arguing that randomized clinical trials are a necessary but insufficient component of a research agenda focused on the effective use of educational resources, Raudenbush (2005) described the critical value of formative evaluation for eventual causal analysis of effectiveness. For example, the design stage identifies promising interventions and reduces the number of candidates for testing in experimental research. Formative assessments also precisely specify the instructional innovations worthy of testing and can do so in a manner targeted towards specific learners in specific settings. Given that large-scale experimental interventions are expensive, it is important to know if an intervention can be implemented as conceived on a smaller scale before proceeding to a large-scale randomized assignment intervention. The results of poorly conceptualized experiments are not only wasteful but may be misleading, Raudenbush observed, given that “Testing good ideas that are poorly implemented does not tell us ‘what works’” (p. 29).

In contrast, a well constructed non-random or small-scale randomized experiment can show whether an innovative practice produces an effect in the expected direction. Such findings provide valuable information regarding instructional innovations even if the effect is not representative in broader populations. In addition, certain

innovative practices that worked in one setting may ultimately be ineffective due to resource constraints in other settings, so it is important to systematically observe resource use in an educational change process in multiple settings (Raudenbush, 2005).

The formative evaluation also assists in ensuring fidelity of program delivery, defining the specific nature of a "treatment" and identifying confounding or interaction variables that can mask effects in experimental field research, should large- or small-scale experiments be conducted as part of the EBIC or subsequently based on its results. The measurement of predictor and outcome variables for quasi-experimental and experimental studies can be specified and validated through formative evaluation (Chatterji, 2005; Cohen et al., 2003; Raudenbush, 2005). Through their discussions in Phase III, for example, EBIC members might adopt uniform ways of measuring student characteristics, such as race and ethnicity, socioeconomic status, and prior academic achievement, which would serve as control variables in analyses of student outcomes. Given that "innovative thinking often entails new goals for student learning" (Raudenbush, p. 29), alternatives for defining the dependent variable would also be explored at this stage. Assessment might take place through available standardized tests or instructor-designed assessments. The use of formative evaluation to specify key predictor, control, and dependent variables is an essential step for designing large-scale randomized field experiments (Chatterji, 2005).

An Example of an EBIC Instructional Regime An example helps illustrate the multiple research methods and tools that would inform understanding of "what works" under this proposed application of Cohen, Raudenbush's and Ball's "regimes" to the institution of EBICs as part of the accreditation and accountability system. As before, consider an EBIC investigating effective practice in developmental mathematics education. The members conclude through the problem framing, literature review, and expert panel discussions in Phase II that a particular curriculum involving computer-aided instruction (CAI) was a promising practice for improving student learning in developmental mathematics education. Therefore, the EBIC members decide to adopt the pedagogical theories, instructional software, textbook, instructor's manual, and standardized assessment tests of this curriculum at their colleges. The adoption of this program as an innovation is expected to be beneficial and, ultimately, scaleable as a cost-effective approach to increasing higher education productivity.

At the beginning of Phase III, the council faces the task of determining the physical, human, and social resources necessary to implement the new curriculum and specifying the program “theory” or “logic” of its effectiveness. The computerized component of the instructional program might be expected to increase student learning by allowing students to progress at their own pace and increase their time in class spent on solving mathematical problems. In addition, the EBIC members expect that with CAI instructors will spend more time in one-on-one interaction with students, which will help them individualize their instruction. The existing variation in resources among the EBIC colleges, such as in teacher experience and credentials, tutoring capacity, computers, and classroom space, would inform understanding of the resources necessary to implement the curriculum.

Different models of independent and collaborative learning, resulting from differences in available resources, could be explored. Through class observations, learning at one college with enough computers for each student might be compared to another college where students are grouped in pairs or trios due to a shortage of computers, with an opportunity to determine if individualized computer access is essential to the curriculum. The effects of differences in physical space use, such as the placement of computers in rows looking towards an instructional console at the front of the room or around the periphery of a group work space at the center could also be explored. Differences in student experience of the curriculum by characteristics such as age, enrollment intensity (full time or part time), and native language would be explored through interviews, focus groups, and surveys. The assumption of increased time on mathematics problem-solving might not be observed other than in classrooms with peer tutors, for example, who might have helped in a critical way to reduce the time students spent waiting for the instructor’s assistance.

Through a combination of evaluative activities of this type involving cross-institutional observations, interviews, surveys of faculty and students in multiple developmental mathematics sections at multiple colleges, the EBIC members might then arrive at a preferred implementation plan involving the computerized instructional materials, one peer tutor, and one instructor per classroom with collaborative work groups of three students per computer. This configuration of resources could be benchmarked at member EBICs in terms of cost and feasibility using the cost analysis instruments from Phase II, which could also be refined based on observations of key “ingredients” that may have previously escaped notice.

Recognizing that the computers and educational software of the computer-aided intervention are not "self-acting" (Cohen et al., 2003), the inquiry teams would also investigate the extent to which the provision of resources in the regime motivates faculty effort, student effort, and facilitates or impedes interactions between them. Interviews with students, for example, may show that some feel embarrassed to ask instructors for help (perhaps with variation observed by the student's native language) while others have trouble navigating the software or seeing the screen (with variation by age). These results would lead to a revised implementation, in which the instructional program is "reengineered" to include a formal question and answer period and larger screens are made available in classrooms for older students. Native language and age are documented as interaction variables that affect students' experience of the curriculum.

The observed negative effects among some groups of students might be significant enough to reject further investigation of the CAI curriculum as a scaleable intervention, or the treatment could become better specified in terms of the required social resources (e.g. peer tutors) or physical resources (e.g. larger computer screens). A period of faculty and tutor orientation to provide instructional training in CAI might also be introduced as an essential aspect of the regime.

Through this process of specifying the CAI treatment, which should be long enough to include at least one feedback loop (Chatterji, 2005), the EBIC may have enough member colleges interested in conducting an experimental test of the effectiveness of the software and curriculum in comparison to traditional classroom approaches. If colleges did not feel it was ethical to assign students randomly, student characteristics in the CAI and traditional classrooms could be matched across colleges to obtain quasi-experimental statistical estimates of the impacts of the CAI curriculum. Colleges opting out of the experimental phase of implementation could participate as control classrooms or conduct observations of the fidelity of program implementation in the treatment classrooms.

Chatterji (2005) gives the example of a small scale field experiment involving one school, 16 classrooms, and approximately 250 students that provides a model for quasi-experimental in small numbers of EBIC colleges. In Chatterji's study, administrative constraints ruled out random assignment, but teachers in eight classrooms volunteered to participate in the field experiment and their classrooms were matched with eight others as a control group. Student outcomes were compared in matched-pairs by grade level and demographic characteristics. Prior

to the summative evaluation of the program effects, threats to the validity of the causal analysis from non-equivalent student characteristics on these moderating factors were evaluated and ruled out. Similarly, regression techniques analyzing a treatment group in one semester and a group of students from a previous semester can take advantage of the “discontinuity” of program characteristics amid the continuity of student characteristics to arrive at estimates of new program effects (see for example, Dynarski, 2002b; Linsenmeier, Rosen, & Rouse, 2001). As an alternative approach to obtaining rigorous estimates robust to self-selection and endogeneity bias, Titus (forthcoming) recommends the use of the propensity score matching technique to simulate the comparison of outcomes among groups of “treated” and “untreated” students.

Phase IV: Summative Evaluation Four sets of questions would be asked of the EBIC at the summative evaluation stage regarding the effectiveness, efficiency, and productivity of the tested educational practices and the effectiveness of the EBIC itself in instituting evidence-based decision making. First regarding effectiveness, what was the impact on student learning of the interventions implemented in the EBIC’s instructional regime? What evidence can be presented to support the conclusions of the EBIC regarding program impact and what is the degree of confidence surrounding those conclusions? The highest degree of confidence concerning causal-effectiveness of educational programs would result from field experiments with randomized assignment of students to treatment and control classrooms or settings, in which case the program impact would be quantified by an effect size and a confidence interval. However, field experiments have been relatively rare in higher education and few EBICs would have the organizational and financial capacity to conduct them on a large scale. Evidence of causal-effectiveness would also result from well executed quasi-experimental analysis.

In addition, as argued by advocates of design-based research, rich narrative reports describing the iterative modifications and results of “engineered” experiments in the improvement of educational practice can provide evidence of the effectiveness of specific practices in a highly contextualized manner appropriate to informing practitioner knowledge about similar practices in other settings (Bannan-Ritland, 2003; Cobb et al., 2003; Design-Based Research Collective, 2003). Although this type of finding is not viewed as scientifically “warranted” knowledge by proponents of experimental field research (Shavelson et al., 2003), it does provide descriptive examinations of cause and effect that can

be judged by practitioners based on the authenticity and trustworthiness of the knowledge claims. In producing narrative reports, in particular, the external evaluation team would need to work closely with the practitioner-researchers in the EBIC to produce accurate reports of program effectiveness for the summative evaluation stage.

Second, regarding the efficiency of the instructional practices tested in the regime, the inquiry council would be asked to document the cost of implementing the instructional regime across the multiple institutional settings of the EBIC member colleges. What variations were observed in implementation and how did the variation in resources expended affect student outcomes? Do the results of the process benchmarking across the EBIC colleges provide evidence of optimal use of resources given more widespread adoption of the particular set of instructional practices tested in the regime?

Third, regarding the expanded productivity of higher education, is it feasible to "scale up" the instructional practices identified in the regime as effective across numerous colleges nationwide or were the circumstances of successful implementation restricted to colleges of a particular type serving a homogeneous student body? What would be the expected impact on student learning of adoption of practices recommended by the council, particularly on the number of additional students who would successfully complete an associate's or bachelor's degree?

Finally, regarding the effectiveness of the EBIC itself under an accountability agenda of increasing the number and quality of educated college graduates ready and able to contribute to national economic vitality, how did the EBIC contribute to the dissemination of innovative educational practices and the creation of a culture of inquiry on campus? To what extent did individual EBIC members adopt or test out new instructional practices and engage in self-reflective learning? Did practitioners engaged in EBIC activities develop a greater sense of self-efficacy in terms of their capacity to help students succeed?

It is also important to consider the potential cost-effectiveness of the EBICs as an accountability strategy. Although the meetings of the entire cross-institutional EBIC would incur direct costs for travel and materials, many campus-level activities could be conducted within existing academic and administrative structures, such as curriculum committees, accreditation self-study teams, faculty senates and subcommittees, and institutional research reports. The duration of an EBIC would vary, but the four phases are structured such that both the formative and summative evaluation results would be available within

the five- and ten-year periods of accreditation and mid-point review as evidence of institutional effectiveness in the focal area of the EBIC and of commitment to institutional assessment.

While ETS has proposed wide scale testing in higher education in general education and discipline-specific content areas (Dwyer et al., 2006), testing within EBIC instructional regimes may offer a more cost-effective strategy, by allowing focused evaluation of specific instructional practices considered by higher education faculty and administrators as those with the most promise to raise student achievement. As proposed by ETS, the universal collection of assessment data for all colleges may provide a means of continually tracking college student progression to a degree and thereby monitoring individual college performance. However, even after correlational analysis controlling for initial student characteristics, the significant investment in the assessment test data would not reveal information about the specific institutional practices and contexts that contributed to higher or lower performance among particular colleges. Even if educators were motivated to investigate causes of lower than expected performance at their college, they might not have sufficient knowledge outside a community of practice, such as that created by the EBICs, to interpret the causes of that poor performance. The integration of assessment and accountability reporting functions within the EBIC offers the potential to capitalize on existing expenditures on these activities and to increase utilization of the results.

IV. SUMMARY

To return to the statement by Feuer, Towne, and Shavelson (2002) cited earlier, we agree that decisionmakers at all levels are thirsting for rational knowledge to inform their decisions, if the concept of “rationality” is not too narrowly framed. There is a form of rationality that is critical to improved student learning that differs from the technical rationality underlying the concept of scientifically-based research or the “hard evidence” of test scores (Dwyer et al., 2006). It has been widely recognized by many scholars and is referred to as ordinary knowledge by Lindblom and Cohen (1979), practical rationality or deliberation by Lather (2004, citing work by Flyvbjerg), or reflective understanding by Polkinghorne (2004). Practitioners with this form of knowledge are responsive to the needs of individual clients (or students) and engage in problem-solving in context-sensitive ways.

Polkinghorne (2004) argues the critical necessity of drawing on practitioners' judgments to achieve excellence in the human sciences. He contrasts Plato's views of "techne" knowing, which aims to transcend the limitations of human experiential understanding through mathematical and calculative reasoning, with Aristotle's views of "phronetic reasoning," which "produces a perceptive understanding or insight about what is called for in a particular situation" (p. 106). He notes that "People's actions take place in situations of complexity and conflict. For an action to be appropriate to the occasion, it cannot simply be deduced from general knowledge or codified into a metric" (p. 107). Aristotle termed the "practical wisdom" that comes from this type of perceptive understanding "phronesis" (cited in Polkinghorne, p. 106).

Polkinghorne (2004) convincingly makes the case that our society must recapture Aristotle's sense of "phronesis" as an antidote to the dominance of "techne" knowing, which is inadequate on its own for problem-solving in the complex realms of practice in care-giving fields such as education and psychotherapy. Phronetic knowledge is responsive to the particularity of situations and the contexts in which they are embedded. The practical wisdom that is associated with phronetic reasoning enables practitioners to determine an appropriate course of action when dealing with contingent and changing situations and the uniqueness of the individuals involved in them.

Despite its uncertain impact, accountability continues to be politically prominent at the state and federal levels (Field, 2005a; Leveille, 2005; Zumeta, 2001). The fluctuations in accountability policy reflect the difficulty of mandating indicators of campus performance and of selecting appropriate measures of the complex ways in which colleges serve different students and communities. These limitations are present even when administrators and faculty accept or endorse the premise of public accountability. They are exacerbated when accountability plans take a punitive approach.

Numerous proposals have been made to modify and improve the design of accountability policies. Three emphasize developing a particular culture of higher education to promote educational effectiveness. The Spellings Commission relied heavily on the creation of data bases of collegiate performance indicators and consumer choice to establish what they described as a "culture of accountability." ETS proposed a "culture of evidence" in which colleges would extensively employ standardized assessments of student learning to benchmark their performance over time and against peer institutions. Our proposal

revolves around the concept of a “culture of inquiry,” in which performance indicators and test scores are only two forms of evidence influencing educational change, which, we believe will come about only through changes in the beliefs, attitudes, and knowledge of practitioners. Quantitative data and outcome indicators are essential as part of a comprehensive accountability agenda that also emphasizes professional development and learning. Assessment processes are also an essential complement to results-based accountability. Much more empirical work needs to be done to understand the levers of effective accountability policy, including how a culture of inquiry can be developed to improve student learning. However, multiple strands of the theoretical social science literature support our argument that a focus on practitioner knowledge is critical to achieve the accountability goals of greater levels of higher education among the increasingly diverse population of young adult and adult learners in the United States. It is also supported by the uneven results of accountability policies to date in achieving their expressed goal of increasing educational effectiveness.

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3. STRIVING FOR WHAT? EXPLORING THE PURSUIT OF PRESTIGE

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INTRODUCTION

I-Want-To-Be-University (IWTBU) is a medium-sized public, primarily undergraduate teaching college in an urban setting in the Southeast. The institution started as a normal school for teachers and evolved over time to a more comprehensive curriculum. It recently changed its name from college to university after a wealthy donor made this a criterion for his donation. IWTBU is somewhat selective in its admissions and its efforts to recruit faculty. Significant executive administrative turnover in the last 5–10 years has fostered uncertainty and dialogue about institutional priorities.

Michael Vaughn, Director of Institutional Research, has worked at IWTBU for 30 years and has seen a lot of change. In particular, he has seen public support for higher education decrease and a smaller portion of the institutional budget subsidized by the state, making the institution more dependent on students who can pay full price. Concurrently, Vaughn has seen competition for students increase as for-profit competitors offer prospective IWTBU students degrees they can earn while never leaving their homes. Likewise, parents and student applicants are increasingly interested in how programs are ranked.

IWTBU has always kept on top of what their peers were doing. However, department chairs are now just as concerned when they hear about innovative programs at institutions below them

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in national rankings as they are in what happens among aspirational peers. Most of the faculty hired 30 years ago were ABD and came to IWTBU for a secure teaching position. The most recent faculty hires come with research university Ph.Ds and seem more concerned with research and improving their departments' national reputation. The competitive job market has allowed IWTBU to recruit some very research-oriented faculty, which they "stole" away from more prestigious institutions for larger salaries and/or better packages (e.g. release time, research monies, etc). A new president and provost are working with faculty on a strategic plan that they claim will move IWTBU up in USNWR rankings over the next five years.

While IWTBU is a fictitious institution offered to illustrate the many forces that give rise to striving, it could describe many institutions of higher education. Each year colleges and universities strive to increase their national standing in the academic hierarchy, and the behavior associated with this "striving" has taken many forms. Striving is defined here as the pursuit of prestige within the academic hierarchy. Striving behavior might include campuses amending their admissions process, reward structures, and resource allocation decisions (Aldersley, 1995; Dichev, 2001; Ehrenberg, 2003; Meredith, 2004; Morphey, 2002; Winston, 2000).

In recent years research has examined the nature of such "striving" to frame how it might be studied, and to examine how striving impacts various aspects of institutional functioning, including but not limited to admissions, pricing/cost, and educational quality (Aldersley, 1995; Ehrenberg, 2003; Massy & Zemsky, 1994; Meredith, 2004; Monks & Ehrenberg, 1999; Morphey, 2002; Morphey & Baker, 2004; Sarraf, Hayek, Kandiko, Padgett, & Harris, 2005; Sweitzer & Volkwein, 2006). Additionally, there is emerging attention to how striving influences faculty work-life (Dubrow, Moseley, & Dustin, 2006; Finnegan & Gamson, 1996; O'Meara & Bloomgarden, 2006; Wolf Wendel & Ward, 2005).

This *Handbook* chapter contributes to this growing area of research by synthesizing recent studies on striving in order to (a) recognize striving institutions (b) better understand the forces influencing striving (c) explore striving behaviors (d) examine possible consequences of institutional striving and (e) identify areas for future research.

It is important to study striving because campuses that engage in striving behavior are often making trade-offs without knowing what they are. Very little research has looked at the consequences of striving

behavior across college and university missions and functions. The popular rhetoric of “moving up in *U.S. News and World Report* (USNWR) rankings” does not include any discussion of the impact of such a move, for example, on faculty work-life, student diversity, or the cost of tuition. The old adage, “the grass is always greener on the other side” applies here. By isolating striving behaviors and associating them with a set of consequences (whether positive, negative or neutral) researchers can provide a clearer view of whether the grass is actually greener on the other side of the fence. Likewise, by studying what Morphey and Baker (2004) refer to as “the organizational behavior that accompanies aspiration (p. 382)” researchers can make the means used to achieve the ends apparent. Thus research on striving behavior in higher education has a direct audience amongst Boards of trustees, college presidents, provosts, deans, and department chairs poised to sign off on strategic plans that promise to move the institution to better rankings. Likewise, state systems of higher education, as well as national accrediting bodies and associations will also benefit from a more complex understanding of how striving impacts less privileged students, and the teaching and service missions of higher education institutions.

Section I explores characteristics of striving institutions and what institutions strive for. Section II examines the forces that compel striving. Section III discusses striving behavior across university operations, and the institutions most likely to strive. Section IV outlines possible consequences of striving behaviors for stakeholders and higher education missions. Section V provides recommendations for further research.

SECTION I: EXPLORING THE NATURE AND CHARACTERISTICS OF STRIVING

A WORKING DEFINITION

As mentioned above, striving is broadly defined here as the pursuit of prestige within the academic hierarchy. The concept of striving builds on the previously studied concepts of “vertical extension” (Schultz & Stickler, 1965), “academic drift” (Berdahl, 1985) and “upper drift” (Aldersley, 1995), “academic ratcheting” (Massy & Zemsky, 1994), and institutional isomorphism toward research culture (DiMaggio & Powell, 1983; Milem, Berger, & Dey, 2000; Morphey, 2002; Riesman, 1956). Additionally, this concept has been called, “institutional

homogenization” or “institutional imitation” (DiMaggio & Powell, 1983; Jencks & Riesman, 1968; Scott, 1995).

David Riesman (1956) was one of the first to introduce the idea of institutional isomorphism. Riesman (1956) observed, “there is no doubt that colleges and universities in this country model themselves upon each other...All one has to do is read catalogues to realize the extent of this isomorphism (p. 25).” Riesman depicted the higher education system as an “academic procession.” Higher education institutions in his portrayal resemble a snake-like entity where the most prestigious institutions in the hierarchy are at the head, followed by a middle group, and then less prestigious schools at the tail of the snake (Riesman, 1956). The most prestigious institutions watch each other closely, while the middle emulate those at the head and those at the tail emulate those in the middle. Each group starts to look more and more like those they emulate and the institutional forms within them become less distinctive (Riesman, 1956). Berdahl (1985) continued this work, describing academic drift as the “tendency of institutions, absent any restraint, to copy the role and mission of the prestige institutions (p. 303)”. Massy and Zemsky (1994) furthered work on striving by describing how academic ratcheting occurs within departments that strive. These authors examined how administrative costs increased as faculty loosened teaching and institutional ties and increased disciplinary ties and activities.

More recently, Brewer, Gates and Goldman (2002) categorize three types of higher education institutions in the industry. This taxonomy classifies institutions as prestigious, prestige-seeking, or reputation-building. Prestigious institutions are those at the very top of the academic hierarchy, inherently conservative, that work to maintain their prestige through acquired resources. On the other end of the continuum, reputation-building institutions are most tuition dependent and most responsive to the needs of students as customers. They pursue strategies to meet current and emerging needs as markets shift. In the middle are prestige-seeking institutions that make ongoing investments to seek and enhance prestige. Sometimes these investments are in athletics, other times faculty research, or merit scholarships (Brewer, Gates, & Goldman, 2002). In the discussion of striving in this chapter, it is the prestige-seeking institutions, the ones that are currently engaging in organizational behaviors, entirely, or in large part, to achieve prestige (as defined by external rankings of the institution), that are of interest. Thus striving institutions are those actively engaged in organizational behaviors to fulfill their aspirations of greater

prestige. Faculty or administrators engaging in striving behavior are those who are intentionally using available resources, and making strategic decisions to bring prestige to them, their department, and their institution.

WHAT ARE INSTITUTIONS STRIVING FOR?

To put it succinctly, ratings. Striving institutions want to improve their *USNWR* college rankings, and related rankings such as those in *Money*, and *Business Week*. Historically, striving institutions have also wanted to move to what institutional leaders consider more prestigious Carnegie classification categories, and be admitted to distinguished groups of institutions. While it can be argued that there has always been a “pecking order” within higher education institutions, the college rankings institutions compete for today came to the national forefront in the 1980s, during a time of declining applicant pools, rising costs, and a national push for assessment and accountability (Eide, Brewer, & Ehrenberg, 1998; Hossler, 2000; Meredith, 2004). The *USNWR* rankings began in 1983 as a reputational survey of presidents, switching in 1987 to a combination of objective data and reputational survey data (Meredith, 2004). The *USNWR* ranking process includes seven measures of college quality including, academic reputation, student selectivity, faculty resources, graduation and retention rates, financial resources, alumni giving, and graduation rate performance (Ehrenberg, 2003). *Money Magazine* began publishing *Money Guide: Your Best College Buys Now* in 1990 (McDonough et al., 1998). McDonough et al. (1998) conducted research with *USNWR*, *Money*, *Newsweek/Kaplan* and *Time/Princeton Review* and estimated that these magazines were generating approximately 15 million dollars per year in sales from college issues.

The Carnegie classification system adopted in 1970 has also served as a “prestige barometer” for higher education institutions because the variables it used to classify institutions (at least in pre-2005 versions) all correlated with prestige, such as amount of federal research dollars and selectivity (Morphew & Baker, 2004). For some time, researchers have reported four-year institutions attempting “upward drift” within their respective categories (e.g. Baccalaureate to Masters, Masters to Comprehensive, Doctoral to Research University), and many with success. For example, the Carnegie foundation reclassification showed, that the number of institutions identified as Research University I increased from 70 in 1987 to 88 in 1994 (Morphew & Baker, 2004).

The use of Carnegie types as a prestige barometer occurred for decades despite the fact that the Carnegie Foundation for the Advancement of Teaching never intended, and repeatedly stated that the Carnegie classification system not be used in this way. In the foreword to the 1987 edition of the Carnegie classification Ernest Boyer observed that “the classification is not intended to establish a hierarchy among higher-learning institutions.” Nonetheless, McCormick (2005) observes that while the classification was developed in 1970 to support research on U.S. higher education, “it has been put to many other uses over the years.” In 2005 the Carnegie Foundation revised their classification system and released six new all-inclusive schemes, each of which provides a different perspective on institutional characteristics. The new classification schemes provide a more multi-dimensional framework for viewing institutions, encouraging institutions to look elsewhere for a prestige barometer.

This chapter focuses on campuses striving for external ratings and prestige and the organizational behavior associated with those efforts. It is possible for campuses to strive for other things, and to do so simultaneously as they strive for prestige. Likewise, it is possible for campuses to act in ways that bring institutional prestige without intentionally pursuing it. However, the focus of this chapter are campuses that are intentional and purposeful about improving their external ratings and prestige and act in ways to achieve that goal.

DOES PRESTIGE MATTER?

In the minds of the public, “the best colleges are the most selective (Kuh & Pascarella, 2004, p. 53).” An assumption is made by consumers of USNWR rankings and similar rankings that prestige equals quality, and students want the high graduation rates, and earnings that highly ranked, prestigious institutions offer.

A major problem with equating USNWR rankings with quality however, is that such ratings are heavily dependent on the incoming credentials of entering students, rather than measures of what they learn while they are there. For example, Webster's (2001) recent study of USNWR rankings indicate that the average SAT/ACT score of incoming students is the most influential criterion in determining where an institution ranks. Likewise, Kuh and Pascarella (2004) completed a similar examination of the top 50 universities and found that the USNWR rankings could be easily predicted simply by knowing average SAT/ACT scores. It is difficult to make an argument that

an institution is providing a high quality education simply because of the prestige of the group of students who enroll the first day of class. Ehrlich (2006) observes, “the quality of campus resources and of incoming students—factors that dominate most rankings—are some of what should be considered. But no one would choose a hospital based on the health of patients coming into the hospital, and no one should choose a college based primarily on the grades and test scores of incoming students (Ehrlich, 2006, p. 1).

Decades of research by scholars such as Astin (1993), and Pascarella & Terenzini (2005) show that the outcomes of a college education are related to how engaged students are with their colleges, and the academic and social fit between them and their institutions, not institutional prestige (Hossler, 2000). On the other hand, there is research showing that peers influence what students learn in college as much, and sometimes more, than professors (Kuh & Pascarella, 2004). Thus, in some ways students are paying for the privilege of who will sit next to them as well as the quality of the faculty and institutional resources at prestigious institutions. Institutions want to attract prestigious students, in part for the halo effect it provides their institution.

Recently, research has begun to examine the linkages that do and do not exist between USNWR ratings and a quality higher education. Kuh and Pascarella (2004) compared the National Study of Student Learning (NSSL), National Survey of Student Engagement (NSSE), and used Barron’s Selectivity Score to estimate institutional selectivity. These authors concluded that institutional selectivity is a weak indicator of student exposure to good practices in undergraduate education. In fact, the more selective the college, the less frequently students received feedback from their teachers (Kuh & Pascarella, 2004, p. 56). Dichev (2001) found that as little as 10% of the variation in an institution’s USNWR scores over time were due to changes in the quality of the institution. Pike (2003) compared the NSSE benchmark scores for 14 AAU public research universities with their USNWR rankings using multivariate statistics. The examination of these results suggested that USNWR rankings and NSSE benchmarks were not related to one another, with the exception of enriching educational activities. Pike (2003) found the students at more selective institutions reported higher levels of engagement in activities that NSSE classifies as educationally enriching.

While the quality of higher education does not necessarily improve as USNWR rankings improve, there are very real resource pay-offs

associated with climbing academic ladders. There are also losses when institutions fall in rankings. Monks and Ehrenberg (1999) analyzed whether the USNWR college rankings affected admissions outcomes or pricing decisions of schools in the Consortium for Financing Higher Education. Increasing in rank (i.e. 5th to 10th) is considered less favorable, decreasing in rank (i.e. 10th to 5th) is considered advantageous. They found there was a direct relationship between institutions moving up or down in USNWR ratings, yield and selectivity. Institutions improving their rank could accept a smaller percentage of their applicants and increase their selectivity the following year, and institutions whose rankings declined had to admit more students to achieve less selectivity (Monks & Ehrenberg, 1999). Monks and Ehrenberg found that a decline in rank from 5th to 10th place coincided with an increase in the institutions' admit rate the following year of almost 2 percentage points. Whereas an improvement in rank from 10th to 6th place was associated with an increase in an average SAT score of 5.5 points. While modest, this research points to the very real pay-off in terms of the academic quality of students associated with improving institutional rankings. A limitation of Monks and Ehrenberg's work was that it was limited to a small number of institutions in the very top tier (16 top national universities, one university ranked between 26th and 50th, and 13 top national liberal arts colleges in the 1998 US News rankings).

Meredith (2004) extended Monks and Ehrenberg's work across a broader range of schools and variables to understand how these ratings impact admissions outcomes across different institutional types, and how racial and socioeconomic demographics, and alumni giving are affected by an institutions' USNWR ranking. A net tuition series was constructed (tuition plus room and board minus average freshman grant) from the 1999 and 2000 Princeton Review. A school improving its ranking from the second to the first quartile increases the percentage of students in the top 10% of their high school class by about 1.5% and decreases their acceptance rate by about 4% (Meredith, 2004, p. 451). Meredith (2004) found that USNWR rankings have a greater effect on admission outcomes at public schools. No significant difference was found in alumni giving among institutions that moved rank one way or another. However, Meredith (2004) speculated that this may have been the result of the dependent variable (log of private gifts, grants and contracts) being too broad. Isolating alumni giving as its own variable in future research may demonstrate a stronger relationship between changes in USNWR rankings and alumni giving.

Thus there is significant research showing that external rankings do matter in terms of the numbers of applicants and the quality of students that an institution can admit. However, research does not suggest that rankings predict the quality of the undergraduate experience. This raises the question of whether parents and students making college choices are aware or care that prestige does not guarantee a quality undergraduate experience. Given the emphasis on career placement in many student and parents minds, it might be argued that parents want prestige and if given multiple choices will always choose the most prestigious college for that reason. However, it can also be argued that higher education has not been adept about documenting what else matters in college choice and student outcomes, and if given this information, prestige would not have as much sway as it does in guiding college decisions.

Regardless, the context of higher education is very different than it was thirty years ago in terms of the quantity and variety of ways there are to pursue prestige. Whereas the early colonial colleges competed largely through athletics for prestige, today colleges compete for prestige through the numbers of national merit scholars they admit each year and Fulbright scholars on their faculty. They compete through state-of-the-art athletic centers and high technology residence halls. They compete for the highest endowments and the greatest percentage of alumni giving.

In summary, institutions strive for prestige as they do other resources. With prestige comes more resources, which help the institution gain more prestige, which brings more resources and on and on. While institutions have sought many types of prestige over time, currently the coin of the realm for many institutions seems to be college rankings and classifications.

IDENTIFYING STRIVING INSTITUTIONS

It is challenging to isolate characteristics of striving across institutions because each institution's striving decisions are inevitably linked to a specific history, market, competitors, institutional identity, and leadership at any given time. Every institutional decision or behavior is influenced by a complex set of internal and external forces. It is therefore difficult to isolate specific behaviors and attribute them solely to the pursuit of prestige. Likewise, "striving" toward greater prestige will look different for a liberal arts college in the fourth tier of *USNWR* rankings than a public four-year comprehensive institution; different

for a historically black college in the South and a state land-grant in the Midwest. There will be regional differences and ways in which public versus private institutions and institutions that are part of state systems are striving for different levels and kinds of prestige.

Nonetheless, it is useful from the perspective of studying the phenomena of striving institutions to identify characteristics of striving institutional environments that might be used to “diagnose” striving institutional behavior at a particular time. Table 3.1. provides a list of characteristics of striving institutions categorized by different functional areas of colleges and universities. This list was developed from studies on institutions identified as striving, experiencing upward drift, academic ratcheting, or institutional isomorphism toward research culture (Aldersley, 1995; Birnbaum, 1983; Brewer, Gates & Goldman, 2001; Ehrenberg, 2003; Finnegan & Gamson, 1996; Jencks & Reisman, 1968; Massy & Zemsky, 1994; Meredith, 2004; Monks & Ehrenberg, 1999; Morphew & Baker, 2004; Morphew & Huisman, 2002; Morphew & Jenniskens, 1999; O'Meara & Bloomgarden, 2006; Winston, 2000).

These characteristics might be used in some objective way to define a set of institutions as “striving” for the purposes of further study, and to compare them to a similar set of institutions that do not have these same characteristics, or do not have them to the same degree.

No one of these characteristics necessarily indicates a striving institutional environment. Nor is the list by any means exhaustive of all possible characteristics. However, a researcher looking to identify an institution as striving might examine whether it has exhibited an overall picture (or significant number) of these characteristics over the previous five years. These indicators might be used in an exploratory sense to develop survey instruments or selection criteria for choosing institutional case studies. They might also be used to develop testable propositions for further research. The indicators might be used to diagnose which campuses seem to have orchestrated a full-fledged campaign to increase prestige, pursuing prestige in multiple ways on multiple fronts, versus campuses that may have just taken a first step on this path (pursuing prestige in admissions for example). Such indicators might help researchers compare striving campuses and begin to understand whether there are patterns in how campuses approach various strategies (e.g. do campuses tend to begin in one area such as admissions and then quickly move on to other areas?)

The next section explores the forces that compel striving behavior.

Table 3.1: Characteristics of Striving Environments

Areas of Institutional Operations	Indicators of Striving
Student Recruitment and Admissions	<ul style="list-style-type: none"> ● Institution increases selectivity over recent years, including high school rank, SAT & GPA ● Increase in use of early decision in admissions
Faculty Recruitment, Roles and Reward Systems	<ul style="list-style-type: none"> ● Institution invites more National Merit Scholars and fewer Pell Grant Recipients ● Greater attempt to hire “faculty stars” with research emphasis, increase in faculty salaries and in start up research packages ● Faculty teaching load decreasing; increase in discretionary time, loosening of institutional ties; increased emphasis on disciplinary ties
Curriculum and Programs	<ul style="list-style-type: none"> ● Faculty report expectations for research in tenure and promotion have increased ● Rise in faculty grants, awards, prestigious fellowships ● Shift of emphasis and funding away from remedial and developmental programs & towards honors and programs for academically talented students ● Institution is adding graduate programs, shift in emphasis from undergraduate to graduate programs ● Focus among faculty on making programs more rigorous and on preparing students for graduate school or prestigious career placements
External Relations and Shaping of Institutional Identity	<ul style="list-style-type: none"> ● Institutional actors use language, speeches, websites, and symbols to shape the external image of the institution as more prestigious or “on the move” ● Institutional actors also work to shape an internal, institutional narrative about striving and use the language and rhetoric of striving to frame major decisions, goals statements, and directives
Resource Allocation	<ul style="list-style-type: none"> ● Increased spending on infrastructure and administrative support ● Shift in resources from instruction to administrative support ● Investments made in competitive amenities

SECTION II: UNDERSTANDING THE FORCES THAT COMPEL STRIVING

Understanding the forces that compel striving is as complex as understanding all of “how colleges work (Birnbaum, 1988).” This part of the chapter is divided into five sections, presenting different explanatory frameworks for why institutions are compelled to strive. First, historical, economic, ecological and sociological, and political frameworks are described, followed by how the nature of the faculty career and academic culture impacts striving. All of the forces described in this section operate within the environment of higher education, at the institutional level, and at the individual level (O'Meara, Terosky, & Neumann, 2006) to compel institutional striving behavior.

HISTORICAL FORCES

One way of viewing striving behavior is as a natural organizational and historical evolution of higher education institutions, who they have served, where they are located, and their changing aspirations over time (Geiger, 2004). Historians contextualize an institutions' aspirations today in the context of institutional saga, including: historical events locally or nationally, important leaders in the institution's past such as college presidents who had a vision for transforming an institution over time. From the perspective of institutional and national history, major events that have occurred in the nation, such as the G.I. Bill and the expansion of higher education, or the money poured into research universities after Sputnik, have acted as catalysts to individual institutions to expand, to refine missions, and to strive to obtain the resources and prestige of the higher education institutions with the greatest status (Thelin, 2004).

For example, Jencks and Reisman (1968), Finkelstein (1983), and Geiger (1993) have all chronicled the great changes that took place across higher education after World War II and the G.I. Bill. Graduate education became a much greater part of higher education, and specialized knowledge and ties to ones discipline became more desired attributes of “star faculty” at premier institutions. As the federal government poured money into faculty research after Sputnik, a greater value was placed on, “cognitive rationality,” and the writing and research of specialists (Geiger, 1997, p. 283). As research universities and comprehensive state colleges expanded, many private liberal arts colleges became more selective. As the faculty labor market has

changed over time, many institutions have been able to take advantage of the opportunity to “recruit for their aspirations rather than the reality of resources” (Finnegan, 1993, p. 652), meaning institutions hiring more research-oriented faculty at primarily teaching institutions. This in turn propelled institutions to aspire to greater prestige based on research university standards.

One such example of striving over time are the American Jesuit Colleges such as Boston College, Georgetown, and Loyola of Baltimore. Goodchild (1997) describes a gradual evolution of Jesuit Colleges over a hundred years from primary teaching institutions to competitive and selective liberal arts colleges with distinguished professional schools. In part, Jesuit Colleges were compelled to become more research-focused and pursue prestige by the events and circumstances of their times. For example, between the 1930s and 1950s many Catholic students graduating from Jesuit baccalaureate colleges wanted to pursue graduate education but found discrimination in gaining admission to non-Catholic professional schools (Goodchild, 1997). Jesuit colleges began creating graduate schools to fulfill this need. Likewise, as the standardization movement swept higher education in the early 1900s, it became imperative for Jesuit Colleges to employ faculty with doctorates in order to obtain accreditation and legitimacy within the system of higher education. However, the Catholic governing bodies wanted Catholic faculty teaching at their colleges, thus making it essential to further develop graduate programs to train faculty and Jesuits to teach in and lead Jesuit Colleges (Goodchild, 1997). In this way, striving to develop a “Jesuit university of high rank,” was compelled by a need set in contemporary circumstances (Goodchild, 1997).

Jesuit Colleges very much wanted and needed Association of American Universities (AAU), American Council of Education (ACE), and/or North Central Association of Colleges and Secondary Schools (NCA) approval. When ACE published a list of 63 distinguished or satisfactory graduate programs in 1934, no doctoral programs from any Jesuit institution were on the list. The Jesuit General published an Instruction, asking American Jesuits to develop, “a new direction and a fresh impulse of Ours [and] a systematized attempt to secure for our educational activities that due recognition and rightful standing among other groups of similar rank and grade (Goodchild, 1997, p. 544).” According to Goodchild, Jesuit institutions changed curricula, improved their graduate schools, created doctoral programs and research institutes, and made achieving AAU membership a main goal. While Jesuit universities attempted to maintain their

distinct Catholic identity, they engaged in “Americanization” of their curriculum and identity, in part out of need to serve Catholic students in a way other institutions were not, and in part to become part of the prestige ladder that was being established among universities at that time. Also, while the circumstances of the time and actions of Jesuit Prefects (leaders within the order) were the major players in this story of striving, an important social subtext is the Jesuits role within their larger Catholic organization. Among the many orders of Catholics, (e.g. Franciscan, Sisters of Charity, etc.) the Jesuits have a long history of being both personally and professionally ambitious, and among the elite of Catholic intellectuals. This is an important context for this story because it begs the question of whether the Jesuit colleges might have engaged in striving behavior regardless of their external context, given their leadership, and/or demonstrates the interplay of internal and external forces that can contribute to an institution or group of institutions’ striving.

The striving of historically black colleges and universities (HBCUs) might also be explained from a historical lens. After World War I, accreditation was a main goal of HBCUs, who needed regional and national accreditation in order to survive with the name of “college,” and provide gateways for African Americans into professional careers (Anderson, 1997). In particular, between World War I and World War II, HBCUs struggled to develop endowments, upgrade the qualifications and salaries of faculty, and to make course work more rigorous. These were significant struggles since most HBCUs had been operating as secondary schools, providing critical remedial work that prepared students for college level instruction (Anderson, 1997). For example, in 1915 only 33 black private institutions were assessed to be teaching at the college level— 79% of the enrollment in black institutions were engaged in pre-college work (Anderson, 1997). In the 1910s when national and regional accrediting agencies such as the Middle States Association of Colleges and Secondary Schools were formed to differentiate between “colleges” and “high schools” there was significant pressure on black colleges to become more like white colleges and universities. In order to be rated as a college by the North Central Association of Colleges and Secondary Schools there were decrees that institutions have an endowment of at least \$200,000, have standardized and more rigorous admissions standards and at least six departments (Anderson, 1997). Thus efforts taken in the area of admissions, faculty recruitment, and fundraising, which might be classified as striving

behavior today, were a direct response to these events and were key to the very survival of these institutions.

The changing missions of normal schools between the 1890s and 1920s provides a third example of striving in a historical context. In 1890, normal schools, which began as academies and evolved as teacher-training colleges, were widespread with at least 37 states having one or more normal schools (Ogren, 1997). Ogren writes of the unique quality of these institutions early in their histories. Quite unique for the time period, men and women seemed to co-exist as intellectual equals under the tutelage of male and female teachers in the early normal schools. However, as the purpose of these institutions changed to include Bachelor degrees in areas outside teacher education, gender equality lessened. For example, in the Wisconsin normal school system new departments and elective courses encouraged gender differentiation in curriculum, literary societies, and social life during the 1910s and 1920s (Ogren, 1997). As the prestige of these institutions increased and they transformed to multiple purposes gender equality eroded by the late 1920s. As the professions students were being prepared for became more gender specific, those considered women's programs assumed a lesser stature on campus. These normal schools appropriately transformed to meet the more complex needs of their region, but as they did the distinct co-education they provided was lost.

Another example of considering striving in a historical context involves Astin and Lee's (1972) study of 494 "invisible colleges" or small private liberal arts colleges. The authors, and many others at the time, feared these institutions would become extinct if they did not increase enrollment, focus on their distinct purposes in the market, or receive state support. In 2007 it is clear that the great majority did not disappear but rather engaged in striving behavior in order to survive. Examples include single sex institutions merging with other colleges to become co-ed; many have added professional programs and distance learning programs, and virtually all have engaged in major development efforts to increase endowments. From a rational perspective, these institutions exerted themselves so they could attract more students; however, they also transformed in ways that emulate more prestigious institutions. Looking at this group of institutions historically, one notices that some types of striving behavior were their presidents ways out of extinction, and natural given the of circumstances they faced throughout the last 35 years.

Likewise, Geiger (2004) has written about the aspirations of public land grants and private universities in the 1950s and 1960s. Some of

the ways they strove to model the most prestigious research universities helped them to become better institutions, expanding the numbers of students served, and garnering “world-class” resources for research and instruction they otherwise would never obtain.

Thus from a historical perspective, striving behavior in higher education can be explained through an institutions’ organizational saga. Events and circumstances within specific time periods compel decisions and leaders shape institutional aspirations.

An important subtext within the larger story of institutional striving however, are how the faculty who have inhabited these institutions have changed over time. Finkelstein (1993) analyzes some of the changes that have occurred in his seminal piece, *From tutor to specialized scholar*, tracing the very first Harvard tutors and their roles, through the research university professor of today. Finkelstein shows how the identity and aspirations of faculty have changed as higher education missions have expanded and new institutional types have formed. In some cases, changes occur even within a single faculty career, causing a potential disconnect between institutional and faculty aspirations. For example, during the early 21st century, many of the faculty hired in the 1960s and 1970s in state comprehensives have retired and been replaced by research-oriented early-career faculty, many of whom may have preferred research university careers but not found them because of a competitive job market. These faculty help the institution strive toward greater prestige research wise, but may come in conflict with faculty hired in previous decades with more of a teaching and service orientation (Wolf-Wendel & Ward, 2005). Finnegan (1993) conducted case study research on hiring cohorts in comprehensive universities over three time periods. Her research found that the more research-oriented the faculty, the greater the pursuit of prestige. Considering current forces impacting faculty and campuses to strive as “generational” can help us understand present behavior (Finnegan, 1993; Finnegan & Gamson, 1996).

ECONOMIC FORCES

A second related and equally important way of explaining why institutions strive relates to the economics of higher education, and the U.S. higher education market in particular (Clotfelter, 1996). A number of economists in higher education, as well as scholars of organizational change have researched the economics behind institutions striving

for USNWR rankings (Brewer, Gates & Goldman, 2001; Clotfelter, 1996; Ehrenberg, 2000; 2003; Meredith, 2004; Morphew & Baker, 2004; Webster, 2001; Winston, 2000). The explanation for institutional striving is as follows. Once an enrollment threshold is met, institutions want to increase student quality. The better the student inputs (i.e. GPA/SAT), the better the peer effects on learning, and the higher likelihood of positive outcomes (retaining students, career placement, student satisfaction and alumni giving) (Winston, 2000). Because there are a limited number of students with the most desirable characteristics (high GPA/SAT, able to pay full tuition price), institutions compete for these students. In this zero-sum game, “a college or university’s access to student quality, then, depends on its position relative to other institutions (Winston, 2000, p. 21).” This creates what Winston (2000) calls a “positional arms race in higher education,” wherein high-ability students are trying to achieve the best deal (e.g. for students, the lowest price for the highest quality education; for institutions, the highest ability students for the lowest amount of tuition subsidy). Pressure from institutions below an institutions’ position in the rankings are more likely to increase competition than pressure from above because institutions below are the ones with the power to chip away at an institutions current level of prestige (Winston, 2000).

Brewer, Gates, and Goldman (2001), economists at the RAND corporation, apply a similar “industry framework” to their study of the issue of “prestige-seeking” among 26 diverse institutional case studies (in an earlier section, their typology of prestigious, prestige-seeking, and reputation-building institutions was described). Brewer, Gates and Goldman’s (2001) theory describing how the market works for each of these institutional types is relevant here. The authors begin with the observation that in higher education, like many service industries, the consumer often does not know what they are buying until they have purchased it. Institutions use two different concepts – prestige and reputation – to attract customers. While reputation is achieved by institutions meeting specific consumer demands, prestige is less tangible, but generated through “prestige generators” such as student quality, research, and sports (Brewer, Gates & Goldman, 2001). Both reputation and prestige are competitive concepts as multiple institutions in a region might have strong reputations, and any institution can compete for and achieve prestige. Institutions strategize to attract additional resources to their institution to enhance prestige—while at the same time working to diminish the prestige of their competitors.

And while it does not have to be a zero sum game, if two institutions in a region are competing for students, the one with the stronger reputation is likely to “steal” students from the other.

In a similar vein, the over-supply of prospective faculty within a time period, or within a discipline, increases expectations for entering qualifications because of supply and demand. Likewise, faculty with “super qualifications,” or very well credentialed, in disciplines with an undersupply can demand amenities and research support as part of their appointments, which can contribute to striving. As such supply and demand realities enable and in many cases encourage institutional striving. Comprehensive institutions and departments that receive 300 applications for one faculty position in Philosophy, can aspire to the highest research standards because they are in a buyer’s market. Yet if the institution is located in a less desirable location geographically, they may receive 30 applications and thus be more likely to show alignment between institutional mission and expectations for faculty recruitment.

Clotfelter (1996) studied trends in institutional costs among departments in the humanities, social sciences, and sciences at three leading research universities (Chicago, Duke, and Harvard) and the contrasting experience of a leading liberal arts college, Carleton, between 1976/1977 and 1999/1992. Clotfelter’s analysis suggests increasing costs in higher education are largely based on universities competing in a national market for scholars and high-ability students, increasingly featuring highly paid star-faculty and students with generous aid packages. One example Clotfelter gives of this is making deliberate efforts to increase the quality of the faculty by institutions extending offers to senior faculty at competing institutions, a strategy he describes in several of the institutions in his study.

It is important not to over-simplify the economic forces that are compelling institutions to strive or to suggest that all actions institutions take to improve the entering qualifications of students, or the scholarly reputation of the faculty, are related to striving. For example, an institution badly in need of out-of-state students for economic reasons (i.e. a higher tuition) may actually decrease the selectivity of those students to get them. Seeking out-of-state students in this case may appear to be striving behavior, but in fact have a mostly financial motivation. Likewise, not all campuses that ramp up their development efforts, redesign their residence halls, or invite more Fulbright scholars to campus are doing so for purely economic or striving reasons. Nonetheless, in the economic environment of higher

education, prestige is an intangible resource used to acquire additional resources. This perspective adds another useful way of explaining why campuses strive.

ECOLOGICAL, AND SOCIOLOGICAL FORCES

Two additional perspectives provide an explanation for striving at multiple levels that focus less on dollars and sense and more on the social interaction of institutions and actors. In Birnbaum's (1983) large scale study of change in the institutional diversity of U.S. colleges and universities, he argued that population ecology provides an appropriate explanatory framework for why institutions have not become more diverse during the growth of the U.S. system during the 1960s and 1970s. Within this framework is also an explanation for why institutions strive to emulate more prestigious models. Population ecology theory suggests that institutions that exist in the same environment, responding to the same stimuli, are likely to become more homogeneous over time. As they struggle to survive, institutions of the same type will deal with similar scarce resources, similar supply and demand of faculty and students, and similar government regulation (Birnbaum, 1983). As such, striving can be explained as institutions maximizing their chances for survival by acting in the ways that protect them from extinction.

In contrast, institutional theory, drawn from sociology, posits that an organization's survival is closely tied to self-perceptions of legitimacy (DiMaggio & Powell, 1983; Meyer, Deal, & Scott, 1981). Organizations in fields like higher education where goals are hard to measure, technology is unclear, and the organization is highly professionalized, are highly susceptible to isomorphic pressures (DiMaggio & Powell, 1983; Morphew & Huisman, 2002). DiMaggio and Powell, (1983) found that institutions are compelled by *coercive*, *mimetic* and *normative* forces to emulate the most prestigious institutions in a group. Morphew and Huisman (2002) further explained DiMaggio and Powell's theory when they wrote:

Coercive isomorphism occurs when institutions respond to regulatory controls by organizations upon which they are dependent. Mimetic forces include institutions engaging in modeling the most prestigious organizations because they lack clear goals and technologies that suggest a more distinctive path. Professional networks and the communication that occurs in "invisible colleges" facilitates normative pressures toward homogenization (Morphew & Huisman, 2002, p. 496).

Morphew (2005) wanted to compare ecological and institutional theory as explanatory frameworks for the degree of change over time in institutional type. He examined changes in institutional behavior in higher education using IPEDS institutional characteristics and enrollment datasets from the years 1972–1973 and 2002–2003 to identify the growth in specific college and university types and declines in other types, repeating a strategy used by Birnbaum (1983). Morphew found that there was zero or negative growth in the general institutional diversity of U.S. higher education system as measured in these two snapshot years. However, Morphew (2005) suggests that the work of new institutional sociologists, such as Oliver (1991) may provide a better explanation for his findings than population ecology or previous explanations of institutional diversity. Oliver (1991) offers a conceptualization of institutional theory that is consistent with what previous institutionalists have referred to as “buffering.” This conceptualization is useful for framing how and why institutions of the same type may differ in the extent to which they pursue prestige. Oliver posits that institutions try to find a balance between external pressures regarding how they think they should be, and their institutional core. Oliver (1991) explains that organizations compromise, “as a tactical response to institutional processes (p. 153).” For example, an institution striving to become a more prestigious liberal arts college might require more research from faculty, but may also try to protect teaching as a primary mission. More organizational balancing will occur in environments dominated by highly professional actors. That is, faculty will have more to say in how and where the institution pursues prestige in institutions where faculty involvement in governance and power is strong.

POLITICAL FORCES

Another force impacting institutional striving is politics. From a political perspective, prestige is simply another scarce resource, a source of organizational and personal power, to be achieved among a group of higher education institutions (Bolman & Deal, 1997). Institutions are compelled to strive in order to obtain more of this resource, which allows them the ability to do the things they want to do (e.g. recruit better students and faculty; have greater autonomy from state control). Institutional leaders bargain and negotiate, even sometimes misrepresent facts and figures, to gain advantage in national rankings systems and distribution of federal research dollars, and to become

members of prestigious groups. At the federal level, interest groups and lobbyists, higher education associations, and politicians have created legislation and regulations defining “quality” in postsecondary policy arenas that have real consequences for how resources are distributed (Pusser, 2004). Lobbyists have pushed for federal funding in research and subsidies that have fueled the prestige movement (Pusser, 2004). Likewise, the new Commission on the Future of Higher Education (Parker & O'Donnell, 2006) is an excellent example of how politics can influence public policy in ways that promote striving. There have been discussions within this group of national standards tests for college graduates, and an increase in publicly available information on the quality of higher education. While the rhetoric suggests higher education change from a “system based on reputation to one based on performance,” (Commission Report, 2006, p. 10), inevitably different interest groups will lobby for what types of performance will and will not count. Because of varied political agendas, the Commission may very well set up new and more costly ways for institutions to strive.

Birnbaum (1988) created the fictitious Regional State University as a way of describing the internal politics inherent in organizational functioning. This case also provides context for how politics influences striving behavior on multiple levels. Birnbaum observes that as an organization, Regional State University is a “super-coalition of sub-coalitions” (p. 132), meaning that units and departments within the university each have diverse interests, yet are interdependent with each other for power to obtain their desired outcomes. One of the ways that units within Regional State University obtain power on campus is by bringing prestige to the institution through external guilds, external research dollars, and other resources such as accomplished graduates and alumni. Likewise, within a larger system of higher education, regional state leaders will have more power in negotiating for resources if both the tangible and intangible (prestige) resources they bring to the state system are plentiful. Because decision-making is not necessarily rational, but dependent on arguments made by coalitions and the use of power, decisions can be made without clear goals (Birnbaum, 1988).

This last point is underscored in Morphew's (2000) case study research on strategic planning. Strategic planning in higher education often claims to be rational and objective but can be subjectively interpreted and selectively applied (Morphew, 2000; Slaughter & Silva, 1985). Morphew's research found that institutional strategic planning can accelerate an already biased system of resource allocation, a system

where the “rich” get richer and the “poor” departments do not get the resources they need to compete. Often departments with the most valuable resources going into strategic planning are the ones who receive the greatest rewards in any redistribution of resources. Given that prestige is a valuable resource, it is clear why departments and units on campus would strive to obtain as much prestige as possible so that it might be used in any campus negotiations for more resources. Slaughter and Silva (1985) and Morphew’s (2000) research suggests that activities introduced by campus presidents and provosts as strategic planning and retrenchment are often a front for activities designed to promote the prestige of the institution by rewarding those units who provide the most prestige already.

Recent scholarship on the rise of academic capitalism further demonstrates how actors at federal, state, institutional, and even department levels jockey for prestige as a scarce resource. Slaughter and Leslie (1997) used resource dependency theory to explain the rise of entrepreneurialism among campus units and universities. According to these authors, resource dependence theory suggests that “organizations deprived of critical revenues will seek new resources (p. 113).” Through case studies, and interviews with faculty and administrators involved in entrepreneurial projects, and their colleagues, the authors observed that personal prestige was enhanced by successful revenue generation and that universities also maximized prestige through entrepreneurial projects. Slaughter and Rhoades (2004) extended this research by exploring:

An ascendant tendency and orientation of colleges and universities to engage in market behaviors in the pursuit of revenues that involve developing new organizational infrastructures, fostering new professions and structures of professional employment and forming new intersectoral networks that affect the very identity of higher education institutions and their relations with faculty/staff and students (p. 33).

Slaughter and Rhoades (2004) proposed that administrators are provided real incentives to encourage their units to act in ways that bring institutional prestige. Often then, striving may result from policies within universities that incentivise competition and activities that will result in prestige. In summary, political forces impact the pursuit of prestige in the academic hierarchy. Prestige is desired as a source of power and resource that can facilitate institutions’ achieving their goals.

THE NATURE OF ACADEMIC REWARD SYSTEMS AND FACULTY CAREERS

There is a significant body of research on academic norms, values, and reward systems that provides an explanatory framework for faculty and departmental striving across disciplines and institutional types (Blackburn & Lawrence, 1995; Tierney & Bensimon, 1996). This literature suggests there are powerful extrinsic rewards associated with faculty striving toward a more research-oriented career. For example, Fairweather's (1993) research on faculty salaries found that across institutional type, faculty salaries are based primarily on research productivity. The more research faculty engage in, and the less teaching, the higher the salary. This norm creates a powerful incentive to emphasize research over teaching, especially in striving institutions. Because national ranking systems depend more heavily on the scholarly reputation of faculty than teaching, there are strong incentives for faculty, their departments, and institutions to emphasize research over teaching. Likewise, professional norms and pressures toward specialization encourage faculty to become more cosmopolitan than local in their careers (Finnegan & Gamson, 1996; Jencks & Reisman, 1968; Morphey, 2002; Morphey & Huisman, 2002).

Blackburn and Lawrence's (1995) comprehensive framework for faculty motivation and behavior posits the interaction between self knowledge and social knowledge causes faculty to act in one way or another. Using this theory, faculty are compelled to strive for prestige based on a complex interaction of their own graduate school experience and an institutional reward system that is increasingly sending messages that it wants publications, external grants, and awards from them. The greater the professionalization of the faculty, (i.e. the more they look outside their own institutions for norms, trends, and direction for teaching and scholarly work) (Morphey & Huisman, 2002) the more likely the institution as a whole will engage in striving behavior (DiMaggio & Powell, 1983; Morphey & Huisman, 2002).

Whether a striving institution attracts striving faculty, or new cohorts of striving faculty engender a striving institution are interesting questions. Clearly they influence each other in complex ways and are cyclical. Likewise, department context and department chair behavior will influence a faculty member's inclination toward striving behavior. For example, department chairs communicate expectations

for promotion and tenure to pre-tenure candidates, they interpret institutional messages from deans and provosts to faculty, negotiate course loads, and determine how scarce department resources are divided. Faculty have reported in many studies that department chairs influence decisions they make about how to prioritize their time, and thus are important players in understanding whether, and if so, why faculty engage in striving behavior.

Department chairs, deans, and provosts are also administrators, who themselves engage in striving behavior, and propel institutions to try to move up in USNWR ratings. There are isomorphic pressures on individual college presidents and/or provosts regarding what constitutes a good leader that acts as a force compelling striving (McCormick, 2005). When being a good leader is defined as (a) increasing selectivity (b) raising faculty salaries and resources (c) scaling USNWR ratings, and (d) bringing in external dollars, administrators in these roles are bound to respond accordingly. Research is needed to explore the pressures executive leaders feel to show trustees, donors, alumni, faculty, and students they are moving the institution to a “better” position. Likewise, the resources used in the pursuit of striving behavior need to be better defined.

In considering the academic norms that compel striving, it is important not to make faculty or administrators sound like victims of a system out of their control. In fact, many faculty and administrators actively engage in striving behavior, not because it is imposed on them, or expected of them, but because they desire the benefits prestige offers for them personally, for their department, and university.

It is also important to consider the American context of professional work and the cultural drive for externally defined success (Reich, 2002). Americans in law, health care, and many other professions with significant education and training are notoriously driven and higher education is well-known to attract individuals with high standards and expectations for success. These forces combine to bring a likely group of “striving personalities” to “striving institutions.”

In summary, it is possible to understand the forces that compel striving from many perspectives, not the least of which are historical, economic, ecological, sociological, political, and embedded in the constructs of academic careers. Table 3.2 provides a summary of these perspectives and what they offer us in understanding this complex phenomena. The next section revisits IWTBU and then explores specific types of striving behaviors.

Table 3.2: Perspectives on Forces that Compel Striving

Perspectives from...	View Striving as...
History	<ul style="list-style-type: none"> • A natural organizational evolution for institutions • Embedded in the context of institutional saga • Influenced by contemporary local, regional, and national events and conditions • The work of visionary leaders • A result of available resources and societal constraints at that point in time
Economics	<ul style="list-style-type: none"> • The result of supply and demand, and competition in the higher education market • An effort to obtain an intangible resource that will be exchanged for tangible resources
Ecology	<ul style="list-style-type: none"> • Involving institutions of similar types within an environment responding to the same set of scarce resources, supply and demand of students, and government regulation. Institutions become more or less similar over time as the environment chooses organizations that will survive
Sociology	<ul style="list-style-type: none"> • Driven by isomorphic pressures to obtain legitimacy; specifically, coercive, mimetic, and normative forces • A balance for organizations between external pressures and their institutional core
Politics	<ul style="list-style-type: none"> • The result of institutions seeking out sources of power that will allow them to achieve desired goals • A process of bargaining and negotiating to gain advantage in an arena where prestige is a valuable resource
Nature of Faculty Careers	<ul style="list-style-type: none"> • Impacted by academic reward systems, professional norms, and the nature of disciplinary careers • Part of a system that values disciplinary ties and activities more than institutional commitments.

SECTION III: THE PROCESS OF STRIVING: WHAT HAPPENS

A new IWTBU president is talking a great deal about aspirational peers. IWTBU has always emphasized their teaching and learning environment in marketing the institution and promised a reasonable student to faculty ratio. Historically the institution was also very proud of the increased access and opportunity it provided to students who might not otherwise have attended college. However this has been changing as both the admissions process and faculty talk more about getting more “quality

students.” Faculty teaching load is 6 courses per year but faculty are pushing for it to be shifted to 5 courses, given the addition of recent masters programs and increasing institutional expectations for scholarship.

The Director of Admissions is a close friend of Michael Vaughn, Director of Institutional Research, and feels the competition for students with high SAT scores and pressure on his office to increase yield has intensified greatly in the past 5 years. The social world in which IWTBU is recruiting seems to be more consumer-oriented than ever before, and millennial students seem more interested in the gym and technology in the residence halls than what they will be learning or from whom. This year he spent on one four-color brochure what he had in his entire budget 10 years ago—but the President keeps providing more funding, so he looks for new marketing opportunities each year. This year IWTBU offered significantly more national merit scholarships than ever before, and made significant investments in updating their website. It seems to be paying off in a more selective student body.

This section builds from the previous one, exploring specific organizational behavior of institutions striving toward greater prestige. While institutions seek prestige in a variety of venues, this section focuses on five areas where researchers and commentators have observed “prestige-seeking” behavior: student admissions and recruitment, faculty recruitment, roles, and reward systems, curriculum and programs, resource allocation, and the shaping of external image and institutional identity. Directly following these subsections, institutions most likely to engage in striving behavior are described.

STUDENT RECRUITMENT AND ADMISSIONS

Institutions gain prestige when the “quality” or qualifications of their incoming students improve, and this is often achieved by increasing student selectivity. Striving toward greater student selectivity means improving student acceptance and yield rates. One striving behavior in this category is to actively solicit applications from lesser qualified students to make the admissions process more selective (Ehrenberg, 2003). Another strategy is to reject well-qualified applicants that the institution believes will attend ivy league institutions, relegating them to a waiting list (Ehrenberg, 2003).

Yet another strategy is to ramp up the marketing of the institution, through multi-colored brochures and DVDs, website programs,

and recruitment efforts. This strategy is aimed at both increasing the number of applications and attracting more students with high GPA/SATs. Winston (2000) points out that part of making the institution more desirable, however, has to do with the “competitive amenities” (such as new athletic centers, residence halls, new programs and expanded student services, enhanced technology in classrooms), that institutions are willing to invest in as part of the “positional arms race.” These amenities will be discussed more in the resource allocation section, but a point made here is that striving institutions are likely to market these amenities aggressively to improve acceptance and yield rates.

Another well-documented strategy for improving acceptance rate and yield with clear economic advantages to institutions is to admit more students through early decision. In early decision students are given a short window (usually between December and January) to accept, decline, or defer admission to the regular process. If they accept, they must remove their applications from other institutions (Avery, Fairbanks, & Zeckhauser, 2001; Ehrenberg, 2003).

Early decision has benefits for both institutions and students—institutions get students for whom they were their first choice thus lowering admit rates and increasing yield (Avery, Fairbanks, & Zeckhauser, 2000; Ehrenberg, 2003). This helps institutions improve their student selectivity. Students for whom the institution was their first choice are given an advantage in the process and find out they were accepted early in the admissions cycle. Machung (1998) quotes Joe Allen, a Dean of Admissions and Financial Aid in 1998, regarding how early admissions benefits institutions: “If you can get 40 to 50 percent of your class by December, statistically your “yields”—the ratio of the number of students who matriculate to the number admitted—are much higher. A typical selective liberal arts college may have a yield of about 30%. If the college admits half of its class through early decision, half through regular admission, its yield could jump to 60 percent” (p. 12). While Machung (1998) goes on to point out that yield is actually only one part of the student recruitment score for USNWR, she notes the perception that early decision makes big differences in this regard, as well as the economic benefits, make it an established organizational behavior associated with the pursuit of prestige.

What are the economic benefits to institutions? Early decision applicants are more likely to be from upper or middle-income families and thus require less institutional grant aid than other applicants (Ehrenberg, 2000; 2003). Thus, increasing the number of early decision students helps

to “dampen the growth rate of financial aid budgets (Ehrenberg, 2003, p. 154).” As such, early decision improves an institution’s chances of getting full tuition price from students, but it also makes these colleges much less affordable and often unreachable for students from low-income or middle-income families who cannot commit to an institution without knowing what financial aid it can provide (Ehrenberg, 2000; 2003; Machung, 1998). Ironically, the more successful an institution is in striving, the less competitive they become with need-based aid. A less favorable ranking one year has been found to influence institutions providing more generous grant aid the next, whereas higher-ranked institutions do not have to offer deep discounts to attract students with high entrance qualifications (Monks & Ehrenberg, 1999).

Perhaps one of the more unfortunate aspects of prestige-seeking behavior in admissions is the rhetoric about increasing student “quality” that often accompanies such behavior. Shaw and LeChasseur (2005) documented some of the changing student demographics of Temple University as it was striving, which will be discussed in a subsequent section. The point relevant to this discussion was that student characteristics were changing from more local to more regional and national, and from a higher to a smaller percentage of minority students. As this was happening, Temple’s president said in the *Philadelphia Inquirer*, (6/5/05), “To make it a truly great institution... means pushing the administration, pushing the faculty and yes, looking for better students (Shaw & LeChasseur, 2005).” This type of comment is made often by college presidents as a simple way of representing a desire to improve the GPA/SATs of entering students. However, the rhetoric of “better,” “high ability,” “higher quality” and “super students,” as the student body becomes less diverse and the university less committed to students in their own backyard, seems to cast a dim light on the students who have previously attended the institution. It also creates a somewhat limited definition of excellence. It can be argued that this type of rhetoric reinforces a stereotype that students with average or low GPA/SAT are somehow less able, and less likely to succeed. This judgment is made by a narrow set of criteria, which research has shown do not fully measure potential for academe or for a successful life.

In summary, striving behavior in prestige-seeking institutions involves specific actions to increase student selectivity through improving acceptance rate and yield, and these efforts rarely come cheap—though they can have a significant financial benefit if they are successful.

FACULTY RECRUITMENT, ROLES, AND REWARDS

Institutions seeking greater prestige will actively recruit more research-oriented faculty, even in institutions with a primary teaching emphasis. A big part of this effort will involve increasing faculty salaries and start-up funds for research, especially to recruit, or “steal” star faculty from other more prestigious institutions. Because faculty salaries are a significant proportion of the faculty resources criterion for USNWR rankings, institutions have a significant incentive to increase faculty salaries, outside of market conditions or any internal desire to do so (Ehrenberg, 2003). Ehrenberg provides an example of this behavior at a small liberal arts college located in a Middle Atlantic State that explored ways to improve its USNWR rankings. The institution was ranked Tier 4 (the bottom quartile) of national liberal arts colleges. Because of the significant weight of faculty salaries in the ranking formula, an early draft of the strategic planning document called for raising faculty salaries (p. 149). Likewise, Clotfelter’s (1996) book, *Buying the Best*, demonstrates the lengths to which the most prestigious institutions will go to lure star faculty away from their competitors.

A second, often faculty-driven striving strategy is raising promotion and tenure requirements. Research on striving institutions suggests that institutions look to aspirational peers for norms for faculty work in order to raise expectations for tenure (Finnegan & Gamson, 1996; O’Meara & Bloomgarden, 2006; Ward & Wolf Wendel, 2003; Wolf Wendel & Ward, 2005). Finnegan and Gamson (1996) point out that, “when institutional mission is not used to define the criteria and standards within faculty personnel policies, faculty are encouraged to apply the professional standards by which they were socialized, that is the culture of research (p. 172).” Likewise, research suggests that values held by faculty on personnel committees such as, “the best scholarship brings the most prestige to our positions,” “climbing the academic ladder is who we are,” and “we want our institution to be like other institutions” will likely influence the evaluation of faculty work in striving institutions (O’Meara, 2002, p. 67). Likewise, Finnegan and Gamson (1996) studied comprehensive universities trying to adopt “research cultures.” They found that the “cultural schema” of research culture was reinforced as key resources such as faculty hiring processes and promotion and tenure systems were employed to support it. Thus whether intentional or not, institutions pursuing prestige will often “up-the-ante” in terms of what is expected by faculty in research and external funding for promotion and tenure.

The scarcity of faculty jobs, especially tenure-track jobs, in many disciplines contributes to an institutions' behavior in raising expectations and standards for faculty work. The over-supply of applicants with research training and research emphasis who cannot find positions in research universities but want to work in academe facilitates institutions and departments building research cultures in places that were previously more focused on teaching and service.

A third striving behavior in faculty roles and rewards relates to faculty workload and work-life experiences. Massy and Zemsky (1994) studied four private liberal arts colleges and two private research universities drawn from a list of selective institutions in their exploration of the "academic ratchet." They found that as each institution pursued prestige, faculty and administrators decreased course load in exchange for greater faculty discretionary time, which was used for research and scholarship, consulting and professional activities, and specialized teaching at the graduate level. Thus striving institutions will decrease faculty teaching load to "free-up" time for activities more likely to bring the institution prestige.

CURRICULUM AND PROGRAMS

Over the last two decades many institutions strove to move from one Carnegie classification to another that they perceived to be more prestigious (Aldersley, 1995; Ehrenberg, 2003; Morphew, 2002; Morphew & Baker, 2004). One institutional behavior associated with such aspirations in masters institutions and some liberal arts colleges was adding more graduate level programs, and a shift of resources from undergraduate education to graduate programs (Aldersley, 1995; Morphew & Jenniskens, 1999). For example, Aldersley (1995) examined institutions that had shifted in Carnegie classification and identified "upward drift" or a tendency for institutions to introduce higher-level programs because they were "beguiled by the promise of prestige associated with doctoral education (p. 56)." Likewise, several other studies have shown this pattern of (especially masters, comprehensive, and liberal arts institutions) establishing new masters and/or doctoral programs in order to gain prestige and move "up" in rankings (Massy & Zemsky, 1994; Morphew & Huisman, 2002; Morphew & Jenniskens, 1999).

However, there are a number of other ways curriculum and programs might be impacted by striving. Many institutions create additional honors programs and prestigious sounding learning communities

in order to attract a more academically accomplished student. Some institutions within state systems have been forced to commence their remedial and developmental work by state legislatures that want those institutions to be associated with higher quality students and prestige. Other institutions have removed developmental and remedial programs out of an institutional desire to look more like their aspirational peers that do not have them. In addition, retrenchment activities, wherein less prestigious programs are cut and resources redirected toward higher ranked ones are included in this category. Thus, institutions will often look critically at the curriculum and programs they offer, and what they need to offer to increase their prestige and act accordingly.

RESOURCE ALLOCATION

Economists who study higher education have found that prestige-seeking seems to increase spending on infrastructure and administrative support (Alpert, 1985; Clotfelter, 1996; Morphew & Baker, 2004). In addition, striving seems to shift resources from instruction to administrative support. One of USNWR ratings is a weighted average educational expenditure per student. For example, Alpert's (1985) research found that as universities become more dependent on external funds, including research, alumni, and donor support, their internal expenditure patterns change to emphasize obtaining more of that support. The institution begins to deemphasize areas (such as teaching or outreach), that are important to their mission, but unlikely to produce additional revenues (Alpert, 1985). This is relevant because large campaigns to attract additional donor support, increase endowments and encourage faculty to bring in external funds are established strategies of university striving. Likewise, Massy and Zemsky's (1994) concept of an "administrative lattice" provides an explanatory framework for how administrative cost increases as institutions strive. As faculty move away from teaching and service and towards specialized research and seeking external funding, additional funding is needed to support these efforts. Clotfelter's (1996) research underscores this point that especially for universities attempting to move toward Research University I status, significant investments in the way of infrastructure, and administrative staff are required to obtain research funding. Once obtained additional costs are needed to maintain and facilitate that research funding. Inevitably, these costs

must come from somewhere, and may divert funds previously spent on instruction and outreach.

A number of economists and scholars of organizational change have begun to look more closely at the increased cost of striving, especially for the top positions in Research University 1 status (Ehrenberg, 2000; Zemsky, 1990). The trend clearly points toward more spending on nonacademic support rather than increased spending on academic related service (Morphew & Baker, 2004). Using data from IPEDS, Morphew and Baker (2004) compared institutions that would soon become Research University I's (or rising RUIs) to Research II institutions for trade-offs in spending among instruction, research, and administration between 1976 and 1996 when the rising RUI institutions were striving toward RU 1 status. These authors found that the rising RUI group experienced significant changes in their spending patterns as they were striving toward their aspiration of becoming a RUI. They exhibited increased proportionate spending on institutional support and research.

Further research is needed to replicate these findings with more precise classification of institutional expenditures than the IPEDS survey data could provide, and with a larger sample of institutions. Nonetheless, this research was consistent with previous studies, such as Bowen's (1980) research showing that the most affluent institutions spend proportionately greater amounts on institutional support than their less prestigious peers (Morphew & Baker, 2004). Thus it makes sense that as institutions try to emulate and act like their aspirational peers expenditure patterns follow suit.

In addition to a shift in resource allocation to support research and external funding, striving campuses are more likely to invest heavily in admissions, recruitment and tuition discounting for students with higher GPA/SATs than they would otherwise be able to recruit. While these behaviors in and of themselves are not a concern if resources are not scarce, research suggests that money is being shifted proportionately away from instruction and outreach activities in the pursuit of prestige (Ehrenberg, 2003; Morphew & Baker, 2004). Given that it takes significant investment in order to see even small improvement in USNWR ratings, it isn't clear these spending behaviors or "investments" always pay-off. In addition, educational researchers have pointed to how these same institutions might use some of the same resources used on glossy brochures and donor relations on improving the quality of the student undergraduate experience (Kuh & Pascarella, 2004).

EXTERNAL RELATIONS AND MANAGEMENT OF INSTITUTIONAL IDENTITY

It was mentioned earlier that higher education institutions, unlike many other for-profit organizations, have unclear goals, processes, and products. Because higher education institutions depend on external perception of their legitimacy and quality to survive, it is no surprise that campuses that are actively striving will engage in significant external relations and marketing to change and/or to improve their image. The campaign to reshape the external image of a college or university may include something as major as a name-change or smaller like a complete revision of a website and marketing materials. Morphey (2002) found that in the decade following 1990, more than 120 public and private four-year colleges changed their names and became universities, at least in part, to gain prestige. It is also not uncommon to find campuses posting their USNWR and related college rankings on the front pages of their websites and other marketing materials. Regardless of the specific strategy, this type of organizational behavior will be carefully orchestrated to portray a more prestigious image through new language used to describe the institution, new images, lists of recent faculty and student accomplishments and recent donor gifts. Sometimes colleges will use the history of their buildings, traditions or organizational saga to appeal to applicants who associate prestige with tradition and longevity.

Internally, there is also a role striving college leaders play in managing a collective institutional identity. College presidents, provosts, deans and department chairs will often strategically inject a common sense of the college as striving through speeches, memoranda, and the framing of major decisions and resource allocation. This sense of institutional direction trickles down into departments and becomes a way those units frame their work. In other words, actors in striving institutions try to create a *zeitgeist* of striving that permeates institutional consciousness. Massy and Zemsky (1994) observed that in their case studies the concepts of academic ratcheting had permeated the vernacular of faculty cultures.

O'Meara and Bloomgarden (2006) conducted a single case study of a self-identified striving institution in the Northeast. The institution was in the second tier of liberal arts colleges trying to compete with the most highly ranked institutions such as Amherst, Williams and Swarthmore. Through qualitative interviews with 29 faculty the authors found that a narrative had formed among the faculty concerning

where the institution had been and where it was going prestige-wise. By narrative, the authors refer to common language and a common ongoing story (Birnbaum, 2000; Postman, 1995). The narrative, or story faculty told each other about their institution was one of “upward mobility” and progress and in part about how far the institution had come. Faculty at “Whayne College” were very conscious the institution was striving and explained it as part of the institutional saga of constant improvement. Participants used this narrative as a lens through which they viewed their work-life, the reward system, and institutional decisions. Postman (1995) writes about narratives in education as compelling stories of purpose and continuity that provide participants with meaning. At Whayne College, narrative served a purpose, connecting faculty to a common goal or vision. Therefore, in striving institutions institutional actors intentionally work to improve/change external image and try to facilitate an institutional identity among members that will work towards striving goals.

THE DYNAMIC INTERACTION OF STRIVING BEHAVIORS

Like human behavior, which is influenced by a complex and dynamic set of factors, each of the examples of organizational behavior above, is in constant interaction with and influenced by other factors. For example, in *The Organization of Academic Work*, Blau (1994) provides evidence that talented faculty will attract talented students. Likewise, Volkwein and Sweitzer's (2006) research found that talented faculty and students interact producing instructional and scholarly outcomes that combine to shape institutional attractiveness and prestige. Webster (2001) found pervasive “multicollinearity” among USNWR rankings wherein changes in the value of one or more rankings is related to and influenced by changes in one or more of the other rankings. Likewise, Meredith (2004) found that “changes in an admissions outcomes affect a school's USNWR rankings which in turn affects the admission outcome (p. 449).” Thus there is an ongoing cycle of inputs that lead to outcomes that lead to inputs in the striving game. A USNWR ranking this year is used by an institution to attract high ability students next year. The qualifications of those entering students next year improve the USNWR ranking the following year and make more well-sought after faculty want to work at the institution.

However, it is also important to note, that institutions competing in the “positional arms race” are not playing on an even playing field. Volkwein and Sweitzer (2005) analyzed the variables that are

most strongly associated with institutional prestige and reputation, drawing on data from USNWR, the Institute for Scientific Information's Web of Knowledge, IPEDS, AAUP and four college guidebooks. They found that the "older, larger, and wealthier institutions have an edge in competition for faculty and students and prestige" (Volkwein & Sweitzer, 2006, p. 11). Institutional age, control, size and resources serve as foundations for faculty and student recruitment (Volkwein & Sweitzer, 2006). Non-church related colleges (those with no religious affiliation) receive higher prestige ratings and larger liberal arts colleges enjoy more robust reputations than their smaller counterparts (Volkwein & Sweitzer, 2005). As such, striving behaviors from each of the five areas will be in constant interaction with each other, compelling forces and consequences, and they will have differing levels of success, based on some circumstances out of their control.

MOST LIKELY PLAYERS IN THE POSITIONAL ARMS RACE

As mentioned previously, striving behavior will differ across institutional types. However, given the current competitive nature of higher education, it is unlikely any four-year colleges are immune. Rather there are conditions that surround institutions that make them more or less vulnerable to striving behavior at given times in their histories. Institutions with these conditions have been found prevalent in the literature on striving. For example, using Brewer, Gates and Goldman's (2002) typology of institutions as reputation building, prestige-seeking, or prestigious, there are 3 institutional types that have been found most prevalent as prestige-seeking in the literature. They are: comprehensive institutions striving to become doctoral campuses; second tier liberal arts colleges striving to enter the top tier; and universities that have previously been classified just under the top research university status. Using this same typology, community colleges and institutions that serve a local, regional, and/or small niche market (e.g. evangelical, military, tribal institution) are more likely to be reputation building in their orientation and less responsive to USNWR and other national rankings. In this section these three institutional types of "most likely strivers" are discussed. Next, the conditions within these groups that make them vulnerable to striving, and/or conditions that could be present elsewhere, are highlighted.

Sandwiched between community colleges and research universities, liberal arts institutions in the middle of the USNWR rankings are among the most likely of institutions to pursue prestige (Massy &

Zemsky, 1994; Morphey, 2002; Ward & Wolf-Wendel, 2003). Liberal arts colleges are especially susceptible to striving behavior because of their small size. Schultz & Stickler, (1965) found that smaller colleges and universities were more likely to undergo academic drift than were larger colleges and universities (p. 235). Small institutions have been found to be more vulnerable to market trends, more in need of the resources greater prestige promises, and more easily moved in a new direction when leadership changes than larger institutions (McPherson & Schapiro, 1999; Zemsky, Wegner, & Massy, 2005). Selective liberal arts colleges compete for a small number of highly qualified students able to pay full tuition price, and for external funds (Ehrenberg, 2003; Winston, 2000). Furthermore, most liberal arts college faculty attended research institutions and were socialized toward research university standards and culture. Liberal arts college faculty must manage expectations about service and teaching while looking outward to disciplinary associations and research university departments for direction for their careers (Clark, 1987; Finnegan & Gamson, 1996; Ruscio, 1987; Ward & Wolf Wendel, 2003). Morphey (2002) studied colleges that became universities and found that less selective institutions are significantly more likely to transform themselves from a college to a more comprehensive university mission than are the most selective institutions. Thus, liberal arts colleges in the middle of the academic hierarchy are likely players in the “positional arms race” (Winston, 2000).

Another group of institutions with as much to gain from striving behavior are public comprehensive institutions. Both Finnegan (1993) and Wolf Wendel and Ward (2005) observe that this group in the “middle of the institutional hierarchy” (Clark, 1987) is under-studied but includes campuses that were formerly liberal arts colleges, teacher colleges, and/or has land-grant status and have always offered undergraduate and masters degrees. Morphey and Huisman, (2002) found that non-flagship universities were more likely than flagship universities to add duplicative degree programs, overall and at the graduate degree level (p. 501). Wolf-Wendel and Ward (2005) refer to faculty life at striving comprehensives as, “between a rock and a hard place,” because the local traditions of teaching and service conflict with institutional aspirations related to more faculty publications and external grant funding. In addition, generational conflicts have emerged among faculty in comprehensive institutions as the job market has brought many research-oriented faculty to campuses with faculty who over

the last 3 decades have emphasized teaching and service (Dubrow, Moseley, & Dustin, 2006; Finnegan, 1993; Wolf Wendel & Ward, 2005). Thus, research has begun to identify the striving comprehensive institution as an important institutional type for future study.

Finally, a number of studies have found striving behavior among research universities (Geiger, 2004; Massy & Zemsky, 1994; Meredith, 2004; Morphew & Huisman, 2002; Morphew & Baker, 2004; Sweitzer & Volkwein, 2005). In many state systems there is the one major, often flagship, research university and then “close seconds,” or other state universities that compete with the flagship for resources and prestige. Geiger (2004) has looked at striving in state research universities historically and chronicled how organizational aspirations over time were fulfilled. Morphew and Baker (2004) studied the expenditure patterns of institutions that had recently moved into Research I status and how their administrative costs changed during that time. Sweitzer and Volkwein (2005) explored the advantages some research universities have in terms of age, size, and governance in terms of competing for prestige. Regardless, it seems clear that those universities closest to the ideal norm of a prestigious research university can see the financial and other benefits of moving from the second tier to a top tier and this vision compels institutions to “reach for the brass ring” (Ehrenberg, 2003).

In summary, liberal arts colleges, comprehensive universities, and research universities are the institutions where most researchers have examined striving behavior and found it prevalent. Yet no institutional type is immune to striving. Rather, institutions that face a certain set of conditions and circumstances seem most vulnerable for or likely to strive. This review of research on striving institutions suggests that institutions that strive are often:

- Institutions just below the prestigious group threshold. In other words they can see the brass ring, it is close and is reachable.
- Institutions trying to recruit outside their local area for students (i.e. not working to establish a local reputation as much as a regional, national, or international one).
- Institutions that are recently vulnerable to market trends; and are searching for additional revenue that can not be provided by tuition.
- Institutions small enough or cohesive enough that they are easily swayed by changes in administrative leadership.
- Institutions where the market has brought an over-supply of research-oriented faculty to a campus.

SECTION IV: CONSEQUENCES/IMPLICATIONS OF STRIVING

As Michael Vaughn thinks back nostalgically on where the institution was 30 years ago, he remembers many “ordinary students” that his institution helped become successful professionals. These same students would not have been admitted today. And he wonders, whose students are they now? He sees that the regional students who come to IWTBU today get a better education than in previous years, at least in terms of some of the rigor of the academic programs, and the prestige of the faculty. Likewise, they have a more academically talented set of peers to interact with, although more homogeneous economically. His faculty friends on campus tell him that there are many more resources for research than there were in the past, and salaries are more on par with peer institutions than ever before. Yet Michael also knows that some of his faculty colleagues feel left out of IWTBU’s aspirations, and that there isn’t as much community in their departments as in previous years. More faculty are traveling during the semester. Michael doesn’t think students find mentors as easily. However, it is hard to ignore IWTBU’s USNWR ratings, which are clearly improving. Michael Vaughn is proud in fact, of all that this old state teachers college has accomplished. Who knew it could come so far? Yet what they are trying to become (other than highly ranked) is not completely clear.

This section reviews research findings and theoretical literature on the known and potential consequences of organizational behavior associated with striving. The section is divided into subsections by implications for higher education stakeholders (i.e. for students, for faculty), and for higher education missions and society (i.e. for teaching and service missions, equity, and innovation in higher education).

Before exploring these areas, however, several important caveats are required. First, the effects of specific organizational behaviors aimed at striving are difficult, if not impossible to isolate. A specific striving behavior (such as recruiting students with higher entrance qualifications), will interact with a whole variety of other factors (striving related or not) to produce an outcome. This outcome, while influenced by the striving behavior, will also be related to other forces/factors at play in the institution. Second, striving behaviors will have decidedly different outcomes across institutional types, as they will interact with the size, age, culture, and existing prestige of the organization. Third, as organizational cultures are in constant flux, there are permeable boundaries between forces influencing striving, a striving behavior,

and a consequence of striving behavior; and the three will constantly influence each other. Each of these realities, and the problem of identifying striving institutions, makes research on the consequences of striving challenging. Nonetheless, researchers have begun to identify these environments and found some outcomes that can be traced in part, to striving behavior. This is an emerging area of study and the findings have not been replicated in sufficient research to consider them definitive. Thus, additional research is needed to identify striving behaviors and trace related outcomes in convincing ways.

A fourth and final caveat is that many of the consequences described in this section might be considered negative and inadvertently suggest a bias against striving. However, striving behavior is not inherently bad, but rather an organizational behavior like any other with its own set of consequences. As the stories of striving by Jesuit Colleges, HBCUs, and normal schools from the history section suggest, many institutions owe the impressive nature of their current facilities, faculty, and in some cases, very survival to striving behavior. Likewise, where would the current state of scientific knowledge and inquiry be if our most respected scientific institutions, such as MIT and Johns Hopkins not aspired to greatness in the sciences in the early 1900s? Thus the intent here is not to demonize institutional striving for prestige and/or “world-class” status. Striving to be the best (albeit as evaluated by external ratings) has made many American institutions the envy of the world. However, if there are some negative, and in some cases unintended consequences of striving for prestige, it is important for institutions to better understand the trade-offs they are making. In some areas, this knowledge might help institutions mitigate unintended consequences.

Research and theoretical literature associating striving behaviors with consequences is reviewed below. In each section areas for future research are identified.

FOR STUDENTS

Very little research has been done on the impact of “striving institutional behavior,” on student learning, satisfaction, and engagement. As mentioned earlier in this chapter, research has explored the relationship between institutional quality (as measured by USNWR and related rating systems) and student engagement using National Survey of Student Engagement (NSSE) benchmarks and found that there is little to no relationship between institutional selectivity and student

engagement (Kuh & Pascarella, 2004; Pike, G. R. 2003; Sarraf et al., 2005). Studies have not actually identified institutions while they were at a highpoint of organizational striving behavior, and studied the impact on student culture, learning, or satisfaction during that peak striving period. This is an important area for future research.

As such, most consequences of striving organizational behavior for students must be extrapolated from related research. For example, in the case of liberal arts colleges moving from a primary emphasis on undergraduate teaching to a mission or culture that is more research-focused (as is the case in many of the most prestigious institutions), raises obvious concerns for student interactions with faculty outside of class, faculty commitment to undergraduate teaching, and the use of full-time faculty to teach courses. Institutions with faculty that prioritize research have been shown to be weaker in student orientation (Astin, 1993; Astin & Chang, 1995; Wawrzynski, 2004). For example, Wawrzynski (2004) found that institutions where faculty spend more time on research have a lower percentage of seniors reporting student-faculty interactions and students involved in active-learning. This is of concern because while Astin & Chang (1995) found that the most prestigious liberal arts colleges seem to find a balance between student orientation and faculty research, most colleges and universities are somewhere in the middle of the prestige hierarchy. Time that faculty shift to research and grant funding will have to come from somewhere in order to maintain a student focus.

On the other hand, academic challenge is a major benchmark of student engagement (Kuh & Pascarella, 2004). For example, faculty in one self-identified striving institution, were very concerned with increasing the rigor of their academic programs, and challenging students (O'Meara & Bloomgarden, 2006). Sarraf et al. (2005) examination of USNWR ratings variables and NSSE benchmarks showed that the level of academic challenge positively related to academic reputation peer scores. In other words, institutions with greater faculty resources (such as smaller class size, where students interact in small groups) are more likely to be able to challenge students academically (Sarraf et al., 2005). Thus from one perspective, striving institutions are actively seeking and obtaining resources to enrich their educational environment. What is unclear is what happens to teaching, collaborative learning, and out of class faculty-student contact during the time the institution is pursuing prestige. Also, do institutions striving for USNWR rankings use additional resources they attract through prestige for instruction or are those resources reinvested in administrative

activities, such as recruitment, alumni relations, and seeking external funding, as Morphew and Baker's (2004) research suggests?

Thus, further research is needed to see whether institutions that are actively pursuing prestige are also improving levels of academic challenge or other NSSE student engagement benchmarks. In addition, additional research should explore whether funding invested in faculty salaries and research during a striving period have direct and concrete benefits to students, such that they experience more enhanced opportunities for undergraduate research, more current or engaging teaching, or other benefits of being associated with accomplished faculty and research resources. Researchers should correlate striving institutions and non-striving peer institutions national survey data (such as from the College Student Experiences Questionnaire, the National Survey of Student Engagement, the College Student Survey, the College Results Instrument, HERI survey, and the NSOPF faculty survey) to isolate as much as possible how striving organizational behavior and faculty striving behavior are influencing students. Empirical research might be conducted that examines institutions student survey data during the five years before a major shift in rankings to assess any differences in student satisfaction with their environment or learning. Likewise, case study and qualitative research following campus climate for students during periods of striving are needed to better understand the impact of striving on students.

There is research that associates striving behavior in student recruitment and admissions with negative outcomes for low-income students (Meredith, 2004; Shaw & LeChasseur, 2005). Meredith (2004) found that at schools ranked in the top 25 of U.S. News and World Report, the amount of Pell grants increases as a school drops in the rankings—or decreased as rank improved. Likewise, early decision may decrease the number of low-income or middle-class applicants a college offers admission. Nationally, there has been a move away from need-based financial aid to merit-based financial aid, and while there are many reasons for this, merit-based aid improves an institution's chances in *USNWR*, while need-based aid does not. Thus for campuses pursuing prestige through admissions, the trade-off of need-based aid for merit-based aid is a likely one (Meredith, 2004).

Finally, a great deal of research has been done over the last decade to examine graduate education and how it might be reformed (Austin & McDaniels, in press). A sub-theme of such studies are that graduate education suffers when a department or its faculty are more focused on external rankings or their own career ascent than creating supportive

cultures for learning. Thus, it is important for future research to explore the impact of a department's striving behavior on the graduate student experience.

In summary, there are negative consequences for some students associated with striving behavior (e.g. use of merit-based aid over need-based aid). Further research is needed to understand the impact of institutional and faculty striving on undergraduate and graduate student learning, satisfaction, and engagement.

FOR FACULTY

In considering the impact of striving on faculty work-life, careers, and productivity it is important to recall that faculty are among the institutional actors most engaged in striving behavior. This makes sense, as research and theoretical literature suggests that the institutional or individual pursuit of prestige can have positive impacts on faculty careers. It will, however, have differential effects based on career stage and rank, faculty demographics (gender, race/ethnicity, age), discipline, and institutional type. Given the perks that tend to come with research-oriented careers and prestigious institutions, benefits associated with faculty salary, teaching load, resources for research, time for disciplinary activities, and the entering quality of students may follow several years of institutional striving (Sweitzer & Volkwein, 2005). Achievement, recognition, and advancement would seem to be staples of striving environments, at least for those successful in research, and they impact faculty job satisfaction (Hagedorn, 2000). Likewise, the preparation of students has an impact on faculty job satisfaction. Many faculty prefer working with academically talented students (Hagedorn, 2000). In a striving environment, student quality could easily improve each year.

On the other hand, emerging research suggests faculty may also experience increased competition in their work-place, pressure to excel in multiple venues simultaneously, a more complex reward system, and a less humane environment for balance of work and family when working at a striving institution (O'Meara & Bloomgarden, 2006; Wolf Wendel & Ward, 2005). Highly competitive and individualistic work environments (like those in many of the most prestigious research universities) are known to be less friendly to balancing work and family (Ward & Wolf Wendel, 2003; Wolf Wendel & Ward, 2005), less supportive of women and minority advancement and more likely to have tenure/promotion failures and retention problems (Rice,

Sorcinelli & Austin, 2000; Tierney & Bensimon, 1996). Faculty in striving institutions have reported increasing and often unreasonable expectations for promotion and tenure (O'Meara & Bloomgarden, 2006; Wolf-Wendel & Ward, 2005).

Likewise, studies have shown that when faculty are asked to change work habits and focus because of a new organizational focus, (such as upping the ante for research publications and grants) dissatisfaction often follows (Finnegan & Gamson, 1996; Henderson & Kane, 1991; Morphew, 2002; Wolf Wendel & Ward, 2005). There can be many reasons for this. In Dubrow, Moseley and Dustin's (2006) fictitious case of "mission creep university," a composite of the authors experiences at several institutions, a junior faculty member became stressed and dissatisfied because resources for research and teaching load did not match the new reward system and institutional aspirations. Whereas a senior faculty member who had spent years building academic programs there felt he was being left behind in terms of institutional direction and saw no hope for promotion (Dubrow, Moseley, & Dustin, 2006). In situations where faculty feel forced to "strive" toward a research university model or risk not being promoted and/or tenured, where faculty feel administrators are forcing them in new directions they do not want to pursue, the potential benefits of a striving environment are less likely to be enjoyed.

Also, Gumpert's (1993) case studies of retrenchment decisions at two public universities illustrate the potential confusion "new institutional aspirations" can create for faculty who were hired during a time when resources were awarded based on undergraduate teaching and regional service, but find themselves years later in a world where academic units without "grant-seeking orientation and aspiration to be premier research university," (p. 31) are easily abandoned or less advantaged.

Wolf-Wendel and Ward (2005) found in their study of "striving comprehensives" that the "upward mobility the campus desires is often at the expense of faculty" (p. 8). Those on the tenure track and those with young children found it particularly difficult to balance the aspirations of their institutions with the needs of their families (Wolf-Wendel & Ward, 2005). Wolf-Wendel & Ward (2005) found that the pressures associated with striving made faculty feel they had to excel simultaneously in their local roles (teaching, advising, governance) and cosmopolitan roles (research productivity, connection to disciplinary colleagues on other campuses). These authors found that mixed messages and a lack of the resources needed to support the

institution's aspirations created ambiguity for faculty about where they should be spending the majority of their time and energy. This is especially evident in public state institutions wherein research expectations increase, but teaching loads stay high as state legislators mandate a certain number of hours in the classroom.

As in the fictitious "mission creep university" example mentioned above, the increased emphasis on research may also make promotion to full professor more difficult. In O'Meara and Bloomgarden's (2006) study of one striving liberal arts college, this phenomenon occurred for some associate professors, described by one faculty member as "casualties on the road." Some would-be full professors did not have the skills required in the new economy of promotion. Likewise, the normal ambiguity of the pre-tenure years intensified as the institution went through an identity crisis (O'Meara & Bloomgarden, 2006). Shaw & LeChasseur (2005) provide evidence of one other potential effect of striving. These authors found that over the time period of 2000 to 2004 while Temple University self-identified as striving, faculty became increasingly part-time, with minority faculty even more so, and fewer faculty were hired on the tenure track (Shaw & LeChasseur, 2005). This seems to be counter-intuitive, as tenure is associated with prestige. However, Shaw and LeChasseur (2005) also found that a greater percentage of first year students were taking courses with adjuncts, and this may be the result of shifting funding from instruction to prestige-seeking activities (Morphew & Baker, 2004), as well as the overall national trend toward new appointments off the tenure track (Finkelstein & Schuster, 2006).

New research building on these studies of faculty work-life in striving environments needs to be conducted. This new research would examine how faculty make meaning of their striving environments, how they participate in them or actively resist them within departments and through shared governance, and what they feel the impact of organizational and individual behaviors associated with striving are for their students. Likewise, research needs to examine women and faculty of color experience of striving environments as these groups report affinity with teaching and outreach roles, likely to be further deemphasized in a striving environment. Given the prevalence of striving in many four-year institutions, this research could have important implications for professional development, in terms of preparing graduate students for mediating these environments, and learning to succeed within them. Of particular concern are how striving environments influence the sense of collegiality and community early-career faculty

say they long for, the balance of work and family, and the ability of faculty to design careers around teaching or engagement scholarship.

FOR TEACHING AND SERVICE MISSIONS

There are many ways to define teaching. Here it is defined broadly as including instruction, mentoring and advising roles, and out-of-class contact between students and faculty. While there are many forms of service, the word is used here to mean professional outreach and institutional citizenship. Only a few research studies have examined the impact of striving organizational behavior on teaching and service missions, with the emphasis on the former. For example, Lachs (1965) study found that as institutions engaged in academic drift they paid less attention to their pre-existing undergraduate programs and these programs may have suffered as a result. Lee and Rhoads (2003) found strong negative relationships between various measures of increased entrepreneurialism in institutions and faculty commitment to teaching. While striving and entrepreneurialism are not synonymous, external funding for research – a major focus of faculty entrepreneurialism – has been associated with Carnegie classification and *USNWR* rankings. Also, O'Meara (2002) found that striving forces within academic departments worked against the positive evaluation of outreach (i.e. service-learning and community-based research) as forms of scholarship for promotion and tenure. Likewise, Milem, Berger and Dey (2000) found that as the amount of time faculty spent on research increased, the amount of time they spent in out-of-class contact with students decreased. This is important because we know from Pascarella and Terenzini (2005) and Astin (1993) that out-of-class contact between faculty and students is critical to student retention, learning, and satisfaction.

Likewise a tie can be made between resource allocation striving strategies and the emphasis placed on undergraduate or graduate education. Morphew observes (2000) “when discipline-based sources of support (e.g. external research grants) have priority graduate programs are emphasized. Conversely, an increased emphasis on institutional support (e.g. tuition) will prioritize teaching and other undergraduate functions (p 260).” If an institution shifts resources away from undergraduate education, teaching and learning could suffer.

We can also extrapolate consequences of the pursuit of prestige on teaching and service delivery through Astin and Chang's (1995) study of selective liberal arts colleges that claim to have the best of

both worlds, (i.e. strong teaching cultures along with a strong research orientation). While the authors did ultimately identify a group of “high-high” institutions to study which had success in both areas, a major finding of their research was that there is a strong negative association between an institution’s degree of emphasis on research and the priority it assigns to teaching and student development. Not one institution in the top 10 percent in research orientation was also among the top 10% in student orientation. They found that, “virtually no institutions with very strong research orientations are even above average in student orientation (p. 46).”

We need new research to isolate the impact of striving organizational behaviors on measures of teaching and service productivity. This research would be closely linked in the teaching category to the research on student learning, satisfaction, and engagement mentioned above, wherein national survey data might be used to compare learning and engagement measures at striving and non-striving institutions. Likewise, as has been done in some cases, NSOPF, IPEDS, and HERI faculty survey data might be used to find trends among faculty in institutions that were striving, trends such as faculty reporting an increase or decrease in superficial assessments of teaching, amount of time faculty spent on student contact hours, course preparation, faculty student-interactions, committee work, and professional service activities.

A second layer of inquiry would involve interviews with faculty committed to teaching and professional outreach and administrators charged with supporting these missions (e.g. Directors of Centers for Teaching, Directors of Outreach, staff involved in learning communities, honors programs, and curriculum development) to assess whether they saw a marked difference in the institutional resources and commitment to teaching and service goals during a striving period. Likewise, case study research could be done to compare groups of non-striving peer institutions with striving institutions regarding faculty involvement in shared governance, and faculty and student involvement in learning communities.

This type of research is fraught with challenges. For example, is an observed decrease in faculty participation in shared governance a result of organizational striving behaviors, or a decrease in tenure-track as opposed to adjunct appointments, and how are they related? Do community partners who have worked with an institution over time feel that it has become harder to engage faculty in service-learning or community-based research projects and why? Some of

this can be teased out by individual interviews with faculty, who might be able to assign institutional incentives or disincentives to specific activities or aspirations with their behavior. However, actors in an environment are not always completely aware of all of the forces impacting their decisions, and thus research is needed on multiple levels of the institution to assess the impact of striving on teaching and service missions. Information on trade-offs related to teaching and service missions will be particularly relevant for institutions in the middle of national ranking systems, institutions that may have less to gain from pursuing prestige and more to gain from behaviors that build on the foundation of distinctive teaching and service.

As part of these efforts, we need to look at research and theoretical models from other disciplines to frame striving, as well as research that has examined the pursuit of prestige in other types of non-profit settings like health-care institutions, and schools. What did other institutions leave behind in terms of balance of work and family, a customer orientation, or other goals, as they pursued prestige?

FOR EQUITY

Equity and social mobility have always been important goals of the American higher education system (Bowen, 1977). As our American population becomes ever more diverse in terms of race, ethnicity, and income, it is critical that our higher education system reflect that diversity, creating opportunities for first generation and low-income students to experience college. In 2005, Clara Lovett, former president of the now defunct American Association for Higher Education (AAHE), warned that the “quest by institutions for places at the top of higher education’s prestige pyramid”... keeps higher education from meeting external demands for better outcomes for students at lower costs, and increased access for students of all backgrounds (B20). She warned that striving institutions lose their, “ability to serve as agents of social and economic mobility (p. B20).”

One illustration of Lovett’s point relates to the striving behavior of increasing admittance of National Merit Scholars. Ehrenberg, Zhang, and Levin (2006) studied whether an increase in the number of recipients of National Merit scholarships (NMS’s) at an institution is associated with a decline in the numbers of students from lower and lower middle income families attending the institution. While holding other factors constant, they measured the number of National Merit

scholars by the number of Pell Grant recipients attending the institution. They found:

Other factors held constant, including the total full-time undergraduate and first year enrollment levels, offering more institutionally funded NMS awards is associated with fewer Pell grant recipients attending the institution and the magnitude of the reduction is roughly four fewer Pell grant recipients for each 10 additional institutional NMS recipients enrolled at the institution (p. 205).

The authors noted the magnitude of the displacement effect is largest at institutions in the sample that enroll the greatest number of NMS students and occurs primarily in institutions whose enrollment is growing.

It is also possible to imagine a scenario wherein striving resulted in a campus becoming more diverse than it ever had been. For example, as a campus in a predominantly white area becomes more selective and offers more merit scholarships, they may attract more academically talented diverse students. In this case, the campus would be more diverse as a result of striving. However, it is likely that the socio-economic background of the students would become more homogeneous.

A similar example of shifts in who is being served by striving institutions is offered by Shaw and LeChasseur's (2005)'s study of Temple University, a self-identified striving institution. In Temple's case, striving seems to be one factor of many that has resulted in a whiter student body (Shaw & LeChasseur, 2005). Between 1998 and 2004 there was a jump of at least 60 points from 1998 to 2004 in SAT, and 6 points in high school class rank from 1998–2004. In 1996 the student population was 30% black and 49% white, and by 2004–2005 it was 17% black, and 61% white. The student body also changed to be less local/regional—from 17% other states in 1995–1996 to 27% other states in 2004–2005 (Shaw & LeChasseur, 2005, pp. 1–2). A corresponding policy shift was for Temple to spend less money on remediation for incoming students.

Both of these studies suggest further research is needed to explore how the college choice options of low-income and students of color may be impacted by institutions in their regions engaging in striving behavior. For example, do these activities make it less likely low-income students can afford to attend four year institutions? Does striving negatively impact equity in college access and choice? On the

other hand, as colleges and universities compete for students they may offer programs that increase choice and create opportunities that have never existed before for some students. Research that tracks the same demographic, financial aid, and income-related data collected by Shaw and LeChasseur (2005) and Ehrenberg, Zhang & Levin (2006) needs to be collected so that researchers can see if there are specific patterns related to equity in striving colleges.

FOR INNOVATION IN HIGHER EDUCATION

The diversity of the American higher education system is the envy of the world. Institutional diversity ensures more learning options for students, a greater diversity of student outcomes, and a diverse system more able to make changes needed by society (Birnbaum, 1983; Stadtman, 1980). However, when striving campuses attempt to mimic the qualities of the most prestigious research universities or liberal arts colleges, they may become less distinctive, and in fact decrease institutional diversity that promotes efficiency, productivity, and quality for students and society (Birnbaum, 1983). Brewer, Gates and Goldman (2001) found through a study of 26 diverse institutional case studies that prestige seekers do not “build prestige in the student market by being innovative or by identifying and meeting new types of student demands. Rather, they build prestige by essentially mimicking the institutions that already have prestige (Brewer, Gates, & Goldman, & p. 66).” This is of concern because there are a number of institutions that have significant traditions and distinctive qualities that might be abandoned in the pursuit of prestige. Such is the case with women’s colleges, HBCU’s, and many Catholic colleges that are encouraged to loosen their ties with what has made them distinctive in the past in order to compete with colleges like Amherst, Williams, Harvard, and Yale. There are however, mitigating forces against some institutions being able to completely change their identity to mimic others. One such example, are state institutions trying to mimic the land-grant university. One study of institutional isomorphism concluded that at least among public institutions, “centralized governance structures may play a significant role in promoting institutional diversity in some cases (Morphew & Huisman, 2002, p. 494).” Nonetheless, additional research is needed to see whether institutional diversity, and the options and choices the system offers students decrease when groups of institutions move to emulate more prestigious models.

Related closely to such research are individual units within striving institutions (e.g. academic departments and administrative units) and whether they feel constrained in their actions or allowed to innovate as their institution is striving.

In summary, research and literature suggest many possible consequences of striving behavior for students, faculty, teaching and service missions, equity, and innovation in higher education. Table 3.3 provides a summary of potential areas researchers might examine for consequences of striving.

Table 3.3: Areas to examine for Consequences of Striving Behavior

Consequences for	Areas to Examine
Students	<ul style="list-style-type: none"> • Student learning, satisfaction and engagement • Faculty-student out-of-class contact • Educationally enriching activities • Campus climate
Faculty	<ul style="list-style-type: none"> • Salaries, teaching load, resources for research • Satisfaction overall and with quality of students • Time devoted to disciplinary as opposed to institutional activities • Work-life climate; balance of work and family • Promotion and tenure standards and impact on faculty careers
Teaching and Service Missions	<ul style="list-style-type: none"> • Institutional emphasis on undergraduate teaching and commitment to student success • Valuing of professional outreach and institutional citizenship; participation in institutional governance
Equity	<ul style="list-style-type: none"> • Race and income of student body; regional versus national student body; available resources for underrepresented students; outreach and bridge programs, developmental classes, etc.
Innovation	<ul style="list-style-type: none"> • The degree to which units within striving colleges feel they are able to innovate. • Whether distinct institutional types lose any of their distinctiveness while mimicking prestigious models • Mitigating factors that cause like institutions not to pursue prestige

SECTION V: CRITICAL AREAS FOR NEW RESEARCH ON STRIVING

There is a variety of extant research on striving behavior that should be replicated. This section attempts to move that discussion forward by making recommendations for identifying “striving institutions.” Also, it suggests new ways of framing research questions and designs on striving behavior and its consequences.

IDENTIFYING STRIVING INSTITUTIONS

There is great variety in how researchers have identified institutions as striving. In many cases where quantitative methods were employed, the institution was assumed to have been striving (or engaged in academic drift) if it had moved in USNWR rankings or Carnegie classification within a five year period. Given what is known about the complexity of striving behavior, it is worth asking whether this definition is both too broad and too narrow for several reasons. First, given the inconsistency from year to year in USNWR rankings and recent changes in the Carnegie classification system, it is possible that some institutions might find themselves with a better ranking or in a new category without having engaged in significant striving behavior to get there. Second, it is unlikely two institutions are engaging in striving behavior to the same degree if the first institution moves slightly in USNWR rankings over a 10 year period and the second makes a major shift over a 3–5 year period. Some campuses have to “strive” for many years to see changes in their rankings and the significance of the shift will relate to where they started. Third, identifying institutions in this way only allows for retrospective research, and identifies institutions as having been engaged in striving only when they have achieved their aspirations. In fact, institutions could strive and not achieve their goals; abandoning them at some point, without ever having been identified as striving.

In contrast, many qualitative studies (i.e. interviews and case studies) have identified institutions as striving from the perspectives of subgroups like faculty and/or administrators. While this is important for reasons that have been mentioned, this way of identifying institutions does not reveal the extent to which an institution is striving, and by itself is highly subjective.

Further complicating identification of striving institutions is the issue of institutional type. Consequences and trade-offs of striving will

likely differ by institutional type. For example, a second tier liberal arts college that was already selective in admissions may not lose much in diversity while they strive. Whereas a striving state university that has a history of providing upward mobility to students in a region will inevitably decrease this service if they keep enrollment the same and admit more academically talented students from out of state. Given the diversity of academic worlds (Clark, 1987), striving needs to be contextualized within the context of specific institutional groups and what striving means within that group.

Each of these observations suggests a multi-layered approach to identifying striving institutions. Institutions might first be identified using shifts in USNWR rankings, then evaluated against the characteristics of striving environments suggested in Table 3.1. A researcher might identify a small group of institutions within one institutional type, and investigate further the ones with the “highest scores” on a checklist of these characteristics. Then an audit might be taken of faculty and administrators regarding institutional identity and narrative. Several studies of striving environments agree (Brewer, Gates & Goldman, 2002; O'Meara & Bloomgarden, 2006; Ward & Wolf-Wendel, 2003) that it is not achieving prestige as much as the “pursuit of it” that shapes faculty work-life and institutional culture in a striving institution. An audit should be done to assess if the institutional members themselves (faculty, administrators, undergraduate and graduate students) see the institution as striving, and believe that this goal is influencing their experience, institutional direction, and behavior. This could be done through screening phone calls to the Provosts Office, and pilot interviews or focus groups with faculty and students. Interviews and other qualitative methodologies are well-suited for identifying and understanding institutional self-image, and whether an institutional narrative regarding striving is influencing major stakeholders. In large universities an exploratory survey of faculty and administrators in a range of disciplines could also serve this task of assessing whether institutional actors view their institution in the middle of a transition toward greater prestige. By taking a multi-layered approach to identifying institutions as striving, researchers might be better able to compare studies and find patterns across institutional cases.

STUDYING STRIVING IN NEW CONTEXTS

One of the biggest challenges of designing research on striving is naming specific striving behaviors and where in an institution they occur. Research that isolates specific “spaces” or contexts within a

college or university where striving behavior is occurring and measures that behavior, must be continued. Morphew and Baker's (2004) examination of expenditure patterns among striving institutions, Meredith's (2004) examination of USNWR rankings and admissions outcomes, and Morphew and Huisman's (2002) examination of program change, are all models that should be replicated in new functional areas. One area that might be isolated and explored in greater detail are internal and external communications regarding external image and internal management of institutional identity. Discourse analysis and document analysis could be conducted of both formal and informal documents that in some way represent the institution during a period of striving. During this time, who issues messages about institutional image and direction? For whom are the messages intended, and what are the explicit and implicit messages and assumptions therein? How do these messages influence how faculty, administrators, and students talk and think about their institution?

In the area of faculty work-life, researchers might take a department approach and examine faculty publications, external funding, and release-time assignments offered to faculty, and how these differ by departments with higher or lower national rankings over time. A second example might be assessing institutional expenditures on remediation programs for incoming students over a five year period and assessing whether money shifts from such programs to honors programs or academic enrichment programs for "talented students" during a period of striving.

While it is crucial to isolate specific places where striving occurs within institutions, it is also important to contextualize them in time, which means examining all of the myriad environmental social, economic, historical, and political forces operating within a specific time period to compel striving in any one institution or group of institutions. Historical research has the advantage of being able to look with hindsight at a complex array of forces, behaviors, and consequences at play in any given institution, or group of institutions as they pursued prestige. Historical research that examines striving within the context of women's colleges or faith-based institutions would help illuminate how the organizational saga of specific institutional types is connected to striving. Finnegan's (1993) examination of hiring cohorts over time in comprehensive universities provides an example of an examination of striving set within specific institutions and market conditions that might be replicated. Also, what campuses are striving for and what they are doing to get there changes somewhat each year,

as the recent changes in higher education away from early decision to early action demonstrate. Campuses have been forced to become more entrepreneurial since the September 11th attacks, and some campuses have pursued the resources that prestige promises to make up for shortfalls in endowment funds and decreases in state-funding. Thus archival research, and in-depth portraits of campuses that have transformed themselves over time may provide a more complex understanding of how forces compelling striving, and striving behaviors interact to produce various outcomes over short or long periods of time.

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CONCLUSION

While I-Want-To-Be-University (IWTBU) is fictitiously located in the Southeast, in fact it could be anywhere. This chapter outlined strategies for identifying IWTBUs to further study the pursuit of prestige within them. Forces compelling striving, striving behavior, and potential consequences of striving were examined. Areas for further research were identified.

Research on striving will complement the efforts of researchers that are trying to show that USNWR rankings are not indicators of the quality of a higher education degree. Just as campus constituents deserve to have better information to distinguish between colleges than USNWR rankings provide, they also deserve to know what is at stake when a campus adopts the goal of becoming research extensive by 2010 or joining the top quartile of liberal arts colleges by 2015. What will the campus be like from now until then? What benefits will the pursuit of prestige bring to institutions? At what cost? There is no doubt that the pursuit of prestige will change a campus. Research on striving will help campuses uncover how, and whether the process of striving is likely to make the institution better, or just different.

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4. 'OUTSIDERS', STUDENT SUBCULTURES, AND THE MASSIFICATION OF HIGHER EDUCATION

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STUDYING STUDENTS' WORLDS

Each student who enters college is motivated by a variety of social incentives; the immediately obvious reference group, or group in which he aspires to be accepted, is normally that of his peers, or that of a section, at least of the student community. Because all students on each campus will have many interests in common, a social system of all students will develop, along with a student culture influenced by and in turn contributing to the various norms and expectations that make up the variety of student subcultures. (Bay, 1962 p. 988).

In the 1940s, 50s, and 60s, many of the leading sociologists and social scientists devoted considerable time to studying and writing about American college students. One can't help but be impressed by the names of those who wrote significant books about students during those years. Theodore Newcomb, Nevitt Sanford, Seymour Martin Lipset, James Coleman, David Riesman, Christopher Jencks, Talcott Parsons, Howard Becker, Rose Goldsen, Martin Trow—all of these were authors of major empirical work. All did such research *before* the explosion of student protest. Once such protest emerged, the amount of empirical study, theoretical analysis, and sheer speculation about students increased exponentially. Several authoritative reviews of this literature exist. Most notable among these are those by Sanford (1962), Feldman and Newcomb (1994), and Pascarella and Terenzini (2005).

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Altbach and Kelly (1973) provide a comprehensive bibliography on student activism during the mid-twentieth century.

Most of the pioneer research was aimed at measuring the effects of college on students. The interest of these social scientists was not in measuring what students learned from the formal curriculum (an entire separate research tradition grew up around that topic; see Astin (1993) or Pascarella and Terenzini (2005, pp. 65–212) for reviews of work in this vein). Rather, it was to see how going to college did or did not affect what might be called the *character* of those who attended. In certain respects, these studies were shaped by the climate of Progressive thought that prevailed in American intellectual circles in the thirties. How might American political culture and the governing class be made more ‘modern’ and ‘liberal’? Since the start of the 20th century, American Progressives placed a lot of their hopes for cultural and political change on education. Moreover, it was a fundamental principle for many academics that higher education should awaken and nurture students’ capacities for critical, reasoned thought and action as citizens and leaders. Arguably the most notable social science work rooted in this perspective is *The American College: A psychological and social interpretation of the higher learning* edited by Nevitt Sanford (1962).

Accordingly, a central question for research was whether students, largely drawn from relatively conservative upper and middle class families, were becoming more tolerant of difference, more supportive of free expression, learning to question authority (or at least to tolerate those who did), developing some understanding of the plight of the less privileged, resisting temptations to suppress ideas and expressions that were offensive, and developing some capacity to appreciate the ‘life of the mind’ as opposed to the merely pecuniary. Some of the studies were more explicitly political—measuring the extent to which students from conservative background (the great majority) moved away from the political identities their parents had instilled and toward the left. Newcomb’s 1943 monograph, *Personality and Social Change* was the first work to get at this directly by linking such transformations to the college experience itself (we will revisit Newcomb’s contributions in a subsequent section). Later work, like that by Rose Goldsen and her colleagues, studied change and resistance to change among Cornell students in the 1950s (Goldsen, Rosenberg, William, & Suchman, 1960).

This line of research found that such changes did occur—but not universally (see Feldman & Newcomb, 1994). A key finding of this research was that the effects of college on the social outlook of students

were mediated by the 'culture' of the students themselves: students' relationships with each other filtered the various ways that faculty, curriculum, and institution affected student values and attitudes. Moreover, student culture was rarely homogenous: a typical campus was constituted by many 'subcultures', cliques and associations. The pattern of these social networks and the locations of students within them determined much of the effects of the college experience.

A pioneering study of this sort was the work Newcomb did at Bennington College in the 1930s (Newcomb, 1943). This small liberal arts college was founded on radically progressive educational principles, and enrolled young women of typically wealthy background. Newcomb found that the typical Bennington student moved away from parental conservatism and that these changes were strongly related to the student's embeddedness in the social life of the college. These political effects were far less likely at the more traditional women's colleges. At these, and at larger university campuses, the student body was likely to be divided politically, but such political division was closely aligned with social networks. Thus, for instance, Rose Goldsen found that at Cornell, students in the Greek system were likely to become more conservative during their college years, while independent students became less so (Goldsen et al., 1960).

The relationship between political attitudes and group membership was but one example of a more general finding: student bodies, both large and small, were constituted by a variety of social circles, and these circles were likely to embody contrasting frameworks of value and style. By the late fifties, Clark and Trow were proposing a way to map the student body into a set of four subcultures; they labeled these: 'academic', 'collegiate', 'non-conformist' and 'vocational' (Clark and Trow, 1966). Their typology was derived from the intersection of two dimensions: involvement with ideas, and identification with the college. So, 'academic' students were both intellectually and institutionally involved; the 'collegiate' subculture (essentially the fraternity/sorority members) were institutionally but not intellectually engaged; 'non-conformists' were those who were intellectually engaged but institutionally alienated; 'vocational' students were seen as being much more instrumentally oriented to both the curriculum and the institution. The Clark/Trow typology was a very useful way to capture the evident cleavages and contrasts in the student body, especially the very visible polarization of 'greeks' and 'bohemians' that typified the campus of the fifties and early sixties (a polarization we detail later in this chapter). It was an empirical question whether all four of their types each represented coherent social

worlds, but their effort compelled recognition that sweeping generalizations about the perspectives of the student body as a whole were likely to be incorrect given their underlying divergences; similarly, generalizing about the impact of college had to take into account the powerful mediating role of student peer groups and shared identities in determining the ways students experienced and responded to the college experience. Clark and Trow's work is part of a compilation by Newcomb and Wilson, *College Peer Groups* (1966), that included a variety of research reports and methodological pieces emphasizing this theme. Sanford's classic *American College* compilation (1962) was also infused with this emphasis on the role of peer groups and campus subcultures.

Research on college students and their cultures reached a plateau by the mid-sixties. By that time, a kind of social science consensus was in place: going to college affected students' values and orientations in many ways, but these effects had much to do with the social worlds students created. These subcultural worlds, rooted in shared social background, were crucibles for collective and individual identity and for the crystallization of attitudes and interests that shaped the life course of many participants. Newcomb's Bennington study in the thirties described a natural experiment in the formation and impact of student culture (Newcomb, 1943). Flacks was part of a team Newcomb organized in the late 50s to revisit Bennington and track down the alumnae of 25 years earlier (Newcomb et al., 1967). These alumnae overwhelmingly had sustained the liberal political and cultural perspectives they had acquired at Bennington, even when they were found living in upscale Republican suburbs. Bennington I had demonstrated the ways that student peer culture could foster personal change. Bennington II demonstrated the durability of such change.

At the same time, the attention of social scientists and wider publics had shifted. The rise of student activism in the early sixties,

Figure 4.1: Types of Orientations of Four Most Distinguishable Student Subcultures.

		<i>Involvement with Ideas</i>	
		Much	Little
<i>Identification with College</i>	Much	ACADEMIC	COLLEGIATE
	Little	NON-CONFORMIST	VOCATIONAL

From: Clark and Trow, 1966

which initially focused on the civil rights struggle, became a topic of research interest. The industry of research on students prior to the sixties, much of which documented the political disengagement of the student body, had not anticipated the emergence of a subculture of political engagement. We note, for example, that the *Sanford American College* volume, which compiled an exhaustive range of studies of student life, contained virtually no reference to political involvements of students, even though published in 1962, when first stirrings of white student interest in the civil rights movement were already evident. Moreover, early sixties activism fed into a period of mass protest and confrontation, culminating in 1970 by a student strike in which millions took part. Equally unpredicted was the rise of a flamboyant bohemian 'counterculture' whose styles and practices came to dominate the American campus. By the end of the decade, the subcultural profile of the American student body seemed transformed. This situation stimulated a very large amount of research energy, and an even larger amount of commentary, seeking to understand where the student revolt had come from, and what its meanings for society and for higher education might be [see Keniston's (1973) comprehensive review of student activism during this period].

By the early seventies, it's fair to say that almost every leading sociologist and social psychologist of note had done some kind of research and systematic analysis of American students during the previous three decades. Theodore Newcomb was of course one of the key figures. But among those who made major contributions were a number of leading social scientists not known as specialists in student research: S. M. Lipset, David Riesman, Christopher Jencks, Peter Rossi, James Coleman. Talcott Parsons, Alain Touraine, Robert Cooley Angell, Howard Becker, and James Davis.

Some of this interest derived from an assumption that the university might well be emerging as the master institution of "post industrial society." It was very fashionable, by the late sixties, to believe that the knowledge industry was coming to dominate economic growth, that cultural production based in the university was defining values and identity in the larger society, and that the students, as the labor force for the knowledge industry, were gaining power and agency. The post-industrial assumption turned out to be grossly oversimplified, and the intense interest in the social meaning of the university and the significance of student unrest faded rather quickly.

A veritable industry of student research developed after the sixties, but its purposes were defined more by institutional needs rather

than by the earlier concern with studying student life as a terrain of social and cultural conflict and change. Much of the post sixties research endeavor defined the student as an individual whose 'development' and 'engagement' were measurable outcomes of institutional policies, practices and conditions. The most comprehensive reviews of research in this vein are the volumes by Pascarella and Terenzini (1991, 2005). Institutionally driven research was designed to predict positive outcomes, and diagnose areas for institutional improvement. Some of this work derived from the growth and professionalization of 'student personnel' administrators seeking guidance for and validation of their efforts to create co-curricular programs aimed at 'student development' (a standard textbook in this vein is Evans, Forney, & Guido-DeBrito, 1998). There was an element of market research in some of this work: institutions subscribed to or commissioned studies to help them profile their enrollees and compare them with various kinds of norms. The most widely used survey, the Cooperative Institutional Research Program (CIRP), provided baseline data on academic goals and social attitudes of entering students at hundreds of institutions (see Astin (1993) for a review of studies rooted in CIRP and related survey research). Somewhat ironically, these data were drawn from students before beginning their college careers (though widespread media reports on CIRP findings tended to give the impression that they referred to students in college). CIRP data had a general research utility because they allowed tracing of various trends in freshmen attitudes—e.g. toward abortion rights, marijuana use, or the value of going to college.

In the eighties and beyond, institutional competition with respect to admissions intensified. That competition was fueled by certain kinds of data about institutional 'quality'—particularly the annual ratings by *US News*. The National Study of Student Engagement (NSSE), a major program of student research begun in the 1990s, was developed in part to provide an alternative to such ratings. Like CIRP, NSSE surveys students at a wide range of colleges. Unlike CIRP, NSSE focuses on student experience with various aspects of institutional life (see Kuh, 2001, 2002, 2003; Zhao & Kuh, 2004). A practical institutional use for these data is that colleges can report on their relative strength in providing various kinds of desirable experience for students—rather than simply be rated on the external indicators used by *US News*. The NSSE effort crystallized key strands of C. Robert Pace's existing program of research using his College Student Experiences

Questionnaire (CSEQ)—an instrument designed to assess student quality of effort (Pace, 1979).

These national research projects are accompanied by a vast number of local studies conducted by institutional research offices established at most campuses. Such institutional research is likely to be tightly structured by immediate policy questions particular to each campus: how to improve admissions yields and retention rates, how students in various degree programs rate their experience, user satisfaction with various student services, etc. A cursory review of the program of the annual meeting of the *Association for Institutional Research* reveals the wide range of such studies (see <http://airweb.org/>). Data derived from these institutional surveys are rarely analyzed beyond the strictly descriptive level, and their findings rarely get cumulated in such a way as to formulate a comprehensive understanding of the student experience at even a particular institution.

A related line of research in recent decades has focused on minority and other non-traditional students in an effort to understand issues of attainment, retention and adaptation. Characteristic of post sixties student research, this body of work treats each student as a discrete individual and tends to search for models that can aid in the prediction of college 'success'.

The now vast literature on college effects is reviewed in exhaustive detail by Pascarella and Terenzini in their monumental volumes, *How College Affects Students* (1991, 2005). This encyclopedic effort epitomizes the research enterprise as it has come to be: thousands of studies focused on particular student attributes (cognitive skills, personality traits, attitudes and values, educational attainment, career choice) and how measurable changes in these can be related to various kinds of institutional circumstance.

The current research enterprise, however fragmented it may appear, has tended to support certain broad perspectives on higher education policy. In general, the research thrust has emphasized the benefits of student 'engagement' in academic and community life as a key to learning and growth. Policies and practices that promote engagement have empirically greater effect than those aimed at 'teaching' in the traditional sense. Indeed, one might read the literature as supporting a vision of the college as an active learning environment, in which institutional structure, curriculum, course organization, pedagogy and the extra curricular are oriented toward and consciously foster student learning, personal development, civic participation and intellectual growth. Such a vision challenges traditional educational

formats, institutional priorities, disciplinary boundaries and much else and has, in part, given rise to a rapidly growing literature on student learning communities—organizational configurations designed to buffer some of this tension (see for example, Schroeder, 1994; Smith, MacGregor, Matthews, & Gabelnick, 2004; Tinto, 1997). It may well be that some institutions have been able to make use of such a vision to enhance their educational quality and reputation, and that many others have adopted pieces of it. But it isn't surprising that applied student research suffers some of the same fate that has befallen other fields of applied social research: the implications of its findings are too often resisted and ignored in order to protect established hierarchies and priorities.

BRINGING STUDENTS BACK IN

We want to suggest that something has largely been lost in the student research of the last three decades. What has been lost is the effort to depict and understand the student experience and the students' role in creating it. That students create a culture or cultures, and that such cultures crystallize collective and individual student identities, has been largely lost from view. This loss is important for several reasons.

First, as the classic student research showed, student culture is a powerful mediating factor of college impacts. Academic engagement may certainly vary according to institutional conditions, or by major field, etc. but we would suggest that such engagement is deeply intertwined with peer relations, and that, now as well as in the past, student peer groups differ widely in their orientation to the academic and the world of ideas. The same may be said for community participation and civic engagement.

Second, the old maps are obsolete. We learned a lot about how to map student subcultures in the pre-seventies research literature. But the composition of the student body nationally has fundamentally changed, and the socioeconomic context for coming of age has as well. What can be said about student cultures now and about their mediating role in identity development?

Third, as the preceding suggests, studying student culture and identity inevitably leads to an effort to understand students within the larger contexts of opportunity structure, cultural conflict and change, and other macro-level themes. Since youth is the stage of life in which one is most shaped by social expectations (Erikson, 1968), and college going is the experience most connected to defining one's place in

economic and cultural terms (Chickering, 1969), one can't understand students collective experience without situating it in these larger frameworks. Student cultures embody such expectations and affect the way their members adapt to them. The classic student research tended to embrace such a mode of analysis, seeing student cultures as both an expression of and having potential effects on wider social and cultural dynamics.

Finally, if we look for a way to map today's student cultures, we are likely to find that students now are less easily categorized in subcultural terms. Our own research to which we will be referring later in this chapter was guided by an assumption that students now are less likely to be fully engaged in their role as students, in the traditional sense. The very fact that the typical student today is likely to be working at least a half time job even at relatively elite colleges is itself an indication that such role involvement is likely to be reduced. A higher proportion of students have transferred from elsewhere, and therefore are less integrated into the peer cultures of the campus, not only because they are relative 'strangers' but because they are likely to be older and less likely to live in the residence halls. That the typical student is carrying a significant debt to finance years in college may affect how those years are spent and experienced. In the golden years of student culture research, the students being studied were primarily preoccupied with the world of the campus and peer culture. How true that is today, and for whom, and with what result is today an empirical question that begs attention. We assume that each student lives in the domains of the formal curriculum, the social world of their peers, of work, and family and also in a private domain that may be an escape from collective engagements and responsibilities. How each student balances and interrelates the demands of each of these is the subject of research. But the fact that such counter-posed domains constitute the student experience may compel revision of the classic assumptions about the primacy of student subculture and the quest for identity in shaping that experience.

In what follows, we offer a sketch of the way that students' cultures have evolved since the early days of higher education. The sweeping generalizations made here derive from our reading of the research tradition we referred to above. This reading has helped us decide what is new and not new about student life today, and accordingly helped us determine the central research questions that frame our own empirical work in this area. We've previewed some of what follows in our review

of the research literature, but here our assumptions about the historical and social context of the student experience are spelled out a bit further.

AMERICAN STUDENTS' CULTURE: A CAPSULE HISTORY

American colleges were created to 'educate' the next generation of elites. For most of their history, their primary and dominant clients were rich WASP males, although from the late 19th century on, public universities and some elite colleges were likely to admit handfuls of 'outsiders', i.e. Catholics, Jews, non-whites, and some who were 'needy'. Women began entering higher education in some numbers in the decades after the Civil War. American political, educational, and business leaders acknowledged that, insofar as undergraduate college campuses were central training grounds for their replacements, some opportunity for upward movement of those of disadvantaged origin was desirable, provided that the upwardly mobile were appropriately socialized.

Helen L. Horowitz's (1987) book *Campus Life* provides a sociologically informed and insightful history of the evolution of 'student culture'. The initial, and, for years, the dominant, student subculture was constituted by rich WASP males. From the outset, these student 'insiders' organized themselves to resist the academic demands of the faculty and to protect their pleasure-seeking activity from excessive control by college and civic policing efforts. Such organization was expressed through fraternities and other kinds of secret and usually exclusive clubs, which operated to promote a climate in which hedonism and extracurricular play and service was fostered and valued, while interest in the scholarly and the intellectual was disdained. The incorporation of this organized subculture as a regular feature of the institutional life of the college (rather than efforts to disperse it) made sense so long as colleges were understood to be frameworks for 'character' formation for elite youth (rather than primarily as places for training scholars and scientists). Legitimizing fraternities provided for the orderly housing of young men who would otherwise be much harder to control—even if it required the tacit acceptance by the institution of racism, anti-Semitism, anti-intellectualism, the objectification of women, cheating, and a variety of other unpleasant practices (Horowitz, 1987).

But the presence of some 'outsiders' in the student body, and the fact that some number of students of insider background were repelled by the 'collegiate'/fraternity world, resulted in the formation

of alternative subcultural frameworks. There were, on the one hand, a minority of students who identified with scholarship and the world of ideas, and who identified with the faculty rather than peers (and therefore were not typically likely to organize a peer 'subculture'). Intellectual engagement of a different kind was collectively expressed by varieties of 'bohemian' or 'rebellious' campus groups—these often felt themselves to be at war with the 'Greeks' and what they represented, and also with the stodgy conservatism or other-worldliness of the faculty. Thus much of the history of student life can be read as a product of the struggle between collegiate and rebellious or bohemian subcultures. This cleavage was based to some extent on class (although the rebels were attractive to some upper class youths as well as to social outsiders).

These two subcultural formations were important for shaping the identity of American elites before the Depression: if you went to a top college and were in a fraternity, you learned how to be the kind of person who would smoothly move into a life of making and managing money or exercising political power on behalf of business values; while at the same school having been a rebel made you more likely to want to be a writer, an artist, a journalist, a maverick professional or politician—carrying on for the rest of one's life the cultural styles and tastes and antagonisms one had taken on in frat houses or coffee houses of one's college days.

As Horowitz describes, however, by the 1930s, the college scene was becoming more varied. A large wave of first generation Jewish youth had begun to enter college, and in some schools they were dominant (notably CCNY, see Gorelick, 1981); offspring of other immigrant groups and of working class origin were also increasing in number. The Depression itself certainly put a damper on the frivolity of both the collegiate and bohemian subcultures. Still, most privileged youth continued to gravitate to social worlds which would shield them from the 'world of ideas' and reinforce and nurture the social outlook to which they had been born. Meanwhile, the ranks of students who worked hard on their studies grew—largely these were the 1st and 2nd generation immigrant and working class kids, for whom doing well in school was now seen as necessary to escape from ghetto, slum and factory. These students were not only or even primarily concerned about their grades, but about acquiring the knowledge, the skills, the personal style that would enable them to be acceptable to and perhaps even welcomed into professional, intellectual, or managerial worlds. Many had to work while going to school; the sacrifices required

to attend further reinforced their seriousness as students. Many of these, at the same time, were attracted by the burgeoning of political consciousness on campus. Earlier cultural rebellion was now being mixed with or replaced by a concern with the seeming collapse of capitalism, the rise of fascism, and support for the newly explosive labor movement.

The 1930s generation of student outsiders did not, of course, end up allying with a revolutionary working class. Instead, their arrival helped to diversify the ranks of the national leadership and professional classes, and signaled the post-war II emergence of higher education as the primary route to upward mobility. After the war a rapidly expanding system of mass higher education aimed not only to socialize those destined for the top, but at creating a vast professional, managerial, and service class—a ‘new’ middle class.

In the immediate post-war world, masses of war veterans thronged the public universities. By all accounts, this influx led to perhaps the largest group of ‘serious’ students yet seen in higher education. Their seriousness was certainly about striving—resembling in even more obviously instrumental ways the perspective of pre-war 2nd generation students. The GI Bill enabled the growth of public higher education, and was a key reason for the institutionalization of the college as the primary route to advancement. Meanwhile, however, the ‘collegiate-Greek’ subculture also burgeoned in the 50s, carrying on the tradition of resisting the academic and defending the hedonistic ‘social’ dimension of the undergraduate experience and extending this tradition to many offspring of the expanding newly affluent middle class. A new bohemianism also flourished in those years, attracting some of the veterans, fueled by national media fascination with the ‘beat’ generation, and by the growing number of graduate students and of faculty who had themselves come out of earlier bohemian generations. The 1950s were notorious as a time of political disaffiliation and fearful avoidance of public protest; in that climate the ‘collegiate’ was taken to be once again the dominant campus subculture. But such depictions of campus life often missed the growing subterranean counterculture at many elite and large schools.

In the 1960s, we might say that bohemian rebellion, for the first time, triumphed over the collegiate subculture. Indeed, by the end of that decade, students seemed more culturally unified than they had ever been, and their shared symbols and practices expressed manifest antagonism toward ‘middle class values’, conventional tastes, striving for ‘success’. Hedonism was pervasive, but expressed rebelliously.

Rather than adopting the forms of pleasure appropriate to mainstream adulthood (i.e. alcohol, tobacco, conventional sex, spectator sports, fast cars, etc.), 1960s youth culture promoted distinctly alternative tastes (marijuana, acid, polymorphous perversity, music festivals, VW vans, etc.) Waves of political protest attracted ever growing thousands of students. Even if only a small percent of students were committed activists, these, by the late 1960s, were often the pace-setters of student culture. And, for a brief moment, after Kent State, the majority of students in the country identified with the 'Movement' (Flacks, 1971).

As noted earlier, the spread and impact of such rebellion had not been anticipated in any of the vast literature on student attitudes that had accumulated by the 1960s. Moreover, the demographic composition of the vanguard of 1960s protest and counterculture was also surprising—since it was disproportionately made up of sons and daughters of elite or at least affluent families, who attended the most prestigious campuses, and had records of solid academic and extracurricular achievement. The leaders of 1960s rebellion were not outsiders to academic life (indeed they typically were the offspring of parents who themselves had college degrees), and they were not 'malintegrated' (Flacks, 1967, 1971). Much research supports the finding that student activists in the early 1960s were distinctively from relatively affluent, professional, and liberal families (see Keniston (1973) for a detailed review of empirical research on 1960s era student protest). While the early 1960s activists were unique in their position of relative advantage, by the late 1960s the demographic composition of the movement increasingly reflected that of the student body as a whole.

The shift toward rebellion among students in the 1960s was 'overdetermined'. It had much to do with 'affluence'—i.e., the pervasive belief that problems of scarcity were being superseded, that college graduates would not have difficulties finding remunerative vocations, and that the central problems facing them were to find ways of life that would be 'fulfilling' and 'meaningful'. Many students were raised by parents who themselves articulated such concerns, who expected their offspring to capitalize on their potential for making a difference in the world, and for living distinctive and fulfilling lives. Such aspirations, however, came into sharp conflict with certain social realities—most notably the war and the draft, but also with the bureaucratization of work for the highly educated. So there was a widespread sense among the young that their hopes for fulfillment were threatened—immediately by the war and by escalating social conflict; in the longer term by the encroachment of authoritarian institutions. Finally, the

symbols and styles created in the counterculture were popularized by mass media eagerly using them to shape and control a rapidly growing youth market. Rebellious images resonated with youth already emotionally primed to question authority; media provided resources for collective identity that enabled the growth of collective consciousness and mass action among youth on an unprecedented scale (see Flacks, 1971 for a complete analysis).

The dominance of the rebellious counterculture on campuses receded during the 1970s. Sixties era beliefs about the permanence of affluence and endless growth gave way to evidence of the ways in which economic growth could be both malignant and less certain. Increasingly, youthful confidence about the future was eroded by a variety of major trends: inflation, energy crises, state fiscal crises, global competitiveness, declining public budgets, and declining job opportunities for the educated. Observers noted a shift in the student climate—a growing concern about life chances created a mood that was becoming more self-centered, and instrumentalist, than the prevailing climate in the 1960s (Levine, 1980). Moreover, the ending of the draft and the war removed the largest shared threat that had mobilized the student movement. Movement activism shifted off campus or was channeled into diverse causes (feminism, environmentalism, ethnic identity struggles, gay liberation) further fragmenting student culture.

In the period since the 1960s, no simple mapping of student cultures has been possible. The student population itself continued to both grow and diversify racially and ethnically. Vocationalist preoccupations increasingly drew students toward individualized focus on maintaining their grades (and, accordingly, the classic collegiate disdain for academic 'grinds' disappeared from student discourse). Participation in extracurricular activity gradually declined, and the perennial warfare between Greeks and intellectual rebels no longer defined student life. Greek organizations did grow after their sixties era decline, but have never regained their old attractiveness or influence (Levine, 1980; Horowitz, 1987).

Still, in the 1970s and 1980s, students continued to seek and express collective identities and some distinct subcultural formations were noticeable. The classic 'collegiate' identity was often identifiable in 'preppy' appearance and yuppie taste, and in hearty party get-drunk-quick beer bashes that were often held in (but not necessarily restricted to) frat houses. Binge drinking became a characteristic part of the party scene.

Neo-bohemianism had several variant subcultures: new 'punk', 'hard-core' styles and tastes in music and dress, 'deadheads' and other forms of 1960s-nostalgia, and 'raves' and other collective uses of psychedelic music and drugs. The influx of African-American, Latino/Chicano and Asian-American students spawned a host of ethnic organizations, including fraternities and sororities, but also a variety of cultural, political, and professional groups, embedded in the social worlds of minority students and creating a new and often dynamic campus leadership force at many schools.

Meanwhile, activist identity was channeled into a host of feminist projects—advancing both feminist politics and service to the needs of women. Alongside these arose 'out' gay/lesbian/bisexual campus subcultures, advocacy of the rights and needs of disabled students, and other struggles for recognition. Environmentalist activists formed still another network and sometimes a full-fledged subculture—'granola-heads' trying to establish sustainable lifestyles, promote recycling and other environmentally sound institutional policies, etc. Ideologically left and right student groups rose and fell during the 1970s and 1980s—and sometimes were able to lead sizable mass protests, as in the anti-apartheid 'divestment' campaigns of the mid-1980s, and widespread protests against the Persian Gulf incursion in the fall and winter of 1990.

The majority of students, however, identified only marginally with these nodes of collective consciousness and action. It was hard to read this majority because, in the 1970s and after, there was a marked absence of systematic survey research and ethnography on student attitudes and culture. Still, it was plausible to claim that, as the 1970s turned into the 1980s, students at most institutions saw their time in college as primarily a preparation for vocation or career, and, as a result, gave priority to efforts to ensure the marketability of their transcripts and resumes. Many instructors remember the early 1980s as a time when students were surprisingly attentive in lectures (Doonesbury cartoons mocked the prevailing tendency to take down everything the teacher said), and captive, if not slavish, audiences were driven, more than earlier generations, by the grade quest.

The campus climate seemed to change, again, in the later 1980s (perhaps a key event was the stock market crash of 1987, which seemed to dash the belief that one could start earning fantastic salaries right out of college if one was willing to work in the financial sector). College administrators began to openly worry about the 'decline in campus community' (remembering a golden past which perhaps never

had existed). Their worries were largely the result of an increasing number of racial incidents on campus—e.g. racist performances by fraternities, minority students' collective distress at incidents interpreted as 'racial harassment', etc. Efforts by student personnel administrators to counter such incidents by adopting such measures as 'hate speech codes', and protests by minority students at alleged racism of faculty and fellow students provoked an outpouring of conservative commentary attacking 'political correctness' on campus. This literature, often recounting the same set of stories, described a campus climate in which freedom of speech was in dire danger from the combined effect of racial and sexual harassment disciplinings, students' zealous efforts to censor faculty and fellow students, and the steady indoctrination by 'tenured radicals' of young minds with 'multiculturalism', 'post-structuralism' and 'post-modernism' (i.e. a new set of doctrines that undermined the legitimacy of Western civilization and the moral foundations of society) (D'Souza, 1991). Soon, media were depicting the campuses as battlegrounds in one or more culture wars—amongst racially polarized student groups and between an intolerantly liberal faculty consensus heroically resisted by a minority of right-thinking faculty and students.

Given the paucity of systematic research on student and campus culture, it is hard to evaluate these characterizations and their applicability to past or present reality. Our own sense, based largely on our experiences at a number of public flagship universities across the country, is that the alleged polarizations of student life around race (and gender and sexuality) were never as sharp nor as simple as these depictions made them out to be. Nor has there been a continuing climate, either among students or in the institution as a whole, in which freedom of expression was in grave danger—although efforts to restrict or discipline speech deemed offensive were certainly not rare.

Beneath all the publicity about 'political correctness' however were other student behaviors that disturbed faculty and administrators, even if they received much less media attention (an outstanding example of these concerns can be found in Mark Edmundson's 1997 piece in *Harper's Magazine*). These might be summarized by saying that, in the early 1990s, there was an apparent decline in student 'discipline'. Administrators began decrying an increase in alcohol abuse, and in violence (sexual and otherwise) associated with heavy drinking scenes in both the streets of the student community, in house parties, and in the residence halls. The periodic reports from the Harvard School of Public Health's College Alcohol Study showing continuing

high rates of binge drinking make up just one component in a stream of complaints about student culture during that period (see for example, Wechsler, Davenport, Dowdall, Grossman, & Zanakos, 1997; Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994; Wechsler, Fulop, Padilla, Lee, & Patrick, 1997). 'Disengagement' served as a shorthand term for characterizing that culture. Faculty began to talk about a certain unruliness in large lectures—students coming late, leaving early, talking, and, indeed, not attending at all. The captive audience of the 1980s seemed to have been replaced by an unprecedented sense of distance between faculty and students, especially in the big lecture settings (which were typical of 'general education' courses).

The prevailing assumption, shared by many educators and citizens during the early 1990s, was that by making the student body more inclusive over the past few decades, we also have lowered its 'quality'. The underlying logic seemed to be that if students are the first in their families to go to college, come from high schools that prepared them poorly for college, or need to work to support themselves, they will be less able to take advantage of what higher education has to offer—and therefore tend to be less engaged in learning. The argument is that the lower the average 'cultural capital' of students, the more evident will be the symptoms of student disaffection.

Many of these changes in student behavior and perception over the years suggest that, unlike student culture of earlier eras, student culture today is not best understood as a domain constituted by a few coherent collective identities that offer some defined paths for individual self definition. The typical student no longer seems to be preoccupied with questions of identity, nor is he or she defining the student role as an opportunity to prolong youth and postpone 'adulthood.' If in fact the typical student is working a job, that in itself sets limits on how playful, experimental and 'youthful' one can be. If moreover this student is anticipating the need to pay off college loans, that in itself limits any possible yearning to 'not settle down' after graduation (and reinforces the instrumentalist perspective on one's priorities while in school).

The typical student's social life is more likely to be organized in terms of a small 'submerged' network of friends than in terms of a visible and extensive subculture rooted in shared values and symbols. Such subcultures continue, as we've said. And they include, not only the continuing classic collegiate, bohemian and academic traditions, but the rise of new 'outsider' collectivities. These are ethnically focused, but simply that. It is likely that students tending to identify and engage with ethnic identity subcultures are members of the first

generation—themselves immigrant, or children of recent immigrants, and/or children of parents who did not go to college. By the late nineties, a large public university such as the University of California located in a state with high rates of immigration, would have at least half of its students in these categories. The worlds these new outsiders are creating are just beginning to take shape. But clearly, what we have believed students' cultures are like can no longer be assumed.

We take an intentional pause to here note that we do not discount the small but important body of work on students conducted after the 1960s. Indeed varied works such as those by Boyer (1987), Levine (1980), Loeb (1994), Moffatt (1989), and Pace (1990) provided important glimpses into the lives of students during this period. Despite this work, however, no systematic program of research on students such as that conducted throughout the 1950s and 1960s has been evident. Rather, these more contemporary efforts have remained largely disconnected from one another.

A new research enterprise aimed at understanding the student experience in the 21st century is what we here are trying to stimulate—a systematic study of the student experience that incorporates, as a central feature, the small group processes that have been shown to powerfully mediate learning, behavior, and the perceptions of college students.

THE UNIVERSITY OF CALIFORNIA UNDERGRADUATE EXPERIENCE SURVEY—A RESEARCH PROJECT

In 1995, we took a first step toward such a systematic study. Our hope was to produce some findings at a single research university campus that would be sufficiently intriguing—and some research tools that would be sufficiently exportable—to stimulate some national data gathering about student life, culture, and attitudes in this period—and thereby to begin to fill the current vacuum of knowledge and understanding (and resulting misrepresentation) of today's students. Worries about declining academic motivation, about the withdrawal of many students from interest in either the public sphere or the life of the mind, are hardly unique to California—they are in fact being nationally expressed. Sacks (1996), for example, provides a particularly simplistic but generally accepted version of these worries. A more balanced view is presented in the aforementioned September 1997 issue of *Harper's Magazine* in pieces written by Mark Edmundson (pp. 39–49) and Earl Shorris (pp. 50–59).

Let us be clear that our position is not that there is a dearth of research on students. On the contrary, we suggest that there has never been more research on students, and relative to years past, a large share of that research is of impressive quality. Rather we point out the fact that while there are a number of useful national surveys of college students that have been developed in the past decade, none of these taps the role of student subcultures that defined much of the sociological work on students in decades past. Two of the more visible surveys that are widely used to assess student 'engagement' are the National Study of Student Engagement (NSSE) and Your First College Year (YFCY, see <http://www.gseis.ucla.edu/heri/yfcy/>). While these instruments are useful for understanding student engagement and experience, they devote little attention to the subculture dimensions we feel are so important to understanding student life on our college campuses. In recent years only a very small handful of studies address the subcultural dimensions of student life that define our interests in this paper. Antonio (2004) and Thomas (2000) are representative of work in this vein, both of which exploit aspects of students' social networks to define group boundaries and an array of associated influences.

Our own work began with initial data gatherings on the campus of UC Santa Barbara in spring 1996. The original effort consisted of a mailed survey questionnaire and a kind of ethnographic inquiry through a technique known as the Diary-Diary-Interview method (Zimmerman & Weider, 1982). While the survey made use of a stratified random sample, the qualitative work employed non-probabilistic snowball sampling techniques through which we collected over 80 diaries from a range of undergraduates. These students kept a detailed record, in the form of a diary, of their daily activity for a two week period. The diaries were then used to frame interviews with each diarist about the details of their daily practices, priorities and interactions. A separate interview with each of these respondents focused on issues of identity and personal development. While cross-sectional in nature, the diary approach allowed a glimpse into the processes through which students developed their identities while at college (see Hechtman (2002) for an example of this work).

Our analysis of all of these materials from the initial phase stimulated significant interest within the University of California system. Our early findings from Santa Barbara suggested that *the students most likely to be disposed to academic values and demands and to make use of the resources available on campus for their own development are today students for whom university attendance involves both sacrifice and*

risk—students usually regarded as ‘disadvantaged’ because of race and class backgrounds. Our data from that early administration showed that students who are supported by their parents, unburdened by debt and work demands, and raised by college educated parents are, paradoxically, more likely to be distanced from the values and opportunities provided by the institution. From a historical perspective we might say that the old ‘collegiate’ hedonistic subcultural pattern has returned—and our data suggest it is largely constituted by white students, particularly white males from relatively advantaged backgrounds.

These sweeping conclusions need immediately to be modified as follows: The majority of white students, especially in the upper division, don’t identify with the party culture. We have not yet tried to profile the values, backgrounds and practices of non-‘party’ white students, nor examined systematically whether a subculture of ‘academic/intellectual’ students (as distinct from ‘vocationally’ oriented students) can be discerned and described. Moreover, when we speak, above, of minority students, we are not referring to Asian-Americans. Our sample did not include an adequate number of Asian-American students to permit confident generalization—but we do see some signs that a considerable number of Asian-American students are dealing with distinctive problems of integration. These problems are not associated with disengagement from the academic, but from the wider community life of the campus.

Since the early effort at Santa Barbara our survey has evolved into a systemic study of the undergraduate experience on eight University of California campuses. This survey, now known as the University of California Undergraduate Experience Survey (UCUES), is administered annually with the goal of developing a longitudinal database on the undergraduate student experience. While the data collected through the broader UCUES effort confirm a number of our original findings from UC Santa Barbara, a much more complex picture is now emerging. With clear undertones of the typical outsider story so powerfully conveyed by Horowitz, the data reveal a complicated tapestry of forces that shape student behaviors and perceptions—forces that are tightly bound to race, class, and educational background.

To illustrate key elements of the most salient themes in this story we use the UCUES data from 2002 to describe and contrast difference between traditional students (those from families in which someone, a parent or grandparent, has earned a 2- or 4-year college degree) and true 1st generation students (those from families with no 2- or 4-year college degrees). We limit our analysis for this chapter to a

subset of 5,427 students who are/were native freshmen on each of the undergraduate campuses in the UC system (the subsample consists of 3,464 freshmen and 1,933 seniors across the 8 undergraduate campuses within the UC system who were surveyed online at the end of the 2001–2002 academic year). Our purpose in the section that follows is to simply illustrate some of the major changes that differentiate today's university students from those that attracted the interest of researchers during the halcyon days of research on student culture—changes that are referenced in our account of this line of inquiry. We therefore do not set out to fully develop detailed analysis of these patterns. Such analysis on these patterns is beside the main point we develop in this chapter. These data are merely illustrative of the intriguing patterns in attitude and behavior that we feel compel renewed attention to work on student culture. While we draw upon our data from the UCUES project to allow for contrasts between traditional college students and first generation students, we refer the reader to Astin's comprehensive overview of related patterns emerging in the CIRP data between 1965 and 1995.

WHO ARE TODAY'S FIRST GENERATION STUDENTS?

Table 4.1 shows that the characteristics first generation students of our sample are similar to those on many state flagship university campuses across the country. These students are likely to be from families of more humble social origin (more than two-thirds of these students report being from working or lower-class backgrounds), non-white (only 15 percent of non-traditional respondents are white), and come from families making just over one-third of that reported by their traditional counterparts (roughly \$34,000 vs. \$96,000). Striking in these data is the largely white, middle and upper-middle class majority. In Horowitz's terms, these first generation students are clearly outsiders on today's campuses.

ORIENTATION TOWARD COLLEGE

It has been widely observed that more students today, compared with ever before, say they are going to college for 'economic' reasons above all others (see Astin, 1998). This broader trend is also evidenced in our data in several ways. In terms of goals motivating college attendance, roughly 9 out of 10 respondents report it being very important or essential to achieve the goal of identifying a career and acquiring

Table 4.1: Characteristics of Students by Generational Status

	Traditional Students (N = 3499)	First Generation (N = 1928)
<i>Overall</i>	64.4%	35.6%
<i>Social Class Background</i>		
Lower – poor	1.3%	28.3%
Working	6.8%	38.5%
Middle	40.9%	26.2%
Upper-Middle	48.5%	6.4%
Upper – wealthy	2.5%	0.6%
<i>Race/Ethnicity</i>		
Black	0.8%	1.9%
Asian/Pacific Islander	32.8%	50.8%
Hispanic	3.7%	30.3%
White	60.1%	15.5%
Other	2.5%	1.5%
<i>Parent Income (5% trimmed mean)</i>	\$95,692	\$33,955

knowledge and skills necessary for its successful pursuit. (1st generation students are more likely to identify this as an essential goal).

As our interest is in the process by which peer groups shape the perspectives and behaviors of college students, we focus primarily on patterns among the seniors in our sample. These seniors were enrolled as freshmen on their home campus and, as a result, have been exposed to the subcultures on that campus for several years. We include freshmen to give a sense of differences between these two cohorts, some of which may be explained by influences of student subcultures and some of which may be attributable to real differences in cohorts during this period.

Among seniors in our sample, almost 35% of traditional students (vs. 48% of 1st generation students) responding indicated that college was very important or essential to position them to “make a lot of money.” On the other hand, 69% of 1st generation students (vs. 55% for traditional students) strongly identify with the goal of using their college education to “give something back” to their community. It is interesting to note that the percentages are almost perfectly inverse when students were queried about the importance of the goal of “having fun.” (Table 4.2) As always, then, students can be classified as ‘instrumentally/ vocationally’ or ‘intrinsically’ motivated—but today, even at a relatively affluent and selective residential colleges like those within

Table 4.2: Percent Indicating Essential or Very Important to Achieve While in College

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
Deciding on the career I want and obtaining the knowledge and skills needed to pursue it	90.7%	84.4%	95.1%	91.0%
Developing an in-depth understanding of a specific field of study	76.4%	66.6%	83.8%	74.2%
Being in a position to make a lot of money after I finish my education	48.2%	34.6%	67.5%	48.4%
Determining what values are most important to me; developing a “philosophy of life”	66.7%	66.1%	70.7%	70.7%
Having fun; enjoying my “college years” before assuming adult responsibilities	72.3%	71.2%	58.2%	57.1%
Being in a position to give something back to my community after I finish my education	58.7%	55.2%	71.7%	69.1%

the UC system, the instrumentalist perspective appears to prevail far more than it might have 20–30 years ago. This instrumentalism is evident for traditional and non-traditional students alike.

UNCERTAINTY ABOUT ECONOMIC AND PROFESSIONAL FUTURES

There is evidence in our survey supporting the belief that young people today are relatively anxious about their future life chances—among certain segments of students. For example, Table 4.3 shows that while over three-quarters of 1st generation students believe that, compared to their parents, they have much greater chances in life, less than 15% of students from traditional college going backgrounds feel this way. While both groups are relatively positive about career directions and chances, 1st generation students are less likely to believe they have good or excellent chances for realizing their career goals.

This table and the next (Table 4.4) indicate that the much remarked tendency of today's students to believe that they will have

Table 4.3: Prospects for Career and Future

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
How sure are you that this is the career that you will still want by the time you finish your education? (% sure or very sure)	64.0%	77.4%	69.4%	78.6%
Chances of achieving this career (% very good or excellent)	84.2%	89.9%	74.6%	83.2%
How do you think your chances for success in life, in terms of career and income, compare to your parents? (% much better)	13.8%	15.2%	67.2%	68.6%

Table 4.4: Perception of Future Opportunities (by Social Class Background)

	Lower-Poor	Working	Middle	Middle Upper	Upper – Wealthy
<i>Freshmen</i>					
Chances of achieving this career (% very good or excellent)	78.7%	83.3%	87.8%	88.0%	91.2%
How do you think your chances for success in life, in terms of career and income, compare to your parents? (% much better)	76.3%	55.8%	29.1%	14.9%	20.0%
<i>Seniors</i>					
Chances of achieving this career (% very good or excellent)	72.1%	75.2%	81.1%	86.8%	85.4%
How do you think your chances for success in life, in terms of career and income, compare to your parents? (% much better)	75.9%	56.5%	28.7%	13.0%	18.5%

a hard time equaling or surpassing their parents' status is, logically enough, largely found among upper status youth (our data indicate that minority students and students who identify as 'lower' or 'working' class are relatively less likely to see their future life chances as worse

or more difficult than that of their parents' generation). Unfortunately, none of the items we used in this survey are adequate for assessing the degree of anxiety about future opportunities that may be present in various sectors of the student body. While freshman are slightly more optimistic than seniors in terms of their chances of achieving their desired career, both groups express similar levels of optimism (or pessimism) about their chances for success relative to the standard set by their parents.

That is, the data do seem to indicate that students from all class backgrounds are less than sanguine about their future occupational and career interests.

SOCIAL ACTIVITY & INTEGRATION

There are striking differences in the social practices and activities of students from different backgrounds. From our data we can see that despite numerous efforts to integrate 1st generation students, they remain outsiders in terms of campus discourse and engagement—a reality unchanged from the outsiders depicted by Horowitz. Table 4.5 shows that while 1st generation students are less likely to devote significant amounts of time to partying, socializing, and participating in exercise or sports they are more likely to instead be working greater amounts of time on campus, helping in a family business, taking care of household or childcare responsibilities, and commuting to and from campus.

While one may find the greater time 1st generation students spend with teaching assistants as a sign of academic engagement, other data related to interactions with peers from the survey suggest that this interaction is more likely to relate to class performance than it is to genuine intellectual engagement. In Table 4.6 we show the differences in the percentage of students who report engaging in out of class discussions often or very often with other students on an array of topics.

Clearly, 1st generation students are less likely to be as frequently engaged with their peers in conversations on these any of these topics. While competing demands for their time likely play a role in this lower level of engagement in peer discourse around these topics, it is also clear from our data that 1st generation students are less likely than their traditional counterparts to view the campus as friendly and welcoming (see Table 4.7) .

Table 4.5: Time Usage (Percentages)

Hours per week	Activity									
	Party	Socialize	Exercise	Work on campus	Student clubs / groups	Helping family business	Household / Childcare	Commute campus and work	Faculty out of class	TAs office hours
	Traditional Students (seniors)									
0	17%	1%	8%	61%	45%	92%	50%	23%	22%	32%
< 1	20%	2%	13%	1%	10%	3%	17%	26%	43%	43%
1-2	18%	8%	18%	2%	15%	2%	21%	24%	24%	19%
3-5	25%	27%	32%	5%	14%	1%	8%	16%	7%	4%
6-10	13%	31%	18%	12%	8%	1%	2%	8%	2%	1%
11-15	7%	31%	11%	19%	8%	1%	2%	3%	2%	1%
Non-Traditional Students (seniors)										
0	29%	1%	13%	53%	48%	81%	42%	20%	23%	28%
< 1	20%	5%	18%	1%	12%	5%	16%	20%	36%	39%
1-2	20%	14%	24%	2%	15%	6%	20%	22%	27%	24%
3-5	16%	32%	27%	4%	13%	3%	12%	19%	9%	7%
6-10	9%	23%	11%	11%	7%	3%	6%	13%	2%	1%
11-15	6%	25%	7%	29%	5%	2%	4%	6%	3%	1%

Table 4.6: Percentage of Students Engaging (Often or Very Often) in out of Class Conversation on

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
Philosophy	40.2%	42.4%	26.2%	28.9%
Science	23.7%	31.0%	14.2%	28.0%
Racial Issues	29.9%	37.4%	28.4%	29.2%
Current events	42.6%	58.8%	35.1%	48.1%
Social issues	38.5%	44.9%	31.3%	34.4%
Arts	17.8%	22.8%	9.6%	13.0%
Technology or computing issues	23.0%	29.3%	19.1%	26.1%

Table 4.7: Percentage of Students Strongly Agreeing that

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
Students on campus are friendly	39.6%	31.6%	27.4%	24.2%
Feel comfortable expressing political views on campus	32.4%	27.7%	18.0%	18.6%
Curriculum includes contributions from people of diverse backgrounds	33.3%	27.8%	24.4%	18.4%
Atmosphere of religious tolerance on campus	30.1%	20.9%	20.9%	15.7%
People on campus respected regardless of sexual orientation	31.8%	25.9%	23.8%	21.3%
Faculty are approachable, available, and helpful to students	27.0%	19.0%	19.8%	13.7%
Feel belong on this campus	41.4%	44.2%	29.0%	32.5%

Patterns of course taking and studying also differ between the two groups. Table 4.8 shows while little data exists that might suggest the motivations for students' course taking behaviors in earlier periods, our data show that grades and scheduling figure more importantly in the course selection process for 1st generation students.

Time devoted coursework and studying varies by student subgroup. Table 4.9 shows that students perceive the degree of their commitment to coursework quite differently. It is interesting to note

Table 4.8: Percentage of Students Citing as Most Important or Major Reason for Course Selection

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
Help GPA through an easy course	15.2%	15.1%	20.6%	18.9%
Intellectually challenging/stimulating	60.8%	67.3%	53.0%	61.3%
Personal time preference	60.0%	49.3%	64.6%	54.7%
Fits work schedule	21.0%	30.8%	36.6%	43.2%
Help GPA through an easy course	15.2%	15.1%	20.6%	18.9%

Table 4.9: How Much More Time Should you Have Spent on Coursework?

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
Much, much more time	11.2%	8.1%	19.7%	15.0%
Significantly more time	23.7%	20.1%	34.9%	27.1%
Somewhat more time	48.4%	47.4%	37.6%	43.3%
I am spending about the right amount of time	16.7%	24.4%	7.8%	14.6%

that over 42% of all 1st generation seniors state that they should have devoted “much, much more time” or “significantly more time” to their coursework (compared to just over 28% of traditional students). The gap among freshmen is even greater.

Reasons cited in Table 4.10 for failure to devote adequate time to coursework varied across the groups as well, with social life and uninteresting coursework being more frequently cited as barriers for traditional students. First generation students are more likely to report that work and inadequate study skills tend to compromise their ability to commit time to their studies.

Through these data we see hints of processes at work that have defied attempts by applied researchers to accurately assess student engagement and success over the decades. That the student body has become dramatically more diverse serves to confound the relatively straightforward understanding of pioneering research in the area of student culture. The worlds in which today’s students define their

Table 4.10: Percentage Citing as Most Significant or Major Barrier to Spending More Time on Courses

	Traditional Students (N = 3499)		First Generation (N = 1928)	
	Freshmen	Seniors	Freshmen	Seniors
Social life competes too much	21.5%	20.1%	17.6%	14.0%
Job competes too much	4.4%	14.0%	8.5%	18.3%
Friends (peers) do not spend enough time studying so it is hard for me to do so.	14.0%	10.8%	12.3%	9.4%
Coursework in uninteresting	32.6%	31.9%	28.7%	26.8%
Coursework not directly relevant to my career	21.7%	22.7%	19.9%	22.8%
Habits / time management skills are not good	34.3%	25.6%	39.8%	27.3%

college experience tap myriad dimensions of identity and beg renewed attention to the role that student cultures play in mediating the well-founded efforts of researchers and campus administrators interested in better understanding and improving student success in college.

21ST CENTURY ‘OUTSIDERS’

In earlier eras, the ‘collegiate’ subculture was opposed by an alternative framework that attracted numbers of relatively advantaged students—the ‘intellectual/bohemian’ subcultures. Among today’s students, however, the most evident subcultural alternatives are constituted by minority students. A distinctive and coherent bohemian/rebel/non-conformist subculture isn’t evident (at least at the University of California right now). Still, there is a decided division among traditional students with respect to the intrinsic/instrumentalist dimension and a large proportion of traditional students (especially those of less advantaged background) are certainly not ‘partyers’ and are more academically and intellectually motivated.

Our empirical observations about the relative seriousness and academic commitment of first-generation students also resonate with the past. As Horowitz summarizes, campus ‘outsiders’ in earlier eras (like the 2nd generation Jewish students of the 20s and 30s) were also likely to be far more eager and committed academically and intellectually than their upper status peers. The student body today bears a

considerable resemblance to that earlier era when waves of first generation students of immigrant background began to throng to higher education, and to that post-war moment when waves of returning GIs started to go to college.

COLLECTIVE AND INDIVIDUAL IDENTITY

Much has been written about the new subcultures of ethnic minority students. Much of this writing, rarely based on empirical investigation, emphasizes that these subcultures are deeply involved with politics of identity—and therefore, separatist, divisive, intolerant of difference—and that minority students are accordingly pressured to conform to fixed collective identities [see Altbach (1991) for a notable exception to this observation]. Such depictions, as stereotypical as those of the ‘slackers’ and the ‘angry white males,’ need to be re-examined. It is far more fruitful to understand each minority student as wrestling with efforts to reconcile and synthesize *both* the moral requirements of collective identity *and* strong needs for individual expression and attainment. Understanding something about how students work through and resolve contradictions between collective and individual identity, between their sense of social responsibility and their desire for individual recognition and status is a key to understanding the current student experience. Data we are collecting through the UCUES effort strongly suggest that 1st generation students—overwhelmingly from working class and lower income families and who are making family and personal sacrifices to be in school—are far less uncertain than their upper middle class peers about the value of a college education. Their aspirations are classic, even if the new economy may be harder to negotiate than that faced by earlier generations of the newly arrived. Unlike previous upwardly mobile immigrant students, today’s ‘first generation’ students may be more conscious of sustaining and fulfilling communal ties and responsibilities, and more likely to define their moves up the ladder as contributions to their communities rather than simply as expressions of self-interest.

INSTRUMENTALISM

Data from UCUES and from a wide array of other sources show that students of all race and class backgrounds define the purposes of college in ‘instrumental’, ‘economistic’ terms. Relatively few students say that they are going to college to gain knowledge, or to develop themselves,

or to enable them to contribute to social betterment. The prevalence of instrumentalism in the academic outlook of students contributes to a narrowing of students' interest in using the opportunities the institution provides for self-development. The instrumental attitude may be applied to class attendance (why go to class if it won't be on the test); to participation in extracurricular organizational activity and community service; to attendance at non-required concerts, performance events, lectures, museum exhibitions, etc.; to following the news and trying to understand the public happenings and debates of the moment; to developing an interest in non-required reading (or even to reading assigned work).

There is however a difference between the instrumentalism of relatively advantaged students and those from working class or minority background. At least some of the latter see that *expanding one's cultural awareness and social knowledge adds to one's cultural capital*. The instrumentalism of students from minority, immigrant or working class background can stimulate active and even hungry use of the opportunities for mind expansion and consciousness raising that the campus provides (as it did for 2nd generation immigrant students at places like CCNY in the 20s and 30s, and the instrumentally oriented returning GIs after World War II).

INTERACTION OF ECONOMIC PESSIMISM AND INSTRUMENTALISM

We suspect, too, that instrumentalism is associated with insecurity about the economic future. Students who believe that they face an uncertain, highly competitive and inhospitable opportunity structure are likely to interpret their college activity as an effort to increase their marketability. This complex of attitudes (which needs to be documented more fully than it has so far) is related to a complex of socio-economic changes that have been much discussed and speculated about: the globalization of the economy, and the emergence of a 'postindustrial' structure of occupational opportunities, has led to corporate downsizing, the erosion of professional and technical career ladders, and demand for a work force that is 'flexible' (and therefore willing to adapt to arbitrary disruptions of career paths and expectations). Students overwhelmingly believe that it will be difficult for them to find vocation that is really fulfilling, and they believe that previous generations of college graduates had an easier time economically than they will have. We want to explore more fully in our future research how such attitudes affect the subcultural patterns we have observed.

SOME POLICY IMPLICATIONS

Tentative findings and working hypotheses such as those laid out in this chapter will be further refined and tested with the data that continue to be gathered through UCUES. To the extent that this depiction of the student scene makes sense at the University of California, and to the extent that it can be generalized to other institutional settings, important questions for educational policy and practice seem to flow from them. First though we put forward a recommendation that flows from the ideas and observations we have advanced in this chapter:

- We should consider assessing the value of the college experience and who benefits from it not simply in terms of quantitative measures of students' performance in classes and on tests, but in terms of their development as members of the culture and the polity. Students from relatively advantaged backgrounds test well, and know how to maintain B averages (and this applies to many who avoid serious commitment to either their courses or the wider life of the intellectual community). Students of disadvantaged background may not test well and may struggle academically because of poorer pre-college preparation—but these may be among the primary constituencies more fully benefiting from the chance to be in college. Recent challenges to continued use of the SAT as a primary tool for admissions are accordingly quite timely, since an implication of the story we are telling here is that reliance on such tests may not necessarily recruit the most motivated and most promising young people.

Several policy relevant questions flow from this:

- How can academic commitment and community engagement be fostered in the present climate? Who is likely to be a more committed student: one who is freed from competing demands and can be a student full-time, or one who has to work as well as study? Perhaps campus climate, student involvement, and personal development would be enhanced if all students were expected to have some kind of real world responsibility as a part of their daily lives.
- How can the instrumentalism that prevails in student culture be challenged and broadened? The traditional faculty effort to pit an ideal of 'knowledge for its own sake' against prevailing students' utilitarianism may now amount to futile gesturing. For

the institution's own endlessly repeated advertisement is itself largely utilitarian—and this converges with parents' reiterated demands that their offspring pursue practical courses of study that justify the ever increasing cost. If students today are detached from many of their classes because: a) making the grade can be separated from genuine engagement with the subject matter or ideas being conveyed, or can be accomplished while cutting many corners; or b) the class itself seems instrumentally irrelevant; or c) the class is being taught in ways that are uninvolving—how can such detachment be overcome? The conventional answer seems to be to increase the entertainment value of lecture sessions or increase the effectiveness of testing procedures to prevent corner cutting. There is also a considerable effort to adjust the curriculum to market demands.

- Is there a way to attract students to more authentic intellectual engagement? Our data indicate that students across the boundaries that separate them seem to share a desire for voice as students in institutional decisions that affect them. At the same time, we conjecture (but don't yet have data to verify) that students might be challenged by a curriculum and a pedagogy that provided opportunity to find their own voices as individual persons in the vast sea of globalized culture in which they have to swim. Offering students opportunity and resources to gain voice as citizens and as consumers and producers of culture provides a way to connect the 'instrumental' and the 'intellectual' as mutually supportive values.

A FINAL NOTE ON METHODOLOGY

The rich tradition of research between the 1930s and 1960s focusing on student culture capitalized on a number of methodological innovations that served to encourage further interest and investment in work being done in this area. Newcomb's early work at Bennington employed a longitudinal design—an approach relatively uncommon until that point. Moreover, that early work on college students spawned a host of projects focusing upon group processes, work that was closely aligned with the rapidly growing field of social networks (e.g., Festinger, Schacter, & Back, 1950; Rossi, 1966, see Wasserman and Faust, 1994 for a complete overview). Despite the advancement of social science methods during the middle part of the 20th century, and the rapid evolution of work in the field of social network analysis, the

major concept of the student peer group as mediator proved elusive to empirical models that could adequately capture the interactions between students and their networks that were presumed to be so central in this group process.

As much as the emphasis on peer-groups provides a tempting empirical avenue for understanding the mediating effects of the peer group, this should not be understood as culture itself. Sanford (1962) notes that:

Each society or subsociety must have a culture—some shared values and beliefs—but individuals within these societies may have distinctive cultural outlooks without joining like-minded individuals in face-to-face groups. (But like-minded individuals who are different from the majority do tend to get together in the colleges, and this is one source of recognizable subcultures.) (p. 59).

Thus while student subcultures can be manifest in peer groups these are not necessarily the only avenue to understanding the mediating forces of student subcultures. Key here is the identification of those values, beliefs, and prescribed ways of behaving identified by Sanford. Aside from the long-running CIRP program (a program that does not easily enable campus specific examinations that are a central feature of this work) there exists frightfully little data through which a renewed program of research on student culture can be established. Other than the notable exception of the UCUES project at the University of California, we are hard pressed to identify other significant investments along these lines.

No contemporary research has successfully married the attitudinal and structural dimensions of student peer groups that Sanford so well articulated in 1962. These features figured prominently, for example, in the pioneering work of Newcomb at Bennington, as well as work by Wallace (1966) who examined social network effects on aspirations during the freshman year, and Newcomb and Flacks (1964) who examined the role of deviant subcultures at Bennington (i.e., those deviant in terms of values espoused by the institution). Few scholars have attempted to incorporate clearly identifiable themes from that earlier research into research on today's college settings.

We feel this is a terrible shame. For not only does this represent a problematic blind spot in the field of knowledge informing student success, but it also occurs at a point in time when the considerably more refined methodological tools available to today's researchers promise to unlock much of the potential left dormant in decades of

earlier research. Significant advances in measurement of perceptions and attitudes, contextual modeling enabling the modeling of interactions between observation at different levels of analysis (e.g., Bryk & Raudenbush, 1992; Lindley & Smith, 1972; Muthen, 1994), and areas of social network analysis aimed at formalizing the peer influence process (e.g., Friedkin, 1998) provide the interested researcher with a wealth of methodological tools that could unlock a most promising line of research on student culture at a time when there are more outsiders than traditional students on most of our college campuses.

There is in fact a fair amount of research demonstrating the theorized effects of peers on a variety of student outcomes (as opposed to process). Most of this empirical research, however, operationalizes peer group structure by using global affective measures such as a student's sense of belonging and friendship (e.g., Pascarella & Terenzini, 1980) or by using aggregate measures of some student body characteristic such as political attitude (e.g., Dey, 1997).

But as we have argued in this chapter, student culture is a powerful mediating force on any number of college impacts that are presumed to be connected to student success. If the findings from earlier work on student culture remain valid today, student engagement, a topic that is receiving tremendous attention, must be deeply intertwined with peer relations and student subcultures. To the degree that this is true, sweeping generalizations about the perspectives of the student body as a whole are likely to be incorrect given the underlying divergences in the ways in which students experience and respond to college.

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5. TEACHERS' NONVERBAL BEHAVIOR AND ITS EFFECTS ON STUDENTS

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INTRODUCTION: IMPORTANCE OF NONVERBAL BEHAVIOR

We all live today in the era of the visual, of the nonverbal. People are continuously and excessively exposed to television, cinema and theater, and these media transmit a multitude of types and bits of information in nonverbal (NV) channels. From a young age children learn to understand the “NV language,” to decipher implicit codes and to make meaning of social situations from numerous, often very subtle NV nuances (including lighting, camera angles, music, and certainly facial expressions and body language). People learn to understand situations without having to receive verbal explanations, such as knowing instantaneously whether they are provided with facts (news), told a story (movies or series) or being manipulated (advertising) the minute they turn on their TV. “NV behavior” includes all expressive aspects that are “non-verbal,” that is, that they have no verbal content, words, or spoken and/or written language. NV research focuses on body language, facial expressions, gestures, postures, movements, vocal cues, attire, physical appearance, and behavioral patterns in interpersonal interaction.

The purpose of this chapter is to examine the area of NV behavior as it relates to higher education, and to focus particularly on the contributions of instructors' NV behavior to their teaching effectiveness. Common-sense would support the general notion that effective instructors are

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nonverbally expressive in addition to their verbal teaching qualities. But the extent, the unique impact, and the exclusivity of the NV aspects have been the grounds for much research and substantial controversy. In this chapter, I first provide some background information about NV research and its relevance to education. Subsequently I review the major conceptualizations, applications, and types of NV research in higher education, explicate methodological problems and overgeneralizations based on faulty research, and eventually lead to an up-to-date evaluation of the status and role of NV behavior in effective teaching.

In her review of NV behavior and self-presentation, Bella DePaulo (1992) described the special significance of NV behavior in several aspects: Its irrepressible nature, its links to emotion, its accessibility to observers, its speed, and the fact that it communicates unique meanings. To these factors, one can add the commonly-held belief that human deception can be detected through the examination of different NV channels – a belief that is borne out by a rich literature (e.g., Ekman, 1985; Ekman & Friesen, 1969b; Zuckerman, DePaulo, & Rosental, 1986). NV behavior simply exists and is enacted in almost every human situation, and therefore it is reasonable to assume that it is likely to influence the outcomes of human interactions of all kinds.

Therefore, NV behavior is part of the process of intended and/or unintended social influence, serving as a tool or a mediator toward the attainment of a wide spectrum of objectives. Some of these objectives are genuine, innocent and well-meaning, others might be devious, and some may be malicious. In education, students at all levels spend a huge number of cumulative hours with their teachers. The teachers have a clear agenda of influencing students and leading them to scholastic and cognitive attainments, but the students do not continuously share this agenda. Clearly, teachers' NV conduct must be meaningful in mediating the attainment of educational outcomes. Instructors' expressiveness can contribute to teaching effectiveness by maintaining student interest and preventing boredom; it may increase general or subject-specific student motivation as a function of instructor's enthusiasm; and it can often contribute directly to the quality of the verbal instruction through illustration and emphasis.

THE PSYCHOLOGY OF NV BEHAVIOR

RESEARCH TOPICS IN NV PSYCHOLOGY

Research on NV behavior grew out of the study of emotions and of the expression of emotions (dating back to Charles Darwin), and

then expanded into social areas dealing with human communication, including the field of education. The central figure in NV psychology of emotions in the last half century has been Paul Ekman, who developed methods for identifying the basic human emotions in facial expressions, dealt with deception, detection and leakage, and has led research on NV behavior both conceptually and methodologically.

In their review of NV research in the fourth edition of the *Handbook of Social Psychology*, DePaulo and Friedman (1998) summarized the central research topics in contemporary NV psychology. The topics include person perception and personality judgments based on NV sensitivity; NV aspects in self-presentation (such as the expression of personal charisma and other attributes); the study of deception and detection of lying (either through leakage of false affect through people's differential ability to control the various NV channels, or through exaggeration); social influence and attempts to manipulate impressions (by politicians, for instance); NV aspects involved in interpersonal attraction; and the communication of interpersonal expectations (by judges, doctors, and of course teachers). Tests measuring sensitivity in NV decoding ability (by Rosenthal, Hall, Archer, DiMatto, & Rogers, 1979, and by Archer & Costanzo, 1988, see also Costanzo & Archer, 1993) led to a multitude of studies on NV behavior in different contexts, and to the development of applied practice to improve NV skills.

THE REPERTOIRE OF NV BEHAVIORS (EKMAN & FRIESEN, 1969A)

In a now-classic article, Ekman and Friesen (1969a) introduced and analyzed the five major types of NV behavior, laying the conceptual foundation for subsequent research on NV behavior. The five types are: Emblems; Illustrators; Affect displays; Regulators; and Adaptors, and they are delineated next, emphasizing their relevance to education when appropriate.

Emblems are "complete" NV acts that have a direct, clear and shared meaning, which usually has a verbal definition consisting of one or two words or a phrase. They are communicated intentionally and are meant to transmit a clear message or shared meaning. Examples of emblems include making a fist and various obscene or sexual gestures. The shared decoded meaning of emblems is either iconic or consensual (like pointing a figure at the temple to indicate confusion or the consensual emblems of sign language). Emblems are communicative and parsimonious, because they are complete, summative, consensual

statements. Teachers often use emblems in providing explanations and in their interactions with students, although I did not come across any empirical study of teachers' emblems.

Illustrators are movements tied to speech, serving to illustrate what is being said verbally. They are learned with a communicative intent of emphasizing intended messages. Sometimes illustrators are emblems (though not always complete messages) and at other times they are facial affect displays (see next), and they are always intended to improve communication through illustration and amplification. Effective teachers use NV illustrators continuously, and this use is an important aspect of their effectiveness. In training for public speaking and in microteaching (see later discussion) people are taught and trained to use illustrators.

Affect display are the movements of the facial muscles expressing the primary emotions. According to Ekman and Friesen, each of the primary emotions (happiness, surprise, fear, sadness, anger, disgust, and interest) has unique, distinctive movements of the facial muscles, and they are universal to the human race. Ekman developed coding systems (FAST and then FACS – Facial Action Coding System, see Ekman & Friesen, 1978) to code and quantify each emotion, and has led since then a wide field of the study of emotions and clinical applications. Later, Ekman also defined “display rules” – procedures for the management of affect displays in various social settings (when to over-intensify and when to de-intensify, when to emphasize and when to conceal). Affect displays are extremely informative and influential, but they are not deliberate and do not have a communicative intent as emblems and illustrators. Affect displays can be consonant or dissonant with verbal messages, and much of the study of deception is based on affect displays and on gaps between channels. In education, teachers are supposed to be nonverbally expressive, and their genuine affect displays probably act as mediators in fostering student motivation and learning. Unfortunately, affect displays also play a crucial role in the transmission of teachers' negative expectancies, potentially hindering low-expectancy students.

Regulators are NV acts intended to regulate the back and forth interaction and control the behavior of the other(s). Examples of regulators include head nods, eye contact, slight movements forward or backward, eyebrow raising, hand movements, etc. Regulators do not have a universal content and they are not necessarily deliberate or intentional. Affective displays, illustrators or adaptors (next) can

function as regulators. In education, regulators are critical in classroom management and in teacher-student interaction.

Adaptors are anti-communicative, transmitting that the person is busy with him/herself and his/her own needs, and is not attentive to the other. Examples of adaptors include self-referent behaviors such as grooming, nail-biting, head-scratching, fidgeting with self (self-touching) or with object (pencils, glasses, watch, etc.). Adaptors are directed “inside,” toward the self and away from the other. In NV research, adaptors would usually found to be negative predictors, contributing to negative impressions and leading to negative reactions. People in interaction would usually prefer to ignore the adaptors of the other person, and preferably, not to be aware of them at all.

CATEGORIES OF NV RESEARCH PERTINENT TO TEACHING (SMITH, 1984)

In an article summarizing the state of the art of NV behavior in teaching, Howard Smith (1984, following Knapp, 1978) listed seven categories of NV research pertinent to teaching and learning. Although Smith did not refer particularly to higher education while most of the research discussed in the present chapter has been conducted after 1984 and was focused on higher education, the Smith categories are still helpful in the classification of NV research types at all levels of education.

Environmental factors involve the influence of the physical attributes and of school and classroom setting on students. The design and physical characteristics of the school, the arrangement of the classroom and the seating arrangement create the milieu and the atmosphere for learning. Today, such environmental factors would not be considered as representing “NV research” but would rather be classified as “environmental psychology.”

Proxemics concerns the perception and use of personal space. The physical distance between teacher and students, the seating of students facing each other or seated in rows and columns, and the implicit norms concerning proxemics influence the learning climate and the nature of teacher-student interaction. In seating arrangement research, evidence shows that the most positive student attitudes and their best academic efforts are observed in the “activity zone” in the center of the classroom, close to the teacher (Moore & Glynn, 1984). Today, one of the most influential conceptions relating NV behavior and educational outcomes – “NV immediacy” – is defined by the “psychological closeness” between the teacher and the students.

Kinesics is probably the central category of NV behavior – including gestures, facial expressions, posture and body language, actually the entire range of expressive behavior. The study of instructor expressiveness and its relation to teaching effectiveness is the central theme of this chapter.

Touching behavior (also called haptics). In fact, educational research on touching behavior is quite rare. Although caring about children (and taking care of them) often includes touching, the issue of teachers touching students is a bit touchy and wrought with ethical limitations. Therefore, touching behavior would not be considered a major category of educational NV research today.

Physical characteristics of teachers and students, and *artifacts* are two Smith categories focusing on physical attractiveness and appearance, on clothes, jewelry, beauty aids and their influence on the perceivers. Frankly, it seems that not much educational research has focused on these features.

Paralanguage refers to the NV characteristics accompanying speech, such as voice pitch, volume, tempo, intensity, pauses, silences, etc. Today, research on instructors' enthusiasm and immediacy employs a global approach to the overall conduct of the instructor, including verbal behavior and the NV characteristics which accompany it. The total NV style of the teacher is considered to be a central mediator of teaching effectiveness, and teachers' paralanguage (which could represent illustrators, affect displays and regulators in Ekman and Friesen's terminology) is quite important.

PERSPECTIVES ON THE ROLE OF NV BEHAVIOR IN EDUCATION

THE SECONDARY ROLE OF NV BEHAVIOR IN EDUCATION

The origins of NV research are rooted in the study of emotions, and over the years it expanded to many fields focused on communication, including education. But given that the central objectives of schooling are cognitive development and scholastic achievement, it is then the *verbal* domain that is most significant in education, and NV research must take a secondary position. Beyond the curriculum, subject matter, didactic methods, cognitive strategies, and a host of other factors supposed to facilitate students' learning, instructors' NV behavior is important in the *delivery* of instruction and in the management of teacher-student interaction. As a mediator in the success of the verbal

domain in achieving the central goals of education, NV behavior can be quite detrimental to teaching effectiveness. Bad instructors most often fail in their NV delivery, and excellence in teaching is probably due to a large extent to instructors' positive expressive style.

Thus, the main focus of NV research in education is on the instructors and their delivery of instruction, secondary to subject-matter concerns and didactic methods. Delivery of instruction has been the central focus of two separate conceptualizations and separate bodies of literature – “teacher enthusiasm” and “teacher immediacy.” Both approaches are discussed in detail in this chapter, and it is argued that they investigate the very same phenomenon despite the distinct terminologies. Both phenomena focus on teacher expressiveness which is considered to contribute to creating the motivational and affective conditions that improve students' coping with learning materials and facilitate their learning and cognitive gains.

The goals of education might be construed in a wider perspective than cognitive learning, to include students' satisfaction, motivation and involvement as important objectives in their own right, not just as means for improving learning. In this broader perspective, the contribution of instructors' NV behavior becomes more central and more direct.

OVERALL “NV STYLE” VERSUS SPECIFIC “NV BEHAVIORS”

In educational research, the commonly-used definition of “NV behavior” is very global and generalized. At the other end of the specificity continuum, in Ekman's study of emotions, each emotion is defined by a particular profile of more than 40 facial muscles and characteristics. Similarly, in microanalysis, the method designed to trace specific NV behaviors contributing to global impressions (see later section on “Microanalysis”), dozens of specific NV behaviors are examined. And, in deception research, behavior is broken into different NV channels. In contrast, most of the NV research in higher education is focused on a single generalized concept (positive impression, enthusiastic, immediate, etc.) that sums up a host of specific variables. In fact, that generalized concept of overall style might include verbal behavior as well (e.g., use of humor), as long as the verbal content does not constitute of actual subject matter instructional material and is limited to the expressive domain. Thus, much of NV research in higher education is focused on generalized expressive style archetypes with no analysis of specific NV behaviors and their unique

impact on students. I believe that a more exacting analysis of specific components of NV style has greater methodological and scientific value *and* greater potential applicability.

DISPARITY BETWEEN COLLEGE ENVIRONMENT AND ELEMENTARY/HIGH SCHOOL ENVIRONMENT

Because this chapter is almost exclusively focused on higher education, it is important to explicate the differences between the college and university environment on the one hand, and the elementary and high school classroom on the other hand, especially as far as research on NV behavior is concerned. The social nature and the organizational characteristics of the classroom and the role of the teacher/instructor differ considerably between the two settings. Therefore, the spectrum of (NV-related) issues relevant to higher education is more limited compared to school settings, and much of the NV research in elementary and high schools is mostly irrelevant to higher education.

Higher education is usually voluntary, the students are older and more mature, and they study the topics of their choice (indeed, some required, compulsory introductory courses in college are characterized as having “a high school atmosphere”). Instructors in higher education enjoy a higher status, they are almost totally exempt from administrative and classroom management duties, and they have to take a punitive stance very rarely. Their interaction with the students is less intense and looser than in the elementary and high school levels, and their role is almost exclusively focused on teaching their subject matter and field of expertise. In a way, the sense of coercion that often characterizes elementary schools and high schools is not felt in higher education, and it is less normative for college students to hate school. Finally, the average intellectual level of students in higher education is higher than in most public elementary and high schools, owing to the selective process, and most college and university classes are less heterogeneous than elementary and high school classes.

Therefore, NV research related to teachers' conduct in managing their classrooms and dealing with discipline problems is almost irrelevant to higher education. Moreover, the wide area of teachers' differential behavior (Babad, 1993) and the NV communication of teacher expectancies (Harris & Rosenthal, 1985, 2005) – a highly significant steppingstone in the development of NV research in elementary and high school education – is largely irrelevant to higher

education. I might add that the standard questionnaires measuring college students' evaluations of their instructors – the dependent variables reflecting teaching effectiveness in research to be reviewed later in this chapter and a central focus of this entire book – are inappropriate for use with elementary and high school students in their conventional form.

MICROTEACHING – A MAJOR APPLICATION INVOLVING NV BEHAVIOR

Microteaching (MT) is the best known applied educational intervention involving NV behavior. The development of MT was not based on empirical research nor on a particular educational theory (although it might have been conceptually connected to the phenomenon of observational learning which evoked much attention in the early 1960s, see Bandura, 1977). MT followed the advances in video recording technology in the 1960s, when it became possible to videotape teaching sessions of sufficiently good technical quality without needing VCR experts and studios. Enthusiasm about it was probably fueled by the advances made in the 1960s in group-based methods of skill training within the (then growing) human relations movement. MT was developed by Dwight Allen and his colleagues at the Stanford University Teacher Education Program, and its popularity spread very quickly as a major intervention in teacher development and in teaching improvement programs worldwide (Allen & Ryan, 1969; Brown, 1975; Perrott, 1977). Today, it seems that the over-enthusiasm of the 1970s about MT has subsided somewhat (perhaps together with the decline of the group dynamics movement), and most practitioners now take a more realistic view of its potential for increasing teaching effectiveness. However, almost every teacher had participated at least once in a MT feedback session and examined her/his NV behavior in delivering instruction and interacting with students.

MT is essentially a data-based feedback intervention for teachers' self-inquiry ("reflection") and skills training. A teaching session is videotaped in a classroom or in a studio and the recording serves as raw "empirical" data. The recorded material constitutes the most complete coverage of all aspects of the teaching situation, and it provides the most reliable and unbiased evidence of teacher behavior (unlike supervisor's observation or self-report). In the MT training session, the videotaped material is viewed together by the videotaped teacher,

the supervisor, and often by the teacher's peers as well, and the teacher receives personal feedback and supervision. The analysis of the videotaped data can take many forms, from open impressionistic discussion to more exacting analyses of pre-selected aspects. Statistical treatment of operationally defined and measured variables might be included as well.

MT was not intended initially to focus particularly on NV aspects, but was conceived as a general tool for the development of effective instruction. Undoubtedly, the analysis of the fully reconstructed verbal material and contentual flow of instruction is highly important, and much (if not most) work in MT sessions is focused on the (verbal) didactic aspects. Still, MT gained significance in the NV domain because of the unique power of the visual aspect. People are very excited to see themselves videotaped, and it seems that they are quite willing to receive feedback and constructive advice when the visual evidence of the finest nuances of their NV behavior can be seen in the recording. I would venture to say that most people show more readiness to be dissatisfied with themselves and to be less defensive when they are confronted with the videotaped evidence.

Therefore, the potential contribution of MT to the issue of NV behavior in instruction became significant several decades before researchers have begun to conduct systematic empirical research on teachers' NV behavior in the classroom. Long before the formulation of theoretical conceptions about teacher enthusiasm and teacher immediacy, it was clear that teachers' trainers and tutors had clear implicit (or explicit) theories about the role of teachers' NV behaviors in instruction and about the potential contribution of NV conduct to teaching effectiveness. The image of the successful teacher always included numerous NV aspects, and the evidence in the VCR recording made it possible to analyze each aspect and to provide teachers with corrective feedback (which could be examined in subsequent recordings).

Thus, MT highlights the role of NV behavior in teaching, and provides opportunities to include NV behavior in teacher training and in teaching improvement programs through "data-based" (however loosely defined) corrective feedback and supervision. Still, the basic problem was that the objective data exists in the videotaped pictures, but the interpretation of these data by supervisors and peers has been largely intuitive, not based on research and on valid findings showing systematic relationships between specific NV behaviors and defined educational outcomes.

TEACHER ENTHUSIASM IN HIGHER EDUCATION

Suppose we were interested in teaching excellence, and we would want to find out whether excellent (or good, or effective, or successful) teachers have in common behavioral characteristics that distinguish them from non-excellent or less successful teachers (see Theall and Feldman's chapter in Perry & Smart, 2007). To find the answer, we would have to measure various behavioral characteristics of the teachers, to independently assess their success or effectiveness, and then to explore the relationships between the two measured clusters. Perhaps teaching excellence is expressed in unique, idiographic profiles, and no systematic differences would be found between the two groups of teachers, but it stands to reason that consistent differences *would* be found. Probably many, if not most of the behavioral correlates of teaching excellence would be verbal (e.g., giving clear explanation of terms and concepts, asking answerable questions, providing succinct overview and summary, etc.), but some correlates would be nonverbal (smiling, gesturing, showing enthusiasm, etc.), and still other predictors would be "organizational" (using a variety of media, access to students, structuring course assignments, etc.).

In a seminal study on teacher expressiveness and its relation to teaching effectiveness, Harry Murray (1983a) asked the question posed above, and examined it on a sample of 54 Canadian university professors. They were divided into three teaching effectiveness groups (high, medium, and low) according to averaged students' ratings of these instructors (SRT) in past courses. Each instructor was observed for 18–24 hours over a period of three months, and judges rated their behaviors on the 60-item Teacher Behavior Inventory. The Inventory included items in the following domains: Speech, NV behavior, explanation, organization, interest, task orientation, rapport, and participation. All items represented low inference measurement, describing specific, measurable behaviors, and they were summarized for each instructor for all observations of all judges.

Of the 60 behaviors, 26 showed significant differences among the low, medium and high SRT groups (see Murray's Chapter in Perry & Smart, 2007). The five teaching behaviors showing the largest differences were: (1) Speaks expressively or emphatically; (2) Shows strong interest in subject; (3) Moves about while lecturing; (4) Uses humor; and (5) Shows facial expressions. Murray saw these behaviors as communicating enthusiasm for the subject matter and thereby eliciting and maintaining student attention to lecture material. Factor

analysis of the ratings yielded nine interpretable factors (Clarity; Enthusiasm; Interaction; Task orientation; Rapport; Organization; Use of media; Pacing; and Speech), and mean factor scores were computed. Three of the factors yielded substantial differences between the three groups of instructors – clarity, enthusiasm, and rapport.

On the basis of these results (Murray, 1983a), teacher enthusiasm was defined as consisting of the following expressive teaching behaviors (Wood, 1998):

1. Speaking in a dramatic or expressive way,
2. Variation in pitch and volume,
3. Vocal inflection,
4. Smiling or laughing while teaching,
5. Moving about while lecturing,
6. Gesturing with hands or arms,
7. Exhibiting facial gestures or expressions,
8. Eye contact,
9. Humor

Except for humor, which should be classified as a verbal behavior, all characteristics of teacher enthusiasm are NV. [The behavioral operational definition of instructor expressiveness used by Perry, Abrami, & Leventhal (1979, see later discussion of the Doctor Fox phenomenon) was virtually identical, defined as voice intonation (items 1–3 above, physical movement (items 4–7), eye contact, and content-relevant humor].

During the same year, Murray (1983b) published a second study which complemented the previous study by examining the relationship between instructor enthusiasm and students' actual learning outcomes. In the 1983a study – as in most studies on NV behavior in education – educational outcomes were measured by students' self-reported evaluations of their instructors and of their own learning. Under ideal conditions, strong, valid, objective measures of learning and achievement are preferable to students' subjective self-reports, but such outcomes are hard to obtain in most studies.

Murray (1983b) focused his study on 36 instructors who taught sections of a multi-section introductory psychology course over a period of five years. The sample included 2,500 students who were randomly assigned to 10–15 sections per year. The same textbook, the same exam, and the same teacher and course evaluation forms were used in all sections, making it possible to include in the teaching effectiveness cluster SRT indices, students' achievement, and student

motivation (self-reported amount of studying, and subsequent registration in senior psychology courses). The low-inference teaching behaviors of the 36 instructors were measured again by behavioral observations in the classrooms, using a 100-item version of the Teacher Behavior Inventory. Enthusiastic teaching behaviors based on the classroom observations correlated highly with SRT (for instructor rating, $r = .72$; for course rating, $r = .57$), with subsequent course registration ($r = .45$), and with final exam performance ($r = .36$). Thus, instructor enthusiasm was strongly related to students' evaluations of their instructors, and to a lesser extent but still demonstrating a very substantial effect, to actual student learning outcomes.

METHODOLOGICAL NOTE: MURRAY'S 1983 STUDIES AS MODEL RESEARCH

I chose to present Murray's two 1983 studies in great detail instead of covering many more studies about teacher enthusiasm in lesser detail. The reason is that I consider Murray's studies to be of special quality, with an excellent treatment of a host of issues, each of which constitutes a special problem in research on NV behavior in higher education.

1. Both studies were naturalistic field studies, with no unnatural manipulation or fabrication of NV behavior. As field studies, they were well-controlled and very strict methodologically. Many other studies were equally well-controlled and used strict methodology (see, for example, Perry et al., 1979; Abrami, Leventhal, & Perry, 1982), but they used staged teaching simulations rather than naturally-occurring instructor behavior (see critique of the Doctor Fox studies in this chapter).
2. Murray used different measurement methods (SRTs by past students, behavioral observations, and exam performance of current students) coming from different sources. In too many studies, all data (on NV behavior and educational outcomes) consist of subjective self-reports of the same body of participating students.
3. Teachers' effectiveness/excellence was determined on the basis of averaged SRTs in all past courses (1983a).
4. NV behavior was measured by low inference, specific behaviors.
5. NV behavior was measured via behavioral observations made by trained observers. Instructor's score for each behavior was based on multiple observations, and therefore was of high validity.

6. The number of specific behaviors measured was very large (60 behaviors in 1983a, 100 behaviors in 1983b) and varied among different verbal and NV domains. Because the entire range of possible teacher behaviors was covered, the emergence of NV behaviors as most influential was doubly impressive and convincing. Many current studies focus exclusively on a narrow range of NV behaviors only.
7. In the 1983b study, the use of a multi-section course made it possible to obtain a credible evaluation of students' learning via exam performance. As will be seen later, the problems in assessing cognitive learning in NV research in higher education are almost insurmountable.

For all these reasons, I consider these studies to be “model research,” and feel confident in their results.

Wood (1998) summarized a body of research on instructor enthusiasm, and the results seem to be consistent across research varieties and variations. Enthusiastic instructors seem to be more positively appreciated by their students, considered by students to have contributed to better learning outcomes, and to produce higher levels of student motivation and learning than non-enthusiastic instructors. The varieties of studies included field experiments, where instructor enthusiasm was manipulated in actual classrooms; laboratory studies conducted in artificial “classrooms;” studies focused on specific NV behaviors such as eye contact, voice intonation, and body movements and gestures; and studies measuring the effects of training programs to increase instructors' expressiveness and enthusiasm in their classrooms. Results are very consistent, and the same patterns of relations between instructor behavior and educational outcomes are repeatedly reported. Perry and his associates (Perry & Magnuson, 1987; Perry & Penner, 1990; Schonwetter, Perry, & Struthers, 1994) added a student dimension – perceived control – and demonstrated that achievement enhancing effects of instructor enthusiasm were found more strongly when students felt a sense of control over learning outcomes than when students felt helpless.

It seems reasonable to conclude that being nonverbally expressive is an important dimension of good teaching. Effective instructors show great interest and enthusiasm about their subject, they teach in a provocative and stimulating style, they use their faces, bodies, and voices to attract students' learning, and they take efforts to involve the students in the learning process. The common conceptual explanations of the effects of instructor enthusiasm on educational

outcomes emphasize: (a) increased student motivation to learn better and to expand their learning, and (b) selective attention, enthusiastic instructor behavior serving an attention-getting role through the aroused interest and constant change in the classroom.

Wood (1998) conducted a laboratory experiment in a simulated, artificial classroom, comparing a low enthusiasm condition to three high enthusiasm conditions – strategic (coordinated with the topic structure and contingent with teaching goals), random, and uniform. Her results showed that instructor enthusiasm produced significant effects on student motivation, student attention, and student memory encoding. Strategic/contingent high enthusiasm produced the most positive outcomes. [See my later critique of experimental manipulations in NV research. Although I do not contest Wood's specific results, I have grave doubts about the appropriateness of fabricated experimental conditions in research involving NV behaviors].

THE DOCTOR FOX PHENOMENON

The "Doctor Fox" effect originates in the strong relation between instructor enthusiasm and teaching effectiveness. (Although the first Dr. Fox study preceded the studies on instructor enthusiasm mentioned above, the belief about the expressiveness-effectiveness link has been common folklore). Specifically, this association raises the question whether the connection between expressiveness and other aspects contributing to instructional gains in good teaching is inherent, or conversely whether high expressivity might create an illusion of learning. In every university department one may find highly expressive instructors, admired and valued by their students much more than by their colleagues. This question receives an extra impetus when teaching effectiveness – which can carry substantial weight in hiring and promotion procedures – is determined by student evaluations (SRT).

Naftulin, Ware, & Donnelly (1973) introduced "Dr. Myron L. Fox" to lecture to an audience of educators and mental health graduate students. He was actually a professional actor, and delivered his lecture in a charismatic, entertaining and highly expressive style, but the lecture was devoid of any meaningful content. Dr. Fox received surprisingly high evaluations from his audience. Naftulin et al. (1973) concluded that an instructor's charisma, wit, and expressive style can seduce students into the illusion of having learned.

The Doctor Fox study was widely cited and considered as a threat to the validity of SRT as a measure of teaching effectiveness. The controversy led many researchers – supporters and opponents – to conduct Doctor Fox studies over a span of two decades. In light of methodological and design criticisms of the 1973 study, Ware and Williams published in 1975 a “corrected” Doctor Fox study, using a 2×3 factorial design, with two levels of teacher enthusiasm and three levels of lecture content amount. Students viewed one of the six 20-minute videotaped lectures, and subsequently filled out teacher evaluation forms (SRTs) and completed an achievement test on the content of the lecture. Ware and Williams found that students learned more and rated the instructor more favorably as a function of both instructor expressiveness and amount of content, with extremely high student ratings for the high-expressive instructor. They also reported an interaction effect, where for low expressiveness, high content produced higher student ratings than low content, but for high expressiveness, content did not affect the (high) student ratings. Ware and Williams suggested that SRT should not be used for faculty tenure and promotion decisions, because charismatic and enthusiastic instructors may receive high students’ ratings regardless of how much their students learn.

Subsequently, Raymond Perry and his associates replicated the Doctor Fox study with several additional conditions at the University of Manitoba (Perry et al., 1979), and Marsh and Ware (1982) reanalyzed the data of the Ware and Williams study, concluding that the findings did not constitute a threat to the validity of SRT. Abrami et al. (1982) eventually published an article entitled “Educational seduction,” in which they meta-analyzed a dozen Doctor Fox studies. They concluded that instructor expressiveness had a substantial impact on student ratings but a small impact on student achievement. In contrast, lecture content had a substantial impact on student achievement but a small impact on student ratings.

The Doctor Fox studies can be viewed from the perspective of NV research or from the perspective of SRT research. NV researchers would not have any problem accepting evidence indicating that instructor enthusiasm and charisma would lead students to report higher satisfaction with their teachers and even report better learning. NV researchers would also accept the proposition that subjective self reports about learning would be higher than empirical test findings on actual learning. Such findings are in line with the findings of the instructor enthusiasm studies reported earlier. It makes sense to view enthusiasm as a critical factor of effective teaching, contributing to

student motivation and attention. In contrast, such findings would be more problematic in the SRT perspective because the stronger the effect of instructor enthusiasm independent of organizational and academic characteristics of instruction, the less one can trust SRT as a measure of teaching effectiveness. SRT advocates would probably reject the notion that student ratings may reflect only student satisfaction and enjoyment without necessarily assessing the quality and effectiveness of the actual scholastic teaching.

Today, following the various methodological and design criticisms and in light of the numerous studies that examined Doctor Fox effects under various reality conditions (see Perry et al., 1979; Abrami et al., 1982), the original Doctor Fox argument is consensually rejected. Under reality conditions in regular university courses, it is not likely that a charismatic and entertaining instructor would receive high course evaluations if the presentation was devoid of any intellectual input and learning content. But some doubt may still linger that over-expressiveness might blind students somewhat for a certain period of time.

METHODOLOGICAL NOTE: EXPERIMENTAL MANIPULATION OF NV BEHAVIOR IS FAULTY

Much has been written and debated about the Doctor Fox effect, and there is no point in going into additional statistical discussions and arguments. However, these studies have not been examined from the perspective of NV research, and I believe that, from this unique perspective, the Doctor Fox design, as well as many other experimental studies manipulating instructors' NV expressive behavior is faulty and lacking in ecological validity.

In psychological research, experimentation is considered the best methodological solution for isolating variables and for examining a causal effect of one variable while controlling other variables. Experiments are usually conducted in artificial, simulated situations to ensure control that cannot be attained under field conditions. The relevant independent variables are operationally defined and manipulated in certain variations to experimental and control groups, and their "clean" impact on dependent variables is measured. But experimental results can be generalized beyond the specific simulated context only if the experimental situation can represent the "reality" of the investigated phenomenon in the field. Thus, the experiment must be unbiased and have high ecological validity. My argument is that, these

demands can almost never be met in experiments on manipulated NV behavior (in Doctor Fox studies and in numerous other experiments) and therefore the experimental method is very problematic in educational NV research. [Perry et al. (1979) also reported that in the more ecological conditions, most closely approximating actual classrooms, the Doctor Fox effect was not replicated].

1. In the controlled experiments on teachers' NV behavior, students usually view a short video lesson on an unknown topic, and subsequently fill out teacher evaluations and sometimes also take a test on the lecture content. This presumably represents regular teaching throughout a university term (say, a 3-months semester). The student evaluations, as well as their achievements, are supposedly equivalent to those obtained in a regular university course. These assumptions can hardly be justified. The experimental situation is highly unusual and out of routine for the students in almost every aspect and it cannot be considered as representative of their normal student experience. Conventional SRTs are based on a long accumulation of continuous exposure to the instructors, including the variations in instructor behavior over time and exposure to rare, infrequent incidents that take place during the semester (see Babad, 2005a). Student achievement reflects a continuous, developing process that is also influenced by their motivation and diligence, and is not a one-shot simple occurrence. Thus, the experimental situation simply cannot be considered to represent the educational situation in which students achievements and evaluations of teaching are formed.
2. The NV behavior manipulated in the experimental videos is extremely exaggerated. Most students would never encounter teachers who are so expressive and enthusiastic or so phlegmatic and dry as those depicted in such experiments. And if such rare teachers would have demonstrated such extreme behaviors continuously in the classroom for weeks (especially if they talk nonsense and teach nothing) – they would have been criticized rather than praised. The issue of internal validity is important, and the extreme low/high enthusiasm shows have no ecological validity. Students are certainly aware of the exaggeration (especially since this is conducted in an unnatural setting), and this must influence their reactions.
3. From the field studies (such as Murray's) and from the natural intuition of most educators, it is quite obvious that there is a

natural covariation between expressive behavior and cognitive components in teaching, and effective instruction is based on a combination of both. This covariation is probably the underlying information processing scheme (“implicit correlation”) employed by students when they are asked to evaluate their instructors. Their belief that instructor expressiveness and enthusiasm are part of effective teaching is, to a large extent, “truth” rather than bias. The artificial experimental attempt to separate the affective and cognitive components (an enthusiastic instructor talking nonsense) violates the natural covariation and students’ internal scheme. Because they are not aware of that, they would continue using their underlying scheme, attributing high learning gains to Doctor Fox. In reality, highly enthusiastic instructors who do not teach anything are quite rare, but when students discover such an instructor along the semester, they will probably allow an exception to their scheme and judge that instructor harshly.

4. The last point emphasizes the unique nature of NV behavior. As mentioned earlier, one of the central topics in NV research concerns detection of deception. A very extensive body of research confirms that the detection of lying and deception through NV behavior is far more effective than detection via verbal means. People have keen awareness to successfully trace deceptive affective messages through NV behavior (Ekman, 1985; Zuckerman et al., 1986), and students have an uncanny ability as “experts” to decipher hidden messages in teachers’ NV behavior (Babad, 2005b). As Zuckerman et al. (1986) pointed out, exaggeration is an important key to detection of deception. The instructor expressive behavior manipulated in the experiments under discussion (highly enthusiastic versus blatantly non-enthusiastic teaching) is fabricated and unreal – especially when the same actor enacts both conditions. Obviously at least one of the behavioral patterns (or both, because of the necessary exaggeration) is unnatural to the actor. Therefore, the NV behavior in these experiments is deceptive, and likely to be detected as such by the students. I think that these NV situations cannot be considered as representing natural teaching, and the results of these experiments cannot be considered valid. In my own research, I have always taken extreme care to use in experimental conditions only recorded videotapes of naturally occurring NV behavior.

TEACHER IMMEDIACY IN HIGHER EDUCATION

Since the end of the 1970s, the majority of NV research in higher education was conducted in the field of “teacher immediacy.” The bulk of instructor enthusiasm research originated in Psychology Departments in Canada, mostly at the University of Western Ontario and the University of Manitoba. Teacher immediacy research evolved in the Communication Department in West Virginia University by James McCroskey, Virginia Richmond and over a dozen doctoral students, headed by Janet Andersen, who actually “opened” this field in her dissertation. Most articles on teacher immediacy were published throughout the years in one journal – *Communication Education*.

As will be argued, the fields of teacher enthusiasm and teacher immediacy have strong conceptual and methodological affinity. Both present a holistic, global view of NV style, focusing on the integrated NV picture of instructor style in delivering instruction rather than on specific NV behaviors. Harris and Rosenthal (2005) saw an advantage in operationalizing NV behavior holistically because NV behaviors do not occur in isolation, and all behaviors are interpreted in a larger reality context. But they also saw a disadvantage in the holistic approach, because it is impossible to determine which discrete NV cues play a role in affecting student outcomes.

Teacher immediacy research began with Janet Andersen's (1978) doctoral dissertation under the supervision of James McCroskey. As McCroskey and Richmond (1992) described it, Andersen was searching for a conceptual structure to identify teachers' behaviors associated with effective instruction. She was influenced by Mehrabian (1969, 1971), who defined “immediacy” as the degree of physical or psychological closeness between people, expressed in positive affect and liking toward the other. Andersen took Mehrabian's idea and conceptualized “teacher immediacy” as instructors' NV behaviors that enhance closeness and interaction, positing that this is the major mechanism mediating teaching effectiveness. From my reading of the literature, it seems that Andersen did not continue working on teacher immediacy after the early 1980s, and McCroskey and Richmond continued developing and leading this field.

Andersen (1978, 1979) developed an observational methodology for measuring instructor immediacy (*Behavioral Indicators of Immediacy*), and found that observers' ratings of the specific NV behaviors correlated highly with ratings of students in the targeted courses. This opened the way to proceed to measure teacher immediacy

exclusively by students' self-reported ratings of specific (low inference) instructor behaviors, dropping the expensive and cumbersome methodology of classroom observation. Andersen's initial findings showed that approximately 20% of the variance in student affect toward the subject matter, 46% of the variance in student affect toward the instructor, and 18% of the variance in motivation to take advanced courses in the area were predictable from instructors' scores on nonverbal immediacy (NVI). Students' test scores, which would have indicated cognitive learning, were not predictable from teachers' NVI scores.

In a doctoral dissertation conducted in the same department, Sorensen (1980) developed a measure of verbal immediacy, focused on instructors' self-disclosing statements and "we" statements. As had been expected, verbal and nonverbal immediacy were related to each other. However, most studies measured NVI exclusively, and Witt and Wheelless (2001), who compared predictions of educational outcomes from verbal and nonverbal immediacy, reported that verbal immediacy did not add much to the picture derived from measurement of NVI. In this chapter, the discussion centers on NVI.

The commonly-used NVI questionnaire (Richmond, Gorham, & McCroskey, 1987) consists of 14 items, six of them reversed in scoring:

1. Sits behind desk when teaching. (R)
2. Gestures when talking to the class.
3. Uses monotone/dull voice when talking to the class. (R)
4. Looks at the class when talking.
5. Smiles at the class as a whole, not just at individual students.
6. Has a very tense body position when talking to the class. (R)
7. Touches students in the class.
8. Moves around the classroom when teaching.
9. Sits on a desk or in a chair when teaching. (R)
10. Looks at board or notes when talking to the class. (R)
11. Stands behind podium or desk when talking to the class. (R)
12. Has a very relaxed body position when talking to the class.
13. Smiles at individual students in the class.
14. Uses a variety of vocal expressions when talking to the class.

Users of the 14-item NVI questionnaire found that some items were poor. McCroskey, Sallinen, Fayer, Richmond, and Barraclough (1996) explained that college instructors virtually never touch their students (and therefore item # 7 was dropped), and that neither sitting nor standing while teaching is a reliable predictor of NVI (and therefore

items # 1, 9, and 11 were dropped). Thus, NVI was measured in almost all studies by either the 10-item or the 14-item questionnaire.

METHODOLOGICAL/CONCEPTUAL NOTE: TWO CONCEPTIONS,
TWO BODIES OF LITERATURE, BUT ONLY ONE PHENOMENON!

As I was covering the research literature on NV behavior in higher education, I was struck by the duality of the “enthusiasm” and “immediacy” literatures. The two bodies of research investigate the very same phenomenon and reach very similar conclusions, and yet they demonstrate total denial of each other, and one is not mentioned nor referred to in the other. For example, Wood’s (1998) doctoral dissertation on teacher enthusiasm, with its extensive coverage of the relevant literature, had only *one* (marginal) reference to a teacher immediacy article among almost 100 items on her reference list! The situation is similar in all early and recent publications about immediacy. Could the amazing mutual denial between the two groups have been caused by faulty literature searches?

Murray’s research originated from the SRT literature and was anchored in it. He searched for relevant instructor behaviors that would predict differences among low, medium, and highly-rated instructors, and discovered the cluster of NV behaviors he labeled “teacher enthusiasm.” The West Virginia group started with a behavioral definition borrowed from Mehrabian, and then set out to construct outcome measures. In fact, immediacy researchers seldom made use of post-course SRT, preferring students’ immediate self-report about their learning.

Presumably, the two literatures focus on distinct aspects in the delivery of instruction – “enthusiasm” would seem to emphasize instructors’ expressive style in teaching their subject matter, whereas “immediacy” would seem to center on instructor-student interaction and closeness. However, scrutiny of the specific items which operationally define enthusiasm and immediacy demonstrates beyond doubt that the two instruments measure the very same phenomenon. Moreover, the above-listed items of the immediacy questionnaire could be condensed into the four behavioral components specified by Perry et al. (1979). To demonstrate the identity of the enthusiasm and immediacy questionnaires, the 10 items of the NVI questionnaire are listed next, showing for each item its equivalent in the list of behaviors defining teacher enthusiasm.

Item # 2: Gestures when talking to the class. This item is equivalent to item # 6 (gesturing with hands and arms) and item # 7 (facial gestures or expressions) on the enthusiasm list.

Item # 3: Monotone/dull voice (reversed item). Equivalent to item # 2 (pitch and volume variation) and item # 3 (vocal inflection) on the enthusiasm list.

Item # 4: Looks at the class. Equivalent to item # 8 (eye contact).

Item # 5: Smiles at the class as a whole. Equivalent to item # 4 (smiling or laughing).

Item # 6: Tense body position. Reversed to item # 6 (gesturing with hands and arms) and other items on the enthusiasm list.

Item # 8: Moves around. Equivalent to item # 5 (moving about).

Item # 10: Looks at board or notes. Reversed to item # 8 (eye contact).

Item # 12: Relaxed body position. No exact parallel exists for this item, but it is highly consonant with the entire enthusiasm list.

Item # 13: Smiles at individual students. This is the only item which might tap an interactive characteristic of “closeness”. It has no exact parallel in the enthusiasm list, although item # 8 (eye contact) and item # 4 (smiling) are quite equivalent. In any event, one item out of 10 or 14 items cannot have a substantial weight in the overall summary score.

Item # 14: Vocal expressions. Equivalent to item # 1 (speaks in dramatic/expressive way), item # 2 (pitch and volume variations), and item # 3 (vocal inflection).

The additional four items dropped from the 14-item immediacy instrument do not change the picture. Touching (item # 7) is anyway very rare in college (McCroskey et al., 1996) and the sitting/standing items (# 1, 9, and 11) are in any event covered by equivalent items in the enthusiasm list.

Thus, my conclusion is that both instruments measure the very same phenomenon, and any conceptual distinctions between immediacy and enthusiasm are not reflected in the actual measurement instruments. Except for one immediacy item (# 13, smiling at individual students) any notion of interpersonal closeness in the immediacy items can hardly be noticed.

My sense is that the reference to “closeness” in the definition of teacher immediacy (which Andersen borrowed from Mehrabian) is misleading, because many readers might assume that the “closeness” is interpersonal in nature (that is, instructors being close to their students and caring about them personally). Perhaps the intended meaning was

that instructors communicate to students their closeness to their subject matter (and their closeness might be contagious) – but still, the term “immediacy” was ill-chosen and is misleading, because immediacy and closeness are not measured at all.

Although these two literatures ignore each other, the two bodies of research can be joined together. Almost all results in both literatures are consistent and very similar to each other, despite their unique methodological flaws.

MEASUREMENT OF NV IMMEDIACY AND EDUCATIONAL OUTCOMES

NV immediacy, as well as verbal immediacy, is measured exclusively via students' self-report about specific behaviors of their instructors. In an article summarizing the historical development of immediacy research, James McCroskey and Virginia Richmond (1992) justified that decision. They argued that the 10-item or 14-item NVI behavioral list consists of low inference behaviors that students know very well and can rate with high reliability, that students' self-reports were found highly correlated to behavioral observations, and that factor analysis yielded a simple one-factor solution with very high Alpha reliability.

McCroskey and Richmond left unsaid a more practical, highly important rationale justifying their scale: Measuring NVI through students' self-reports makes the administration very easy, enabling numerous researchers and graduate students to conduct immediacy research with relatively little investment of effort and resources. This fact may explain the great multitude of published investigations on teacher immediacy. Having experienced personally the great investment of effort and finance required for conducting NV research based on videotaped observations and subsequent judgment practices, I can only admire the simplicity of the self-report methodology. Because of my earlier-mentioned reservations about fabricated manipulations of NV behavior in controlled experiments, the self-report measure remains the central effective tool in immediacy research. However, the measurement is wrought with methodological flaws.

The NVI score is a statistical composite of all (10 or 14) items. Harris and Rosenthal (2005) argued that the immediacy scale items are certainly broad in scope, and we do not yet have exact empirical evidence of the relative contribution of these individual behaviors to producing immediacy. Harris and Rosenthal concluded (following McCroskey et al.,

1996) that vocal variety, eye contact, smiling, and relaxed body position were probably the stronger contributors to immediacy.

A very interesting innovation in the self-report measurement of NVI is the fact that students are asked to rate “the instructor in the last class you had before this one” rather than the present instructor. McCroskey and Richmond (1992) argued that poor instructors and those who do not value social science research are often unwilling to cooperate with research that may involve evaluation of their teaching behaviors. The “previous class” method (if it is ethically permissible because instructors are not asked for their consent) ensures great variability in the samples of instructors and courses. However, McCroskey and Richmond were well aware of the fact that this strategy complicates the subsequent measurement of cognitive learning.

Because of the retrospective nature of the students’ ratings of the NVI items, it must be understood that students actually rate “instructor’s style” rather than “instructor’s behavior.” Their retrospective judgments reflect their recollections of the instructor’s most typical conduct, but they do not rate specific behavioral instances. Therefore, we are not dealing here with a pure “low inference measurement.”

METHODOLOGICAL NOTE: $N = \text{STUDENTS}$ VERSUS $N = \text{TEACHERS}$

Cronbach (1976) and Cooper and Good (1983) emphasized the difference between educational research based on $N = \text{Students}$ and educational research based on $N = \text{Teachers/Classrooms}$. They warned against aggregating all students into one sample if classroom phenomena are investigated. When the investigated phenomenon involves the entire classroom or the instructor, and we investigate, for example, 20 classrooms with 25 students in each class, we cannot analyze our data for $N = 500$ students but must rather analyze $N = 20$ instructors, using averaged scores for each class. This requirement complicates educational research and makes it very expensive, and Cronbach, as well as Cooper and Good lamented that it might destroy educational research. Clearly teacher immediacy is a classroom phenomenon, in which a single instructor affects the entire class, and therefore $N = \text{Instructors}$ is the appropriate way for analyzing the data. Indeed, Murray’s (1983a, 1983b) seminal studies were conducted using $N = \text{Instructors}$ (samples of 54 and 36 instructors). Christophel (1990a, 1990b) did likewise in her early investigation of teacher immediacy (with $N = 60$ classrooms).

The use of the self-report methodology in the measurement of immediacy turned the research into $N = \text{Students}$ type. Because each student reports about a different instructor and a different course, the design actually becomes one of $N = \text{Students} = \text{Instructors}$, and the evidence on each instructor is derived from $N = 1$ Student. I suppose that Cronbach would *not* have accepted this approach, and would have demanded more robust data about each instructor. Because the results of enthusiasm and immediacy research are so consistent (see next), this issue has not been dealt with as yet (except for a comment in passing in McCroskey and Richmond's, 1992, account).

To assess the impact of teacher immediacy, educational outcomes must be measured – constituting the dependent variables (in experimental research) or criteria (in correlational research) representing teaching effectiveness. In enthusiasm research, the investigators used students' post-course evaluations (SRT), which are the conventional and most widely used instruments worldwide. Their advocates maintain that SRT instruments measure teaching effectiveness with high validity (see Marsh's Chapter in Perry & Smart, 2007). Even their critics concede that SRT instruments measure students' satisfaction and affective reactions to their teachers (see also Special Section of *Journal of Educational Psychology*, Perry, 1990).

Immediacy researchers chose to ignore SRT and course grades. (Indeed, when the research is not conducted in the $N = \text{Instructors}$ approach, mean course SRT and grades are not available at all). McCroskey and Richmond (1992) described their deliberations and how they settled on students' self-report about their learning. The choice is practical, because all data on both instructor immediacy and educational outcomes are collected in one short session, necessitating no search for data from other sources.

To measure cognitive learning, students are asked two questions: (1) How much did you learn in this class? (2) How much do you think you could have learned in this class had you had the ideal instructor? By subtracting the first score from the second, a variable labeled "learning loss" was created, and was expected to correlate negatively with teacher immediacy scores. Both the raw learning (first item) and the learning loss scores are used to measure students' reports of their learning. Psychometric analyses which would have examined the validity of this measure of cognitive learning have not been provided, and meta-analyses (to be reported later) could not ascertain its validity.

METHODOLOGICAL NOTE: THE POSSIBILITY OF HALO EFFECT

The methodology of accepting students' self-reports about their learning gains is very problematic. Students report about the instructor who taught them at their previous class. They characterize the instructor's behaviors on a 10–14 item scale, and then immediately proceed to evaluate how much they have learned from that instructor, and how committed they feel to study more in the same area and/or from the same instructor. Almost all data of the field studies in immediacy research have been collected in this manner.

Harris and Rosenthal (2005) were worried that a halo effect might influence the students' ratings. Halo effect is the phenomenon where one's overall reaction to a target person (e.g., liking) influences all other, presumably independent ratings to be consonant with the overall impression. Because *all* measures (of instructor's NVI and students' affective learning, behavioral intentions, and cognitive learning) are filled out by the responding student in a single short session, and furthermore, given that each instructor is represented in this research by $N = 1$ Student, the possibility of inflated correlations due to halo effect is quite real.

Feeley (2002), who has been investigating halo effects in different areas, conducted one study on halo effect in immediacy research. He asked 128 students to evaluate the same instructor on the three conventional measures: NV immediacy, teaching effectiveness, and attitudes toward course content. To these measures he added two variables irrelevant to teaching effectiveness (physical attractiveness and vocal clarity) that should have been equally rated by all students (and to yield zero correlations with the other measures), because only one instructor was evaluated. Feeley found significant correlations among all five measures, indicating the presence of a halo effect. When the irrelevant variables appeared at the end of the questionnaire, their correlations with the other three variables grew higher. Thus, the typical relationships found in the conventional self-report measurement of all variables in immediacy research probably over-estimates the intensity of the relationships between instructor immediacy and educational outcomes.

META-ANALYSES OF NV IMMEDIACY RESEARCH

Two recent meta-analyses summarized the research on instructor immediacy and its relations to educational outcomes, one by Witt, Wheelless, and Allen (2004), the other by Harris and Rosenthal (2005).

Witt and his associates are researchers in the field of teacher immediacy, and Witt's (2003) doctoral dissertation consisted of an experimental study comparing educational outcomes for 2X2 combinations of verbal and NV immediacy (see also Witt & Wheelless, 2001). The meta-analysis reported by Witt et al. (2004) was based on 81 studies of verbal and NV immediacy.

Harris and Rosenthal (2005) are "veteran" meta-analysts, having published several meta-analyses on various topics over the last 20 years. Rosenthal is one of the world leading experts on meta-analysis. Their meta-analysis on NVI was based on 37 studies. The difference between the number of studies included in the two meta-analyses stems from different search methods and differing criteria for inclusion in the analysis (e.g., including or not including studies of verbal immediacy, including or rejecting M.A. theses or unpublished reports, etc.).

The measures employed in two meta-analyses were as follows:

1. *Teacher immediacy*. Harris and Rosenthal included only studies involving NVI, Witt et al. included both verbal and NV immediacy.
2. *Affective learning*. Students' evaluative reaction either toward the course or the instructor. This is an affective measure of satisfaction.
3. *Cognitive learning*. Students' self-report about their learning, usually including both "raw learning" and (the reversed) "learning loss" scores.
4. *Cognitive performance*. Objective measures of achievement in the form of grades or exam performance. Only few of the meta-analyzed studies included such measures, and these studies were mostly experimental manipulations of NVI.
5. *Behavioral intentions* to take another course with the same instructor or on the same subject. Only Harris and Rosenthal included this index in the analysis.

The results of both meta-analyses (Table 5.1) were quite similar, although Witt et al. (2004) reported higher effect sizes than Harris and Rosenthal (2005) for affective learning and self-reported cognitive learning. In both reports, the meta-analytic results for the few experimental studies showed much smaller effects sizes compared to the field studies.

Witt et al. (2004) concluded that teacher immediacy has a substantial relationship with certain attitudes and perceptions of students in relation to their learning and their instructors, but only

Table 5.1: Effect Sizes in Meta-Analyses of Teachers' Nonverbal Immediacy Research

Correlations of NVI with:	Harris & Rosenthal (2005)	Witt, Wheelless & Allen (2004)
1. Affective Learning	$r = .43$	$r = .49$
2. Behavioral Intentions	$r = .32$	
3. Cognitive Learning (Self Report)	$r = .36$	$r = .51$
4. Cognitive Performance (Objective Grades)	$r = .14$	$r = .17$

a modest relationship with cognitive learning performance. Harris & Rosenthal (2005) concluded that the results of the meta-analysis reveal that NV immediacy is strongly related to many positive student outcomes: Liking for the course and the instructor, willingness to take more classes with the instructor and more classes in that subject, and students' perceptions that they have learned a lot in the class. What is not yet clear in their minds is the degree to which these positive outcomes are translated into gains in actual student achievement.

McCroskey and Richmond would have probably reacted to these meta-analyses by arguing that, due to inevitable methodological shortcomings, the meta-analytic effect size reported here for objective achievement ($r = .14$ to $r = .17$) underestimated the real life magnitude of the impact of teacher immediacy on actual achievement. In my opinion, the gap between the associations of NVI with students' affective outcomes and with objective student achievements is quite reasonable and makes sense. Instructors' enthusiasm, immediacy and expressiveness indeed contribute to student satisfaction. It stands to reason that a student who is very satisfied with his instructor's expressive style and delivery of instruction, a student who enjoyed the course (see Pekrun's chapter in Perry & Smart, 2007), would react more positively, report higher motivation, and may also have an inflated sense of learning gains. Objective cognitive learning probably requires many additional causal factors that are not included in the immediacy conception – including students' differential intellectual abilities and their interest in the subject, the intellectual and teaching

ability of the instructor, clarity of presentation and course organization, the structure of the syllabus and the assignments. Excellent teaching (see Theall and Feldman's chapter in Perry & Smart, 2007) would combine both affective (NV) and intellectual qualities of the instructor, and would influence both affective and cognitive student outcomes.

THE BIG PICTURE OF INSTRUCTORS' GLOBAL NV STYLE AND STUDENT OUTCOMES: CONCEPTUAL SYNOPSIS

SUMMARY OF THE MAJOR FINDINGS ON GLOBAL NV STYLE AND STUDENT OUTCOMES

Thus far, the presentation in this chapter was focused on instructors' global NV style, that is, summary measures of their overall NV expressiveness. The accumulated results from the numerous studies on immediacy and enthusiasm are very consistent, despite the numerous methodological problems and flaws. We know that the expressive style of instructors in higher education is consistently related to (and probably causes) positive outcomes among the students: Positive affect toward the instructor and toward the subject, an increase in motivation and commitment, improvement in attention, and positive self-reports about cognitive learning. As to the influence of teacher expressive style on objective achievement outcomes and students' academic/intellectual learning, effect sizes are much smaller, the findings are not as robust, and there is no clear indication that instructor expressiveness leads to improved academic gains.

The extensive, cumulative research literature on SRT has demonstrated beyond any shadow of doubt the covariation between academic and affective components of effective instruction (see chapters by Abrami, Rosenfield, & Dedic and by Marsh in Perry & Smart, 2007). Therefore, the positive expressive characteristics in enthusiasm and immediacy research probably constitute a necessary, but not sufficient condition for effective instruction. Students' implicit theory about effective teaching includes a belief about such covariation of academic and affective components of instructor style, and subsequently expressive instructors would usually tend to be (and believed to be) effective instructors. The great instructors who are sought out by students and who are remembered forever by their former students are probably excellent in both expressive and intellectual components. Very poor instructors that students try to avoid are probably lacking

in both affective and academic components. Low quality of a given instructor in either the academic or the affective component would probably lead students to a negative view of that instructor's teaching effectiveness.

CENTRAL PROBLEMS WITH RESEARCH ON GLOBAL NV STYLE

As has been demonstrated thus far in this chapter, the study of global NV style is wrought with conceptual, methodological and measurement problems. First and above all, we face the absurd situation of discovering two bodies of literature that are focused on the very same phenomenon and yet are totally alienated from each other. I have never experienced such estrangement between related conceptualizations, especially when the main instruments for defining and measuring the central phenomenon are almost identical. The irony of this situation is the fact that the findings in the enthusiasm and immediacy literatures are highly consistent with each other!

The larger body of literature – on teacher immediacy – is characterized by several faults:

1. The main concept – “immediacy” – is borrowed from Mehrabian and is not consonant with operational definition of the concept as apparent in the measurement tool. Therefore, the term “teacher immediacy” is misleading.
2. The field research is almost exclusively based on students' subjective and retrospective self-reports. Data on both instructor NVI and student outcomes are collected in one short questionnaire, with no safeguards against halo effects.
3. Every instructor is represented by $N = 1$ Student only.
4. Cognitive learning gains are evaluated via students' uncorroborated self-reports, with no established validity for the measurement of this most problematic cluster.
5. The few experimental studies of instructor immediacy are based on deceptive and exaggerated (staged) NV behaviors that have no ecological validity and are inappropriate for NV research.

Last, but not least, the undifferentiated focus on “global NV style” and its global correlates in students' impressions severely limits the efficacy and utility of this research. To advance our knowledge on instructor's classroom NV behavior and its (correlates or) effects on students, we need to isolate and carefully investigate specific NV behaviors, different

types of courses and students, various types of instructional situations, and separate aspects of student outcomes.

A PROFESSIONAL DILEMMA: METHODOLOGICAL QUALITY VERSUS CONSISTENCY OF RESULTS

The situation described in the last two sections evokes a professional dilemma. On the one hand, most of the immediacy studies have serious methodological flaws that should inevitably lead to discounting them. In our professional training, we tell our students that faulty research must be discarded regardless of its results. On the other hand, the results of almost all published studies and of the meta-analyses are very systematic, showing highly consistent associations between instructors' global expressive style and students' outcomes. Even the distinction between affective and academic measures of student learning gains is systematic in this body of literature. Should we accept methodologically faulty research if the accumulated findings are consistent and systematic? The only "solution" to this dilemma is to give highest credence to studies that seem to be of higher methodological quality and to be more carefully designed.

A FINAL REFLECTION ON DOCTOR FOX EFFECTS

The Doctor Fox phenomenon has maintained its salience over several decades because it symbolizes the ambivalence of many experts in the field of teaching and learning in higher education about the power of instructors' NV behavior. On the one hand it is consensually held that effective teaching requires enthusiasm and expressiveness on the part of the instructor. On the other hand, excellence in teaching *must* be based on certain academic and intellectual aspects (clarity of presentation, intellectual challenge, and so on). The Doctor Fox study fueled the nightmarish notion that the showy, theatrical aspects *alone* might lure students into the illusion of having learned, thus destroying the foundations of students' evaluations of instruction.

As a scientist, I concur with the various critics that the claimed Doctor Fox effect has no validity, and cannot be considered as a threat to the validity of SRT in real university settings. As a former dean and a member of various academic committees, I cannot deny that suspicion about potential inflation of student evaluations as a function of instructors' charisma and over-expressiveness always lingers on ... We do not want to have a Doctor Fox (or even a "partial" Doctor Fox)

on the staff of our departments, and we would like to believe that unlike their reported susceptibility in a one-shot Doctor Fox simulation, students' diagnostic abilities would lead them to react appropriately to charismatic instructors who fail to deliver the academic goods week after week. If Hans Christian Anderson's famous king would have appeared in his "new clothes" again and again week after week, it stands to reason that everybody would eventually discover the nature of the new attire.

CROSS CULTURAL DIFFERENCES IN NV CONDUCT

McCroskey and Richmond (1992) summarized the questions that remain to be resolved by research in the field of teacher immediacy. The first question concerned cross cultural differences in NV conduct, wondering whether findings on teacher immediacy obtained in the USA can be generalized to other cultures. Questions were raised about the stability of the relationship between teacher immediacy and educational outcomes, about cross cultural differences in absolute levels of teacher immediacy (as a function of cultural norms and expectations about expressivity), and about inter-cultural teacher-student interaction in American education (See McCroskey et al., 1996, who compared teacher immediacy in Australia, Finland, Puerto Rico and the USA; Neulip, 1997, and Pribyl, Sakamoto, and Keaten, 2004, who compared Japan to the USA; Myers, Zhong, and Guan, 1998, who compared the USA and China; Roach and Byrne, 2001, who compared Germany and the USA; and Johnson and Miller, 2002, who compared Kenya and the USA). Without going into the details of those studies, tentative conclusions claimed consistency across cultures in the pattern of relationship between teacher immediacy and educational outcomes; showed cultural differences in absolute levels of immediacy; and indicated that unique combinations due to different cultural expectations might be expected. Several researchers investigated inter-racial teacher-student interaction in American education (see Feldman, 1985; Feldman & Saletzky, 1986; Neulip, 1995; Rucker and Gendrin, 2003).

CAN TEACHER ENTHUSIASM/IMMEDIACY BE TRAINED

In the earlier discussion of microteaching, the importance of applied training in NV behavior to improve teaching effectiveness was emphasized. In the final analysis, the significance of research on NV behavior in education lies in the possibility of using the research outcomes for

corrective purposes. Because this chapter is written from a research perspective and it is based on empirical research publications, the problem must be faced that the number of published research studies reporting outcomes of applied interventions of NV training is very small. Only few researchers choose to conduct and publish research on applied interventions, and probably there is a lot more applied work being conducted in the field.

The problem gets worse because of the explicit focus of this chapter on higher education. In most countries, formal teacher training is required for early childhood education, for elementary, middle and high school education, but not for higher education. Many educators (and certainly university students) lament the fact that most instructors in higher education have not undergone formal teacher training. They are hired on the basis of their scientific and research potential much more than on the basis of their teaching ability. It is true that many universities and colleges invest effort and resources in the improvement of teaching, but participation in training programs is usually voluntary, and the volunteer participants are most often self-selected – they are the most interested and motivated instructors who do not need the training too urgently. The weak instructors who need training interventions more urgently, often tend to be those who resist change efforts and would not voluntarily participate in such programs. The situation is less problematic in the K-12 level, because the investment in initial teacher training is enormous, and it is normative for teachers to continue their in-service training throughout their careers. In my country, Israel, continued in-service training is mandatory and rewarded, and therefore K-12 teachers seek opportunities for continued training. Because there is a demand, many professional (formal and informal) organizations offer training services of various kinds. Thus, it should not be surprising that of the few references to training in NV behavior which I have found, only a fraction dealt with higher education.

In both teacher immediacy and teacher enthusiasm literatures, one high quality study on applied NV training was published by the researchers leading those fields – Murray and Lawrence (1980) in teacher enthusiasm, and Richmond, McCorskey, Plax, and Kearney (1986) in teacher immediacy. Richmond et al. (1986) conducted their study in high school (grades 7–12). Teachers were trained in NV communication generally and NV immediacy behaviors specifically. They were matched with teachers in their schools who taught the same subjects but had no NV training. Measures of NV immediacy and affective learning were administered to the students of both groups of

teachers. The trained teachers were perceived as more immediate than the untrained teachers, and their students reported more positive affect for both the teacher and the subject matter than did the students of the untrained teachers. Richmond et al. (1986) concluded that research results on teacher immediacy in the classroom could be translated and applied to real improvements in teachers' NV behavior and to lead to real increases in student learning.

Murray and Lawrence (1980) conducted their NV training research on a sample of university lecturers. Twelve instructors participated in 20 2-hour speech and drama training workshops, and learned how to apply acting techniques (body movement, expressive speech, etc.) to classroom teaching. They were compared to twelve matched controls with comparable pre-treatment ratings of teaching effectiveness. Teaching effectiveness was assessed by a student rating form completed before the beginning and after the end of the 20-week program. Independence of pretest and posttest was guaranteed by using different random samples of student raters at pretest and posttest. The experimental instructors significantly improved their effectiveness ratings whereas control teachers did not. In addition to the change in the mean overall effectiveness rating, the improvements of the experimental instructors included the following ratings: (1) shows concern for student progress; (2) is friendly and approachable; (3) shows facial expressions; (4) asks questions; (5) suggests supplementary reading; and (6) lectures without notes. Wood (1998) concluded that the Murray and Lawrence (1980) study was a significant contribution to the teacher effectiveness research because it demonstrated that enthusiasm training in the form of speech and drama workshops generalized to the classroom and produced improvement in teacher effectiveness ratings and specific teaching behaviors. In reading this report, I was disappointed that Murray and Lawrence had not used a later posttest in addition to the immediate posttest, to examine whether the new style of teacher behavior still held after the excitement of the workshops wore off.

Wyckoff (1973) also developed a teacher enthusiasm training program, and examined its effects with 12 teachers who were randomly selected from among 90 student teachers attending a MT lab. They received training in (1) gesturing, (2) pausing while lecturing, and (3) moving around the classroom. Then they taught two distinct lecture topics to groups of four students, one presented with enthusiasm as trained, the other with minimal stimulus variation, sitting at a desk and reading from notes. The student groups consisted

of elementary and secondary school children. The results showed that the secondary school students retained more information in the enthusiastic condition, whereas elementary school students did more poorly in that condition. Wyckoff (1973) thought that the enthusiasm and animation of the teachers might have distracted the younger children. McKinney et al. (1984), who compared the effects high, medium and low enthusiasm conditions on 4th grade students, found increased classroom management problems in the high enthusiasm condition.

The McKinney et al. (1983) study was not an applied training study, but an experimental study. It highlighted the issue of *exaggerated* enthusiasm and its potential of hindering students. The danger of over-enthusiasm or excessively high immediacy is quite apparent, especially when the advantages of this expressive style are zealously preached. In another experimental (non-training) study, Comstock, Rowell, and Bowers (1995) compared low, moderately high, and excessively high NV immediacy, and found a curvilinear inverted U relationship, where moderately high immediacy resulted in higher cognitive, affective, and behavioral learning.

Klinzing and Jackson (1987) wrote about issues in training teachers in NV sensitivity and NV behavior, and assessed various methods and techniques as means of improving teachers' NV abilities. Klinzing (1983) developed a training program for secondary school teachers on the basis of the NV descriptors of enthusiastic learning, including vocal delivery, eye contact, facial expression, gestures, and body movement. He conducted four field studies using several combinations of the training elements. Klinzing reported that the studies provided consistent evidence of the trainability of teachers' NV sensitivity.

Within the teacher immediacy framework, Hunnicutt's (1999) doctoral dissertation at Georgia Southern University carefully examined the effects of training in the use of selected NV behaviors in reducing student disruptions in the classroom. The experimental group of pre-service elementary and middle school teachers-in-training received training in the use of NV behaviors in expectancy, immediacy, withitness, dress, haptics, kinesics, prosody, and proximity. The equivalent control group did not receive such training. Classroom observations focused on seven distinct categories of student disruptions. Hunnicutt did not find significant differences between the behaviors of the students in the classrooms of the experimental and control teachers. However, the pattern and consistency of the differences along

the different categories of disruptive behaviors were clear, showing some effectiveness of the NV training program in reducing classroom disruptions. I believe that the findings could have been more instructive had they been discussed in terms of effect sizes (as is customary today) and not in terms of statistical significance.

Conceptual varieties of training in NV behavior. Conceptually, implementation of a training intervention for changing teachers' NV behavior can be viewed in three perspectives:

1. *Holistic approach.* The holistic approach puts the entire NV style of the teacher in focus, and they are taught about expressive style as an integrated whole. Such intervention would probably include an extensive theoretical component, where instructors would learn about the overall phenomenon and the research findings supporting it. Perhaps they would view videotapes of enthusiastic or immediate instructors in their classrooms and would compare them to non-enthusiastic or non-immediate instructors, and the practical training would deal with the overall impression each trainee creates while teaching. This perspective is quite consonant with the holistic nature of the definitions and the findings in both teacher enthusiasm and teacher immediacy fields. In the training studies described above, both the Richmond et al. (1986) and Murray and Lawrence (1980) studies represented this perspective, and both reported positive outcomes demonstrating the effectiveness of the training. (The studies by McKinney et al. (1983) and Streeter (1986) could also be considered as representing this perspective).
2. *Specific behavioral approach.* In this perspective, the training is concentrated on pre-selected specific behaviors considered critical for improving teaching effectiveness, and the training is focused on these behaviors only. Klinzing (1983) examined specific training combinations of several pre-defined behaviors, and Wyckoff (1973) chose three defined behaviors. Hunnicutt's (1999) research could be classified as falling between the holistic and the specific behavioral approach, as she had pre-selected eight different behaviors.

Some years ago, in the 1970s, a colleague in Philadelphia (Norman Newberg, personal communication) did an impressive piece of training work with one single, isolated NV behavior. In that period, verbal and NV research in the elementary school focused on teachers' expectancy-related

differential behavior, following “Pygmalion in the classroom” (Rosenthal & Jacobson, 1968). Eye contact was one of the distinct differential NV behaviors considered to mediate teacher expectancy effects (Brophy, 1983; Harris & Rosenthal, 1985; see also Babad, 1993), with evidence that teachers held shorter duration eye contact with low-expectancy students, especially following wrong answers or failure to respond. When teachers do not expect those students to do better, they shift their eyes more quickly to other students. Newberg decided to train teachers to intentionally prolong eye contact with low-achievers. The participating teachers reported that the changed pattern of eye contact affected classroom atmosphere and motivated weak students to more active participation.

In a somewhat paradoxical way, the specific behavioral approach to NV training can be conceptually justified by the holistic nature of teacher enthusiasm and teacher immediacy. Because of the covariation between the different behaviors comprising enthusiasm or immediacy, it might sometimes be sufficient to change one specific behavior or one aspect, and other behaviors and aspects would follow suit and change in covariation with that specific change. I think that this happened in the classrooms of the teachers in Newberg’s intervention. This idea is certainly not new; it is one of the cornerstones of behavior therapy and biofeedback, where a change in one specific behavior can trigger a chain of subsequent changes in related behaviors.

3. *Diagnostic approach.* In this commonly-used approach, training is flexible, with no pre-selection of change objectives. Diagnostic change means that each participant must be observed via MT or another form of observation, and individual strengths and weaknesses must be diagnosed and measured. Expert supervisors then analyze the instructor’s data, make judgments about aspects that are more readily changeable, and design training particularly tailored to that instructor, to strengthen certain changeable behaviors and/or weaken other behaviors through behavioral training. Other members of the trained group of instructors can learn vicariously from that individualized training undergone by their peer. This approach is widely-used as individually-tailored consultation and can potentially be very successful, but it does not lend itself readily to systematic evaluation research.

PREDICTING STUDENT EVALUATIONS FROM THIN SLICES OF TEACHERS' NV BEHAVIOR

GLOBAL NV STYLE VERSUS SPECIFIC NV BEHAVIORS

The research described thus far, especially teacher immediacy research, deals with "NV style" rather than "NV behavior." It presents the averaged sum total of the instructor's most typical and most frequent behaviors, as these are recalled retrospectively by the students. One cannot determine the differential weighting of specific behaviors and the degree to which each behavior or various combinations of behaviors contribute to predict the student outcomes (are facial gestures more important than hand and body motion? how do smiling, voice pitch, and relaxed body compare to each other? etc.). In the NV research perspective, attention is focused on specific NV behaviors as they are enacted, and attempts are made to isolate specific behaviors and defined situations and to reduce the impact of the overall context and the verbal, contextual characteristics.

CONTEXT MINIMAL NV RESEARCH

The studies discussed thus far in this chapter dealt with NV behavior while maintaining the full (or almost full) context of the classroom. The immediacy questionnaire presumably consists of low-inference NV behaviors, but students report their retrospective memories about teacher's typical style of enacting each behavior, and do not rate at all any specific behavioral instance. In NV research, most investigations of NV behavior are carried out in minimal (or limited) contexts, where judges' exposure to the person whose behavior is to be judged is controlled. Context minimal NV research would usually include some or all of the following characteristics: (1) It would focus on isolated behaviors rather than on a continuous flow; (2) It might separate NV channels (face, body, voice, etc.); (3) It would eliminate verbal content; (4) It would focus on the judged target (e.g., the instructor) and not show the other parties in a given social interaction; (5) It might use brief exposure to behavioral instances; and (6) NV behavior would be rated by outside judges rather than by the actual participants in the interaction. NV researchers argue that only through isolation of variables and maximal control of "noise" variation it is possible to examine the impact of specific NV behaviors.

The issue of classroom context has long been debated among educational researchers, and the interest in NV research in education sharpened the debate (see Galloway, 1984; Woolfolk & Galloway, 1985). Some educational researchers (Doyle, 1977, 1981, 1983; Fenstermacher, 1979) were apprehensive about research methods that ignore the natural setting and flow of the intact classroom, believing that all relevant characteristics of the classroom must be included in "proper" educational research. In their view, the true meanings of an educational situation are embedded *only* in its fullest context, and therefore a minimized context cannot be considered to represent the actual classroom situation. If one accepts this approach, educational research on NV behavior would be seriously limited. The mere term "NV" means that verbal content must be ignored and the focus should be on NV aspects only! Beyond that, the purpose of thin slices research is to isolate single behaviors and to examine them under the most controlled conditions.

It must be made clear that a minimized context can be of high ecological validity. "Ecological validity" means that the investigated unit represents reality and is not faked or artificial, whereas "minimal context" refers to the length of the investigated unit. The manipulation of enthusiasm and immediacy in experiments such as the Doctor Fox studies was criticized earlier in this chapter, because the behavior enacted in these situations was faked and exaggerated, and did not represent naturally (or ecologically) occurring behavior. But exposure of ten seconds to the face of a teacher (without hearing anything) can be of high ecological validity if this expression was recorded in a real classroom interaction. The empirical test of such recorded behavior would be if it would predict, on its own, certain student outcomes.

THIN SLICES RESEARCH

A recent development in NV research is the investigation of thin slices of NV behavior (Ambady & Rosenthal, 1992; Ambady, Bernieri, & Richeson, 2000). Thin slices research continues the trend of measuring NV sensitivity through judgments of very brief instances of NV behavior that started in the PONS Test (Profile of Nonverbal Sensitivity, Rosenthal et al., 1979). In the PONS, decoding ability is tested by deciding which of two alternative descriptions for each brief item accurately describes the meaning of the enacted NV behavior (e.g., goes to church or goes to supermarket; scolds or praises her child). But whereas the PONS also separated channels such as face, body and voice,

in thin slices research the full NV context is shown, only that exposure time is extremely short. Raters are exposed to very brief instances of NV behavior – a few seconds of trial judges delivering instructions to jurors; of job applicants in the first few seconds of job interviews; of doctors communicating to patients; of TV interviewers; of experimenters reading instructions; and recently, also of teachers and instructors – and subsequently rate their impressions of these target persons. These ratings are then correlated with a variety of criteria characterizing these target people, with a diagnostic and/or predictive objective (e.g., judges' verdicts, applicant success in job interviews, interviewers' bias or equity, SRT). It turns out that perceivers absorb considerable amounts of information even from extremely brief exposure to target persons, and they are therefore capable of making accurate judgments that are not inferior to judgments made on the basis of much longer exposure.

Thin slices research often evokes a "Wow!" reaction in its audience. To quote a few dramatic examples, Babad, Bernieri, and Rosenthal (1991) and Babad and Taylor (1992) demonstrated that, after viewing unknown, foreign teachers for 10 seconds without understanding their speech content, 4th-grade students could accurately guess whether the teachers were interacting with unseen high- or low-achievers. Blanck, Rosenthal, and Cordell (1985) showed that ratings of brief excerpts of judges' NV behavior while delivering instructions to jurors in actual criminal trials were correlated with judges' expectations for the trial outcomes and with the criminal history of the defendants. Using these videotapes of trial judges from actual trials in mock jury research, Hart (1995) found that even when admonished to disregard the judge's behavior, participants returned verdicts concordant with the judges' bent. Babad (1999) demonstrated that thin-slices (averaging 7 seconds) of content-free NV behavior of television interviewers provided ample information to accurately detect interviewers' favoritism and preferential treatment. Gada-Jain (1999) examined NV behavior in job interviews, focusing on initial greeting and settling into chairs, and reported that thin slices depicting the initial handshake and introduction predicted the outcome of the subsequent structured employment interview. Finally, Babad (2005b) demonstrated that after viewing 10-second clips depicting unknown teachers lecturing to their entire classrooms, 11th graders could accurately guess those teachers' differential treatment of unseen low – and high-expectancy students in other classroom situations.

METHODOLOGICAL NOTE: EXPENSES AND NEEDED RESOURCES IN THIN SLICES RESEARCH

Thin slices research is quite complicated and expensive to run, especially compared to the administration of a short questionnaire to students in measurement of NV immediacy. In this slices research, appropriate samples of instructor behavior must be videotaped in the classroom, following strict procedures. The necessary lab work must then be done to select clips and record them on master cassettes. Next, these clips are administered to groups of judges/raters who are unfamiliar with the videotaped instructors. "In return" for this investment, thin slices research can demonstrate in a dramatic and clear manner the tremendous informational value of specific, isolated NV behaviors, even with the briefest and most minimal exposure.

In thin slices research in higher education, we investigate whether ratings of very brief clips depicting instructors' classroom NV behavior can systematically predict students' post-course evaluations (SRT). This question is similar to the general question of teacher enthusiasm and teacher immediacy research, namely, whether instructor expressive style contributes to teaching effectiveness. But the thin slices research differs from the other types of research in that it is completely context minimal: The judges/raters are not familiar at all with the videotaped instructors; exposure time is very short and measured in seconds; there is no flow or continuity to the videotaped material; and there is no comprehension of any verbal content. Finally, unlike NVI research, the measurement of NV conduct and the measurement of teaching effectiveness are totally independent of each other in thin slices research.

If very brief instances of instructors' content-free NV behavior would be found to predict students' post-course evaluations of these instructors, a conceptual issue would have to be resolved. Would such a finding be considered a threat to the validity of SRT (as had been claimed following the Doctor Fox studies), or would it actually strengthen the validity of SRT? The challenge would then be to define the conditions and specific findings that could lead to support one interpretation or the other.

THE AMBADY AND ROSENTHAL (1993) STUDY – "HALF A MINUTE"

Ambady and Rosenthal (1993) used very short NV clips (lasting 30 seconds) in which 13 junior instructors (graduate students) at Harvard University were videotaped while lecturing in sections of

undergraduate courses. The clips (video only, no sound) were judged on a series of dimensions by students who were not familiar with the instructors. Ambady and Rosenthal examined the correlations between these judgments (each separately and as a composite) and the mean end-of-semester (SRT) “overall course” and “overall instructor” evaluations given by the students in these courses. They found very high correlations between the judgments of NV behavior and SRT. The correlations were not reduced when the clips were shortened from 30 seconds to 6 seconds for another sample of judges.

The importance of Ambady and Rosenthal’s (1993) study was in the initial demonstration of the intense predictive power of thin slices of NV behavior in the context of higher education. As thin slices research advanced during that decade, Ambady et al. (2000) argued that thin slice ratings are context dependent, and therefore more differential predictions must be made from particular stimulus situations to particular criteria. In a replication and extension of the 1993 study, Babad, Avni-Babad, and Rosenthal (2004) examined the prediction of SRT aspects from brief instances of professors’ NV behavior in defined instructional situations.

THE BABAD, AVNI-BABAD, AND ROSENTHAL (2004) STUDY – INSTRUCTIONAL SITUATIONS

The Babad et al. (2004) study was designed to replicate the Ambady and Rosenthal (1993) study and extend it in several directions. The sample consisted of 47 experienced professors who taught in 67 courses of various types and sizes (20 professors were videotaped in two courses – a small and a large one).

The 1993 study was confined to lecturing behavior, when instructors addressed their entire classes. In the 2004 study, each professor was videotaped in four distinct situations, and the relationship between instructor’s NV behavior and SRT was examined separately for each situation. The four situations were:

1. The first minute of the first class session (initial exposure of the students to the professor – “first impression”).
2. Lecturing to the entire class.
3. Interacting with students in an instructional dialogue. The interaction clips did not show any student at all, focusing only on the interacting instructor.
4. Talking about the course to the camera in the professor’s office.

The distinction between “talking about” and “talking to” yielded interesting results in studies of psychotherapists (Rosenthal, Blanck, & Vannicelli, 1984) and teachers (Babad, Bernieri, & Rosenthal, 1989).

In the Ambady and Rosenthal (1993) study, the judges viewed the clips of the instructors in a silent video, to prevent any influence of the verbal content on their judgments. Babad's method has been to use judges in a foreign country who did not understand the Hebrew-speaking teachers (Babad & Taylor, 1992) and TV interviewers (Babad, 1999, 2005c). They can hear the speech and are therefore exposed to the NV characteristics of the voice. In the 2004 study, Babad et al. also used American judges who did not comprehend the Hebrew speech content of the videotaped instructors. Each group of foreign judges viewed the 67 instructors in one of the four instructional situations, and rated each instructor on three scales: Friendly, Competent, and Interesting. A fourth score, an overall composite averaging the three ratings, was added following reliability checks and principal components analyses.

All students in the 67 courses filled out the SRT questionnaire close to the end of the term (long after the videotaping in the classroom had been completed). Ambady and Rosenthal (1993) used a global SRT index, averaging the “overall course” and “overall instructor” student evaluations as the measure of teaching effectiveness. The overall ratings are considered in the SRT literature as being potentially prone to bias (Cohen, 1990; Theall & Franklin, 1990), and it is recommended to use more distinct components and aspects (Marsh, 1984, 1987, see also Marsh's chapter in Perry & Smart, 2007). In the Babad et al. (2004) study, the specific SRT ratings were clustered into four composite scores following principal components analyses:

Academic: Learning value, intellectual quality and challenge, breadth of coverage, contribution of readings, and presenting different points of view.

Instructional: Instructor's humor, enthusiasm, clarity, and expressive style.

Students: Questioning students and encouraging their participation, interest in students and accessibility to them.

Difficulty: Course workload and difficulty, and fairness of assignments, exams, and grading (difficult courses considered as less fair).

Predicting SRT from professors' NV behavior. Because of the complexity of the findings, it is important that the overall conclusions from the Babad et al. (2004) college study (and the complementary findings

from the Babad, Avni-Babad, & Rosenthal, 2003 high school study) be stated first to provide “the big picture.” The shift from the analysis of a global NV style that is over-generalized beyond all situational nuances to a careful and exacting analysis focused on specific aspects in defined instructional situations demonstrated that the associations between aspects of instructors’ NV behavior and students’ educational outcomes are very complex, with no one monolithic global prediction! Instructors’ NV behaviors in one instructional situation can predict certain SRT aspects (but not all aspects); NV behaviors of the same instructors in another instructional situation may not predict SRT (but might be related to other course characteristics); and NV behaviors in yet another teaching situation may be found to be a *negative* predictor of SRT aspects, mediated by course characteristics that had not been considered at all in previous research. Moreover, the specific NV behaviors of the same instructors vary from one instructional situation to the other and are largely unrelated to each other! Beyond all that, and still without tiring the readers with detailed findings, I argue that in the big picture, the findings support the validity of SRT measurement, and the relevant NV aspects are predictors (of moderate effect size) of the relevant student outcomes.

Table 5.2 presents the correlations between the averaged judges’ ratings of professors’ NV behavior in the four instructional situations and the averaged ratings of the professors by their actual students in

Table 5.2: Correlations Between Professors’ Nv Behavior in Four Instructional Situations and Components of Students’ Post-Course Evaluations (adapted from Babad et al., 2004)

NV Behav. In Instructional Situation	SRT Components and Overall Evaluations					
	<i>Academic Factors</i>	<i>Insrtuctional Style</i>	<i>Interact Students</i>	<i>Difficulty Level</i>	<i>Course</i>	<i>Overall Instruct</i>
First Class Session	−0.14	−0.09	0.17	0.22*	−0.18	−0.05
Lecturing	0.08	0.29**	0.08	0.10	0.20*	0.20*
Interacting W. Students	−0.25*	−0.20*	−0.12	0.33**	−0.30**	−0.22*
Talking About Course	0.08	0.10	0.15	0.16	0.08	0.09
* $p < .10$ ** $p < .05$						

those courses at the end of the term (SRT). Because all data points for all variables in these analyses consisted of group means for each professor, all correlations are reduced compared to results in a $N = \text{Students}$ design.

As can be seen, the correlations for the clips videotaped at the first class session (top of Table 5.2) showed almost no association between judges' ratings of NV behavior in the first minute of the course and students' SRT. Students' post-course SRTs are probably based on numerous impressions, and first impressions might be modified by further exposure to the teacher. The correlations for ratings of the professors' NV behavior while talking about their courses in their offices (bottom of Table 5.2) also showed no association with SRT. Thus, an important conclusion is that not *every* sample of instructors' NV behavior can predict SRT.

The stronger associations between ratings of instructors' NV classroom behavior and end-of-course SRTs were found for the two instructional situations that represented the central activities of university teaching – lecturing and interacting with students. However, patterns of correlations for lecturing and for interacting with students were not consistent with each other! This incompatibility was counter-intuitive and required further thinking and analysis.

For lecturing, the correlations for the thin slices of instructors' NV behavior supported what we know from enthusiasm and immediacy research. Being rated more positively on the 9-second clip depicting NV behavior while lecturing was positively related to the overall course and overall instructor global ratings, more strongly related to the instructional component of SRT which includes instructor's expressive style, and unrelated to the other three SRT components. The fact that three of the four specific SRT components were not related to the NV lecturing behaviors adds to the credibility of the relationship found for the instructional component.

The negative correlations between instructors' NV behavior while interacting with students and SRT components were unexpected and surprising. The more positively professors were rated by the foreign judges for their NV behavior while interacting with students, the more they received *negative* course evaluations from their students for the academic and instructional SRT components and for the two SRT overall ratings. In light of the findings for lecturing behavior, in light of the Ambady and Rosenthal (1993) findings, and in light of most teacher enthusiasm and teacher immediacy research reviewed earlier, a positive relationship should have been expected! Why should these NV-SRT correlations be negative?

Babad et al. (2004) thought that the key to understanding this pattern lies in the positive correlation of the NV interaction ratings with the difficulty component in SRT. This correlation ($r = .33$) was the highest in Table 5.2. Professors' NV behavior while interacting with students was rated by the judges of the brief clips more positively in the difficult courses and less positively in the easy courses (with "easy" and "difficult" determined by the actual students' responses about "course workload and difficulty and fairness of assignments" in the SRT questionnaire). Babad et al. speculated that perhaps the professors were aware that some of their courses were considered difficult by the students, and in these courses they tried harder to be more communicative and to provide the best explanations. This compensation was probably manifested most clearly in their interaction with students, answering questions and explaining difficult issues. Therefore, NV Interaction behavior was judged more positively in the more difficult courses. This explanation could account for the negative correlation of the NV interaction clips with the overall course evaluations and the other SRT components in Table 5.2: The difficulty component was found in that study (in analyses not reported here) to be negatively related to all other SRT components (correlations ranging from $r = -.40$ to $r = -.54$ with all other SRT components and overall composites), difficult courses (where professors' NV Interaction behavior was judged more positively) receiving lower SRTs. Thus, self awareness of the difficulty of their courses probably moved instructors to try harder to demonstrate a more positive behavior in their interaction with students, but students anyway evaluated the difficult courses more negatively.¹

¹ I am aware that the findings touch the controversial and much-debated issue of the nature of the relationship between course difficulty and student evaluations. In the present study course difficulty (consisting of ratings of workload and fairness) was negatively related to the other components of SRT, and more difficult courses received lower evaluations. Marsh (1984, 1987, see also Marsh's chapter in Perry & Smart, 2007) claimed that course difficulty is positively related to other aspects of SRT, and Marsh and Roche (2000) claimed to have debunked the popular myth that student evaluations are substantially biased by course workload. The myth that difficult courses might "cost" instructors in low ratings is indeed popular (see Greenwald & Gillmore, 1997a, 1997b). In my opinion, the issue is complicated, and no overall global conclusion would be valid. Different types of "difficulty" (e.g., grading leniency, workload of readings and assignments, number and format of exams, difficulty of exams, course tempo, level of difficulty of the subject, difficulties in understanding the instructor, etc.) probably interact with course characteristics (e.g., required versus elective courses, focused seminars versus broad lecture courses, beginners versus advanced courses, etc.) and with students' expectations to determine differential patterns of relationships. With regard to this issue, difficult courses were clearly evaluated more negatively by the students in the 67 courses in the Babad et al. (2004) study. With regard to NV research, the notable finding was that instructors' NV behavior while interacting with students was rated more positively in the more difficult courses!

METHODOLOGICAL NOTE: EXAMINATION OF COURSE DIFFICULTY
AS A MODERATING VARIABLE IN NV-SRT RELATIONS
FOR INTERACTING WITH STUDENTS

In essence, the above argument puts course difficulty as a moderating variable in the NV-SRT relations for teachers' NV behaviors while interacting with students. Babad et al. (2004) computed a series of partial correlations for the NV-SRT relations for NV behaviors while interacting with students, controlling for course difficulty. And indeed all correlations dropped considerably: None of the NV – SRT partial correlations was significant or even close to significant, the median correlation was $r = -.07$, and the highest was $r = -.14$. Thus, course difficulty probably was the key moderating variable in the negative correlations between professors' NV Interaction behaviors and SRT: Professors invested more effort in conducting positive interactions with students in difficult courses (as perceived by the judges of their NV behavior), but, being harder courses, the students in these courses gave them anyway more negative evaluations.

Course-size effects. Babad et al. (2004) examined whether ratings of instructors' NV behavior varied as a function of course size. Only a very weak, nonsignificant trend was detected for smaller courses to receive slightly higher ratings of instructors' NV behavior. However, an interesting fact was discovered when comparing the NV ratings for the 20 professors who were videotaped in both a small and a large course. Of the four instructional situations, differences in judges' ratings of the NV behaviors of these 20 professors were found only for talking about the course. Professors' NV behavior when talking about their smaller classes was rated more positively than their behavior when talking about their larger classes. Professors seem to like and enjoy their smaller courses more than their larger courses, and their feelings were picked up by the judges from 10 seconds of their NV behavior when they talked about these courses. At the same time, no differences were found for the ratings of their actual NV behavior in the classrooms! This finding adds to the credibility of the examination of thin slices of NV behavior in different instructional situations.

HIGH SCHOOL (2003) VERSUS UNIVERSITY STUDIES (2004) –
DISPARATE PATTERNS

Concurrently with their investigation (2004) of instructors' NV behavior in higher education, Babad et al. (2003) conducted a parallel

study in a high school context. A high school study is pertinent to this chapter's focus on higher education for one of two alternative reasons: (a) Either it confirms the validity and generality of the patterns discovered in the university context; (b) Or it uncovers different patterns of findings which would limit the generalization across educational contexts. Ambady and Rosenthal (1993) also conducted parallel investigations in college and in high school, and their results (for teaching effectiveness ratings provided by the school principals due to the lack of appropriate SRT instruments for high school populations) confirmed the generality of the reported pattern. The results of the Babad et al. (2003) high school study differed radically from the 2004 college study, illuminating fundamental conceptual issues concerning the role of teachers' NV behavior in the teaching/learning process.

Groups of foreign judges rated the NV behavior of 28 experienced high school teachers in seven separate instructional situations: (1) Administrative behavior; (2) Disciplinary action; (3) Using the board; (4) Frontal teaching (lecturing) to the entire class; (5) Interaction with students ("at large," that is, students identified as neither high-achieving or low-achieving); (6) Interactions with high-achieving students; (7) Interactions with low-achieving students. Students' evaluations of their teachers were collected in a SRT questionnaire (especially designed to fit the high school classroom) and in a second questionnaire measuring students' perceptions of each teacher's differential behavior toward high- and low-achieving students.

As in the 2004 university study, Babad et al. (2003) found again in high school that the prediction of SRT aspects from ratings of teachers' NV behavior varied greatly among the instructional situations, with no overall generalized pattern. For administrative behavior and using the board, no predictive NV-SRT correlations were found at all. The instructional situation for which the most positive predictions of SRT were found was disciplinary behavior, with correlations up to $r = .40$. The more teachers were rated positively by the foreign judges for their brief NV behavior while disciplining students, the more they received positive evaluations from their students at the end of the year. Frontal lecturing to the entire class, which was found to be the positive predictor of SRT in the university study (2004), was found in high school to be a *negative* predictor, and all 40 relevant correlations for this instructional situation were negative! The teachers who were rated higher by the foreign judges for their NV behavior while lecturing were more disliked by their students, and they received more negative evaluations from them.

A NV behavior index of teachers' differential behavior was computed by subtracting the ratings (of one group of foreign judges) of each teacher's NV behavior in interaction with a low-achiever from the ratings (of another group of foreign judges) of the teacher's NV behavior while interacting with a high-achiever. The greater this difference, the more differential a teacher was considered. This empirical differentiability, based on NV behaviors in 10-second clips, was related to extreme dislike toward the teacher by the classroom students, with negative correlations ranging from $r = -.47$ to $r = -.63$ with SRT components.

Thus, the high school students liked teachers whose NV behavior while dealing with discipline problems was more positive, and disliked unfair, inequitable teachers who treated high-achievers differently than low-achievers. They also disliked the more positively rated lecturers and considered them unfair.

As in the other study, Babad et al. (2003) conducted partial correlation analyses to examine potential moderator variables that might explain the surprising finding that highly rated lecturing was associated with more negative student evaluations. It turned out that higher ratings of NV behavior in frontal lecturing to the entire class were related to greater teacher differentiability (which was disliked by students). The negative NV-SRT correlations for lecturing indeed dropped after the effect of teacher differentiability was partialled out. In a subsequent study, Babad (2005b) showed the frontal lecturing thin slice clips to high school students in another town in Israel, and asked the students to make guesses about each (unknown) teacher's differential behavior when s/he would interact with low- and with high-achievers in other instances. And indeed, correlations around $r = .40$ indicated that high school students were able to guess teacher differentiability from their NV behavior while addressing their entire classrooms. Adult judges could *not* guess teacher differentiability. Babad concluded that students were "experts" in picking up and interpreting very fine and subtle nuances in teachers' NV behavior.

In conclusion, the findings on specific NV behaviors in defined instructional situations stand in contrast with the sweeping generalizations about the overall impact of global NV style on students' outcomes emerging from the teacher immediacy and enthusiasm literatures. NV behaviors can indeed predict aspects of teaching effectiveness, but such associations are context specific (differing between college and high school) and situation specific (as a function of the nature of specific instructional situations). The stronger NV-SRT predictions were found

for the instructional situations reflecting students' central needs and concerns – learning from instructors' lecturing activity in college, and disciplinary action and teachers' fairness and equal treatment of all students in high school.

MICROANALYSIS: THE NV PROFILE OF THE “GOOD LECTURER”

The final section in this chapter brings the different literatures on teachers' NV behavior to some closure and integration through the discussion of microanalysis – the method for analyzing NV profiles and illuminating the molecular behaviors contributing to overall impression. When thin slices research yields dramatic predictions of various outcomes after an extremely brief exposure to the target person, the question that pops up in everybody's mind is: “What did they (teachers, judges, TV interviewers, doctors, job applicants) specifically *do* in those few seconds that could predict future outcomes?” The microanalytic technique is quite simple: A few judges scrutinize each brief clip of NV behavior by viewing it again and again. They are given a long list of molecular variables which isolate all possible elements of each gesture, expression, movement and body position. A list of microanalytic variables would include separate lists of variables for the face, the head, the hands, the body, and the voice (e.g., nods head, leans forward, blinks, fidgets with object, etc.). Ekman's Facial Action Coding System (FACS, Ekman & Friesen, 1978) uses essentially the same methodology for identifying all human emotions from the analysis of facial molecular elements.

For molar judgments (like those presented in the previous section), judges viewed each clip only once and then filled out their global impression (e.g., competent, interesting, etc.). For molecular analysis the clips are viewed again and again, until the judges feel that they had examined each specific aspect and rated it satisfactorily. The microanalytic ratings for each clip are then correlated with the molar judgments for those clips, to examine the extent to which each element had contributed to the overall impression. Microanalysis can illuminate the molecular NV profile of good teachers, TV interviewers, trial judges, etc. In studies where multiple brief clips of a given target person are available (see Babad, 1999, on TV interviewers), microanalysis can be used to characterize the unique individual NV style of each target person. But usually the microanalysis is conducted on the entire target group (e.g., all teachers) where each person is represented

by one brief clip only, and then microanalysis is used to discover a generalized profile. [In a way, it might be said that Murray (1983a) used a microanalytic approach in his study of teacher enthusiasm, only that he used molar observer judgments of classroom-observed NV behaviors rather than molecular elements].

Babad (2005a) pointed out that microanalysis can often be quite disappointing. Many variables can be quite elusive and difficult to rate and sometimes the analysis does not yield meaningful results. Sometimes only universal components emerge out of the microanalysis, such as smiling contributing to a positive impression or shouting contributing to a negative impression, and at other times sporadic findings cannot be integrated into a meaningful pattern.

Ambady and Rosenthal (1993) conducted microanalyses on the NV behaviors of 13 junior lecturers, using a dozen molecular behaviors (on arms, gaze, frown, nod, fidgeting, laughing, smiling, leaning, etc.) plus four “position” variables (of hands, legs, torso, and sitting versus standing). The microanalytic ratings were then correlated with the judges’ molar ratings of the videotaped instructors, and also with the educational outcomes. The results were quite disappointing, and did not reveal a systematic and consistent profile of good lecturers. In a way, they might have uncovered in that analysis the NV characteristics of *bad* lecturers, as the highest (negative) correlations were found for frowning and for Ekman and Friesen’s (1969a) adaptors – fidgeting with hands, legs, and objects.

Babad et al. (2004) conducted a microanalysis on the 67 clips depicting professors’ NV behavior in lecturing to their classes. As mentioned above, the molar judgments for this instructional situation positively predicted the relevant aspects of SRT, and the objective of the microanalysis was to search for the NV profile of the good lecturer. Table 5.3 presents the correlations between 42 microanalytic molecular behaviors and the global (molar) impressions of the foreign judges based on the intact 9-second clips. Of the 42 correlations in the Table, 25 were statistically significant, and some reflected very strong relationships.

Because of the significance of the profile of the good lecturer derived from molecular elements of their NV lecturing behavior, I next list all the specific behaviors found significantly related to the global impression, re-ordered in meaningful conceptual clusters. The professors who received more positive molar ratings by the foreign judges on the basis of 9 seconds of their lecturing, demonstrated more overall NV emphasis ($r = .52$); voice intent toward students to

Table 5.3: The NV Profile of a Good Lecturer: Correlations Between Microanalytic Molecular Behaviors And Molar Judgments for NV Lecturing Clips in 67 University Courses (adapted from Babad et al., 2004)

Microanalytic NV Behavior	Correlation with Molar Judgment	Microanalytic NV Behavior	Correlation with Molar Judgment
<i>Face Variables</i>		<i>Body Variables</i>	
Smile	.44**	Sitting vs. standing	.42**
Frown	-.42**	Moving in space	.28*
Gaze down	-.36*	Body expressiveness	.33*
Eye contact	.34*	Lean forward	-.38*
Blinking	-.14	Lean backward	.09
Wide vs. narrow eyes	-.12	Lean sideways	-.35*
Tense vs. relaxed face	.31*	Orientation to audien.	.34*
Sarcasm	.30*	Fidgeting with body	-.25*
Gen. face expression	.20	Fidgeting with object	-.05
<i>Head Variables</i>		<i>Changes</i>	
Movement, expression	.10	Body & posture shift	.38**
Nod head	.03	Change NV express.	-.13
Shake head	-.18	Change in intensity	.42**
Thrust head	-.02	<i>Global Variables</i>	
Touch head	-.18	Regulators	-.11
<i>Hands Variables</i>		Illustrators	.16
Hold hands	-.23	Tense vs. relaxed	.31*
Movement, expression	.50**	Overall emphasis	.52**
Beating movement	.39**	<i>Voice Variable</i>	
Round movement	.30*	Intensity (volume)	.43**
Hands in pockets	.32*	Soft vs. hard	-.34*
Hands folded together	-.23	Voice change	.42**
		Voice emphasis	.41**
		Slow/fast tempo	.45**
		Intent toward student	.40**
<p>*$p < .05$ **$p < .001$</p> <p>Note: Voice variables were judged while hearing professors' voice. All other micro-analytic judgments were made without hearing professors' voice.</p>			

make them understand (.40); and body orientation toward students (.34). They were more expressive, showing more movement and expressions of their hands (.50); hand beating movements and round movements (.39 and .30, respectively); body expressiveness (.33) and body movement in the classroom space (.28), while standing rather than sitting (.42). The more positively-rated professors demonstrated more changes in intensity (.42); body and posture shifts (.38); voice

change (.42); and voice emphasis (.41). But interestingly, the professors judged as better lecturers were also more relaxed (relaxed face .31, and overall relaxation .31), and they refrained from negative behaviors (negative correlations): frowning (−.42); gazing down (−.36); and fidgeting with body (−.25). Among the different clusters in Table 5.3, the use of voice was particularly important in predicting the judges' molar ratings, and all correlations for the voice variables were quite substantial: Volume and intensity (.43); soft voice (−.34); voice change (.42); voice emphasis (.41); fast tempo (.45); and voice seemingly intended to make students understand (.40).

Together with the analysis of the significant molecular predictors of effective lecturing, it is important to inspect the molecular behaviors that were *unrelated* to the molar judgments. In Table 5.3, the nonsignificant correlates were noted for several miscellaneous behaviors (e.g., blinking, wide-narrow eyes, leaning backwards, etc.), but more notably for the cluster of head variables (head movement, nodding, shaking, thrusting, etc.). This is interesting, because in a parallel microanalysis of the NV profile of effective TV interviewers (Babad, 1999; see next discussion), head variables – especially head thrust and nodding – were found to be significant predictors of molar impressions. Perhaps TV interviewers, who are seated and cannot move about, need to use their heads for “expressive purposes” more than college instructors, who are free to move about in the classroom space.

This profile of effective lecturing – derived from exacting analysis of extremely brief samples of instructors' NV behavior under context-minimal conditions and with no comprehension of verbal content – was quite clear, consistent, and rich in detail. Highly-rated lecturers are very expressive in their faces, hands, voices, and body orientation toward their audience. They make continuous shifts in the various channels of their NV behavior, thereby preventing boredom and increasing student interest. And yet, despite their high level of activity, they are quite relaxed and avoid showing negative behaviors.

These findings are consonant with the various lines of research discussed in this chapter. They lend validity to teacher enthusiasm and teacher immediacy field research and experimental studies, despite the numerous flaws and methodological faults in many studies. Still, new elements emerged in the microanalysis that could not have emerged in all previous analyses. Most important is the fact that effective lecturers are quite relaxed despite their high level of face, body, and voice activity. Unlike many other life situations, their over-expressiveness is not a sign of tension or anxiety, and they even seem to enjoy

the commotion. The other element concerns the finding that effective lecturers refrain from manifesting negative behaviors such as frowning, gazing down, and Ekman-type adaptors. The absence of influence of such negative predictors enhances the effectiveness of their positive expressive characteristics.

Microanalytic comparison of effective lecturers and effective TV interviewers. The utility of microanalysis can be enhanced if it can demonstrate distinct and unique profiles of effective NV behavior in different social roles and different contexts. Beyond the universal meaning of some NV behaviors – such as smiling being positive or Ekman-type adaptors being negative – “success” in a particular social role would require a different profile of NV behaviors than in another role, dependent upon contextual aspects and normative demands. Babad (1999) investigated the NV behavior of TV interviewers with the objective of tracing preferential behavior, and that study included a microanalysis of seven prominent Israeli TV interviewers. The same set of microanalytic variables was used in the Babad et al. (2004) study, and therefore it was possible to compare the NV profile of positively-rated professors and TV interviewers.

Comparison of the 1999 and 2004 microanalyses showed that a substantial number of variables predicted the molar judgments in the same direction in both analyses (such as positive correlations for smiling, relaxed face and round hand movements, and negative correlations for frowning, gazing down, blinking, and fidgeting with self and objects). However, a substantial number of microanalytic variables that were found to be negative predictors for TV interviewers emerged as positive predictors for effective teachers. Such a reversed pattern was found for sarcasm, head shaking, hand movements and gestures, beating hand movements, body mobility, body and posture shifts, changes in intensity, and several voice variables.

Thus, changes in NV behavior and shifts in intensity, as well as “strong” expressive behaviors, are negative indicators in the tense and confrontational setting of the TV interview. These same behavioral aspects become positive indicators in the more relaxed, less confrontational atmosphere of the university lecture, and intensive and strong NV behaviors contribute to lecture effectiveness rather than hindering it. The same behavior might be perceived and interpreted as “aggressive” in one context and as “enthusiastic” in another setting. Therefore, the conclusion presented earlier for thin slices research, that a NV behavior attains its particular meaning only in the context and the situation

within which it is enacted, is further confirmed by evidence from the microanalytic research.

Conclusion. The profile of successful lecturers, derived from very fine and exacting molecular aspects of extremely brief behavioral instances, does not tell a new story about effective teaching. It consistently confirms the picture emerging from a multitude of studies in several separate literatures, and supports the intuitive common sense of educators and teacher training specialists that instructors' expressive behavior and enthusiastic (NV) conduct contribute to students' interest, satisfaction, and motivation to pursue their studies. However, the specific NV research and the microanalytic research add more specific and particular details, uncovers some counter-intuitive findings and illuminates non-findings. Most importantly, it shows how the various details are integrated into a whole picture. Thus, we can feel confident that teachers' expressive style in higher education, as delineated and investigated in various methodologies and measurement designs, is strongly related to, and probably accounts for major elements of "effective teaching."

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6. THE PELL PROGRAM AT THIRTY YEARS

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THE PELL PROGRAM AT THIRTY YEARS

For more than 30 years the Pell program has provided a voucher-like subsidy, for low-income students who apply for financial aid, to any qualifying college or university in the country. In 2005, the Pell program provided over \$12 billion in grants to more than a fifth of all college students. However, despite the significant resources spent on need-based financial aid in the United States, the gap between low- and high-income students' matriculation rates into post-secondary education has not only persisted but has widened in the last three decades (e.g., Ellwood & Kane, 2000). Disparate college attainment across socio-economic status is of particular concern to policy makers and university administrators because the percentage difference in earnings between college and high-school graduates has grown dramatically over the same period – from 19 percent in 1980 to 50 percent in 1997, for 25 to 34-year-old males. Combined with above-inflation increases in the cost of college and an increasing proportion of college-age students attending colleges these factors have contributed to mounting pressure by consumers, providers, and overseers of higher education to reform the Pell program and other components of the U.S. financial aid system (e.g., McPherson & Schapiro, 1997; Ehrenberg, 2000). To the extent that potential shortcomings of the system may be mitigated by a serious account of the related academic literature, our analysis aims to inform future policy proposals on the quantifiable outcomes of Pell on the access, choice, and persistence of low-income students.

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Following our introduction, we organize the subsequent material into five sections. The background section provides background information regarding the program history and an empirical description of the distribution of Pell funds to individuals. The first part of the background section describes how the mission and generosity of the program has changed over time due to explicit executive, legislative, and judicial action. In addition, we describe the budgeting process that has frequently constrained the funded level of Pell awards to be less than the value authorized by the Pell program, more generally. As we will discuss, the best empirical studies assessing the efficacy of the Pell program have exploited precisely these changes in the parameters, design, and funding of the program as a means of isolating exogenous sources of variation in need-based aid. The background section also provides a descriptive analysis that documents how the various reforms to the Pell program affected real outcomes, such as qualification criteria and levels of financial support. The descriptive evidence indicates that a combination of explicit reforms and government inaction led to a move away from an explicit focus on young, full-time, low-income students and a general decline in the purchasing power of the Pell award.

With the context of history in mind, we then examine in the demand-side section whether the Pell program has successfully improved (increased) the college outcomes (demand) of low-income students. First, we generally describe how the regular and sometimes significant changes in Pell-program parameters brought about by the reauthorization process can generally be exploited using a *natural experiment* (quasi-experimental) methodology. This discussion of natural experiment design highlights the importance of controlling for the potential endogeneity of aid provided to low-income students, which may bias the estimated impact of Pell aid on college outcomes. The remaining subsections sequentially discuss the empirical evidence regarding the efficacy of the Pell program on access and persistence. In general, the summary of evidence suggests that the Pell program, while possibly improving access for particular types of students (e.g., independent students), does not generally entice low-income students into college if not previously inclined to attend. Further, it does not necessarily permit a low-income student to persist in college once enrolled.

If nothing else, a quick history of the Pell program reveals that student and university interests do not always align in regards to the generosity of the Pell program. In the supply-side section we provide

descriptive evidence that the institutional distribution of Pell revenues has shifted toward two-year and less-selective four-year institutions over time, suggesting that Pell policy can have important effects on supply of higher education. In this light, we discuss one particular misalignment of student and university interests that has come to be known as the Bennett hypothesis (after former Education Secretary William Bennett) that contends that federal aid can create an incentive for universities to rent-seek at the expense of students. A summary of the empirical evidence shows that the Pell program can yield upward pressure on tuition that could offset the potential access and persistence effects of Pell aid. However, contrary to the Bennett hypothesis, some empirical evidence suggests that universities may well *price discriminate* in order to improve access of the neediest students. Nonetheless, this literature shows that supply-side impacts of federal aid programs cannot necessarily be ignored and could potentially offset the intended demand-side effects of the program.

Given the lack of compelling evidence with regard to the efficacy of the Pell program in improving college outcomes, the federal non-Pell grant section examines whether other related federal grant programs, such as the GI Bill, yield similar discouraging effects. The empirical evidence from a variety of federal programs consistently suggests that federal grants can and have improved the access and persistence of low-income students in a variety of settings. In conjunction with findings in the Pell literature that suggest Pell grants can improve the college outcomes of some low-income students, these studies offer some hope that the Pell program can be modified to yield its desired effect more generally.

The final summary section considers what might be done to close the college enrollment and graduation gaps between low- and high-income students. The apparent unresponsiveness of dependent low-income students to Pell awards suggests that incremental adjustments to the program may not be sufficient to generate the desired improvement. Thus, the current policy debate, which has become entrenched in whether Pell awards should be funded at more-generous levels, may well miss the key point – that more significant and creative changes may be warranted in how public subsidies are provided for college. We conclude with thoughts on where the empirical literature suggests we might find fruitful means of achieving our collective objective of improving the college opportunities of needy students.

BACKGROUND

CONCISE HISTORY OF THE PELL GRANT

The Pell Grant is the foundation of the federal financial aid system, providing nearly \$12 billion of aid to over five million undergraduate students in FY2005. At this level, the Pell Program is the largest single source of need-based aid, serving over a fifth of all matriculating undergraduates annually. While its size alone might suggest the tendency for Pell resources to leak into higher-income populations, the vast majority of Pell recipients are found in low-income families. For example, recent estimates suggest that over 90 percent of Pell recipients who were dependent (independent) on their parents had family incomes below \$40,000 (\$30,000) in FY1999.

The broad purpose of the Pell program is to facilitate the access of low-income populations to investments in higher education that may not otherwise be made. The Pell program was born out of the ferment of the 1960s when politicians and academics began to link access to higher education with the American dream of upward social mobility and, in a broader sense, a movement toward economic and social equity (Schenet, Powner, Stedman, & Shohov, 2003). The program founder, Senator Claiborne Pell from Vermont, himself indicates that the program has successfully maintained popular public support and survived the political vagaries of Washington because of the simplicity of its ideal: "Namely, that no student with talent, drive, and desire should be denied the opportunity for a postsecondary education solely because of a lack of financial resources" (in Gladieux, Astor, & Swail (1998, p. vii). From the Pell program's inception, it has been argued that *need-blind* access to higher education served the national economic interest by enabling the best and brightest to fully exploit their talents and thereby contribute all-the-more to the welfare of society at large. In a climate of anticipating large-scale social returns to such investments, it followed that both taxpayers and politicians had interest in supporting basic access to higher education.

While the social turbulence of the 1960s may have been the impetus behind the Pell program, the groundwork for broad-based aid programs is more appropriately attributed to the GI Bill. In particular, the generous coverage of direct educational expenditures by the GI Bill, along with its living allowance, was broadly viewed as fostering the rapid integration of veterans into the middle class and facilitating the rapid economic growth of the post-war period. Thus,

Oregon-Senator Wayne Morse, who chaired the Senate Education Subcommittee over most of the 1960s until succeeded by Senator Pell in 1969, pushed for a federal grant program for all students. Concurrently, the “war on poverty” also led other government agencies to look toward higher education as the means through which the opportunities of low-income Americans would improve. For example, the Office of Economic Opportunity introduced a number of programs, such as College Work-Study, that focused on improving the access of the poor to higher education. All told, for over a decade, the political and economic climate had been moving toward embracing a coordinated federal financial aid system, which came to fruition formally in the Higher Education Act (HEA), put forward by President Johnson in 1965.

As part of its structure, the 1965 HEA included a reauthorization process that was to occur every four to six years as a means of regularly evaluating the federal government’s financial role in higher education. The actual formulation and funding of the Basic Educational Opportunity Grant (BEOG) – renamed the Pell Grant in honor of Senator Pell in 1980 – was not actually put in place until the 1972 reauthorization of the HEA. In the intervening time between the 1965 HEA and its reauthorization in 1972, the shape of federal financial aid was bitterly debated between the Senate and the House. The Senate, under the leadership of Senator Pell, favored a \$1,200 BEOG grant, paid directly to the student or to the student’s family, that would be available for each of four years of undergraduate study. The House, following the lead of Oregon-Representative Edith Green, preferred a model that incorporated capitation grants to institutions – grants based on institutional enrollment but not expressly tied to individual students. Ultimately, the House-Senate conference committee yielded to Senate interests and largely adopted a program based on the Senate’s model of aid to students. This formulation of the BEOG grant was also supported by the Nixon administration as encouraging institutions to be responsive to student interests. Formally, the Pell Grant was phased in over a four-year period, first with the full-time freshmen of the class of 1973–74 and then with each of the three subsequent classes of freshmen.

The Pell Grant had several key elements. First, the grant took the broadly Republican-supported form of a voucher awarded directly to students who could use it at the institution of their choice. Second, although some aid was to be made available to middle-income families, the award amount was to be based on financial need that targeted

the largest share of total funding dollars toward low-income families (particularly in the event of any funding shortfall). This provision was particularly well supported by Congressional Democrats. Third, though the voucher was not technically an entitlement, the grant was expressed in terms of a fixed maximum award (\$1,400) that provided the aspiring college student a modicum of certainty with regard to the level of funding that would be available. Fourth, the program initially restricted the award level to no more than half the cost of attendance of the institution attended, which was intended to both facilitate choice among institutions and protect lower-cost and less-selective institutions that might not be positioned well enough in the higher-education market to command higher tuitions. Finally, the Pell Grant was introduced as a supplementary program that built upon pre-existing, institution-based aid programs that favored well-established universities with current-year aid allotments based on past allotments. In the end, the 1972 reauthorization yielded a hybrid program that reflected the various competing political and higher education interests of the day. Although a remarkable political achievement, the reauthorization nonetheless suffered from inadequate funding and a number of administrative difficulties that hampered implementation. Consequently, at the time of the next reauthorization in 1976, serious questions were raised regarding the effectiveness and future of the Pell program.

In general, the 1976 reauthorization was relatively uneventful. Under the new chairman of the House Subcommittee on Postsecondary Education, James O'Hara of Michigan, the reauthorization focused mainly on reducing the number of student loan defaults in order to ensure the participation of a sufficient number of banks in the Guaranteed Student Loan Program. With regard to the Pell Program, the major hurdle to the reauthorization process was the interests of private colleges in maintaining the half-cost provision along with the requirement that the federal institution-based programs be funded at no less than current levels before funds were provided to the Pell grant. These provisions, while clearly benefiting private universities at the expense of low-income students, were not changed until subsequent reauthorizations when it was clear that private universities would not be harmed by their removal. Thus, in the end, the HEA funding was extended through 1980 with the only substantive change to the Pell program being an increase in the maximum grant from \$1,400 to \$1,800.

A significant but short-lived change to the Pell program came in 1978 when congress passed the Middle Income Student Assistance

Act (MISAA), which substantially expanded access to the Pell Grant to middle-income students. The Bill was an omen of future political debate regarding federal aid programs because it brought to the forefront the tradeoff between funding low- and high-income students. The key Pell provision changed by MISAA was a reduction in the assessment rate on discretionary income used to calculate the expected family contribution. MISAA also permitted students to receive the in-school subsidy for Guaranteed Student Loans. Ultimately, the MISAA expansion of the Pell grant to the middle class subsided as the Regan Administration, through the Omnibus Budget Reconciliation Act of 1981, significantly cut funding to federal student aid programs and re-established low-income families as the target group for aid. Nonetheless, the MISAA made many of the political actors aware of the existing battle lines over which subsequent skirmishes would erupt (e.g., the increased use of tax breaks for college costs and merit-based aid that provided benefits to higher-income students).

The 1980 reauthorization highlighted the growing recognition that federal aid might differentially flow to students attending particular types of institutions. Given the student-based assignments of aid, it was student choice that dictated the ultimate flow of resources to two-year versus four-year or public versus private institutions. In consequence, there was a concerted effort by the chairman of the House Subcommittee on Postsecondary Education, Michigan-Representative William Ford, to broker a deal across competing interests within higher-educational markets that managed the distribution of federal dollars across these various sub-markets. Two key attributes of the Pell program that determined the flow of federal aid were the maximum award value and the half-cost rule. William Ford proposed that the major higher education associations negotiate an agreement that would acceptably modify these two provisions. The reauthorization therefore reflected the principles established in these talks. Specifically, the legislation called for a regular (and significant) increase in the maximum Pell award that was directly linked to the progressive elimination of the half-cost rule. As a result, the maximum award has increased since the 1980 reauthorization, albeit in fits and starts, and the half-cost rule was changed to 60 percent in 1986 and eliminated entirely in 1992.

Congress began the 1986 reauthorization process by writing into law the formulas for determining the expected family contribution for Pell grants. The formalization of the process was the direct result of the continued struggle between the Executive Branch, with the desire

to maintain the focus of federal aid on low-income students, and the Legislative Branch, with the desire to expand the program to middle-income students. In 1981, the Omnibus Budget Reconciliation Act significantly reduced funding for federal student aid. In response, the Department of Education (DOE) proposed a significant increase in the discretionary income families were expected to contribute toward their college expenses. In fact, the proposed increase was so sizeable that it would have eliminated Pell grants to families with incomes greater than \$15,000. Through a legislative veto, Congress rejected these proposed changes and, further, provided guidelines to the DOE for writing new regulations for FY1982. However, in 1983, the Supreme Court ruled that the legislative veto was unconstitutional, thereby preventing Congress from indirectly regulating the Pell grant. As a consequence, Congress instead wrested control of federal aid and the Pell Program from the Executive Branch by directly defining the rules that determined the level of student awards. Funding for federal student aid has largely been in the hands of Congress since the 1986 reauthorization.

The important events that characterize the 1992 reauthorization have more to do with what did not change than with what did change in regards to Pell funding. In particular, note that the Pell program is unlike an entitlement program in that the reauthorization process establishes expected funding levels that are subject to the annual budget and appropriations process and that the annual Pell funding is based on DOE estimates of the number of eligible persons and the expected size of their benefits. Thus, to ensure that students who qualify for a grant receive a grant, the appropriated maximum award is frequently reduced from its authorized level reflecting the limits placed on the program by the actual annual appropriations made by Congress. In fact, at the time of the 1992 reauthorization, the appropriated maximum had not equaled the authorized maximum for more than a decade. It followed that the Pell Program was viewed as *discretionary* because it permitted less than the full funding to meet all student *entitlements*. However, the 1992 reauthorization debate considered seriously the proposal that the Pell program be made a true entitlement, partly in response to the growing relative importance of loans versus grants in the financial aid package.

Of course, the real purchasing power of the Pell grant had declined by nearly a third over the 20 years since the introduction of the Pell program which, combined with the rapid increase in tuitions, had led to the maximum Pell covering an increasingly small share of the

cost of attending college. In particular, student loan defaults were up significantly in the 1980s and some in Congress felt that making Pell grants entitlements (which would reduce the level of borrowing) might stem the tide.

While both the House and the Senate entertained bills with provisions to make Pell grants an entitlement, Congress as a whole was not willing to make such a commitment. Thus, in the end, the Pell Grant was reauthorized for six years, with annual increases in the authorized maximum award but not with the substantive entitlement change first contemplated. The 1992 reauthorization did eliminate the 60-percent-of-cost cap on award values, removed mortgage costs from the calculation of family contribution, and adopted rules that made it more difficult for independent and non-traditional students to receive Pell support, which, as we will discuss, has been shown to significantly impact students and institutions.

Other than some relatively minor adjustments to the formulae that expanded the Pell eligibility for protected classes such as working dependents and independent students without children, the 1998 reauthorization offered relatively modest changes to the program. The authorized maximum Pell award was maintained at \$4,500 for FY1999, but raised by \$300 in successive years, reaching \$5,800 in FY2003. The appropriated maximum awards, having been largely ignored in earlier reauthorizations, increased after 1998, reflecting the increased willingness of Congress to fund student aid. At the same time, the total number of Pell-eligible students increased, which was driven largely by the growth in the number of high school graduates. The joint effect of the increase in the appropriated maximum and the number of Pell-eligible students nearly doubled the appropriations for the Pell Program over the reauthorization period – from \$5.9 billion in FY1997 to \$11.4 billion in FY2003.

The current reauthorization process has made it out of committee in both the House and the Senate, and again side steps some of the more controversial issues, including a renewed effort to make the Pell program an entitlement. The current House plan has proposed to *front load* Pell benefits by allocating an additional \$1000 in Pell Grants for the first two years of college. As an alternative, the Senate plan creates two new grant programs that are expected to provide \$8 billion in additional aid to Pell-eligible students over five years, with \$2.25 billion allocated to low-income students who major in areas deemed critical to national security (i.e., mathematics, sciences, and foreign language). This most recent reauthorization process has generally focused on

the flexibility of federal financial aid to serve an increasingly heterogeneous student population. For example, with regard to the Pell Program, both the House and Senate proposals allow Pell recipients to use their awards year round, as opposed to the 9 month restriction placed on current benefits. Nonetheless, the House and Senate plans largely stick to the traditional mechanism of raising the maximum Pell award and only modestly alter the administration of the Pell Program.

PROGRAM FUNDING: SO HOW MUCH IS THIS GOING TO COST US?

A historically significant limitation on the Pell Program's ability to serve low income students has been a disconnect between the reauthorization process and the actual federal funding for the program. The funding for the Pell program, although shaped by the guidelines laid out in the reauthorization process for a predetermined number of years (generally six to seven years), is specifically determined by annual appropriations legislation that also sets the maximum Pell Grant to be awarded (i.e., the appropriated maximum grant). The appropriated funds are available for two fiscal years starting in October of the fiscal year when the appropriation is made through September of the following year. Thus, for example, legislation was passed on February 20, 2003 that made the appropriation for FY2003 available to serve obligations through September 30th, 2004. On the other hand, the Pell Grant award year runs from July 1st (2003) to June 30th (2004). It follows that the periods of availability for the appropriated funds overlap multiple award years.

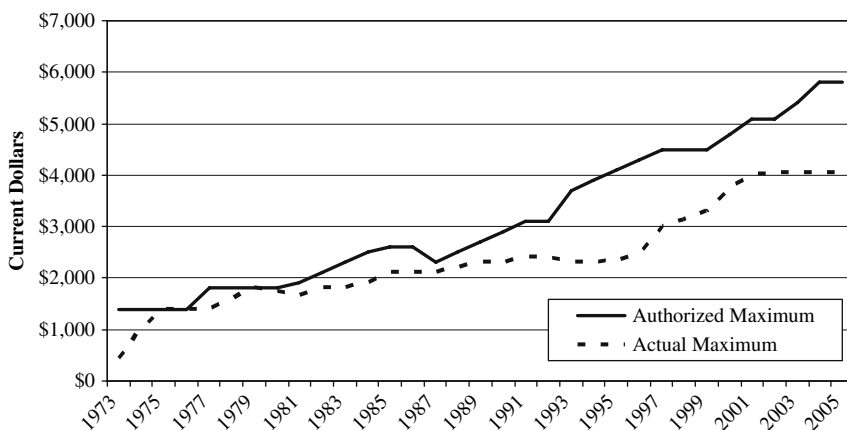
Beyond budget-related timing issues, funding problems also arise because the annual appropriation level and the maximum grant are determined well in advance of the award year they are intended to support. In particular, funding the Pell program is complicated by the difficulty in predicting the program's costs that depend on estimates of both the number of eligible students and the level of aid for which these recipients are entitled, given program rules and the maximum grant. Thus, in practice, it is necessary to predict program costs for the federal budget and then reconcile the annual program costs in a future budget (St. John & Byce, 1982). Consequently, program costs have been indirectly controlled through restricting the appropriated maximum set by annual Pell legislation, which limits the actual award

value to be less than the authorized maximum determined by the reauthorization process.

In practice, the restrictions placed on Pell funding by the appropriations process has meant that the appropriated maximum rarely equals the authorized maximum. Thus, as Figure 6.1 shows, the appropriated maximum has equaled the authorized maximum in only three years of its history and last occurred in 1979. The appropriated maximum is the amount that the neediest students are likely to receive and is often used as a measure of the generosity of the Pell program. Consequently, there are often heated debates during the appropriation process regarding the setting of the maximum award. Nonetheless, the gap between the appropriated and authorized maximum grant grew through the mid-1990s, with only a small abatement of this trend with the 1998 reauthorization.

The logic behind enacting education appropriations at least nine months in advance of the relevant academic year is so that students can plan for college with some reasonable expectation regarding the level of financial aid that will be available to them. However, because the annual appropriation is determined on the basis of estimates of the programs costs that are expected to occur at the chosen maximum grant, it has not been too uncommon that there is either a surplus or a shortfall of funds to pay students the award value for which they qualify. A surplus is a potential problem for the DOE because it has relatively limited carryover authority. Nonetheless, shortfalls have been

Figure 6.1: Authorized and Actual Maximum Pell Grant.



Source: College Board, *Trends in Student Aid 2004*, Table 8.

the more common occurrence, particularly in recent years. The recent response of the DOE to these shortfalls has been of particular policy concern.

Prior to the 1992 HEA, the Secretary of Education had the statutory authority to reduce awards to respond to a shortfall in appropriated funds. A reduction of awards was made eight times between 1973 and the last reduction in 1991. Although the 1992 HEA repealed the Secretary of Education's authority to reduce awards, the appropriations legislation between 1994 and 2001 technically restored this authority (although it was never used). Moreover, since 2002, the appropriation legislation has not included the authority to lower grants. Instead, the Secretary of Education has utilized the relatively unique attribute of the Pell grant appropriation to cover the shortfall: the DOE can and has borrowed from next year's appropriation because program funds are available for obligation immediately upon enactment and remain available for a full two years. In other words, the DOE uses funds from the 2nd (overlapping) fiscal years' appropriation to meet the current award year costs.

According to a 2004 Congressional Research Service report (Congressional Research Service [CRS] Report RL 31668, CRS-11), the shortfall problem began in FY2001, when under-funding led to the borrowing of almost \$1 billion in future funds. Specifically, appropriations legislation for FY2001 set the maximum Pell Grant at \$3,750 and appropriated \$8.756 billion. In January of 2001, the DOE estimated that the program costs for FY2001 at the specified maximum grant level would be \$9.115 billion, and that the difference between the appropriation and the program costs would be made up by the \$359 million in surplus funds from the prior year. However, the actual program costs were \$9.998 billion (a 10 percent higher program cost), while the surplus from the prior year was \$40 million less than had been estimated. Consequently, there was a \$923 million shortfall for the FY 2001 Pell Grant program and the DOE funded the shortfall by borrowing from FY2002 appropriation, which became available for obligation during the 2001–2002 award year.

These shortfalls have continued to accumulate, and the budget shortfall had reached \$4.3 billion as of 2005. The DOE attributes these shortfalls to the recent growth in the maximum appropriated Pell Grant and the unexpected growth in the number of Pell applicants and recipients (U.S. Department of Education, 2004). Regardless, the combined effect of the Pell program changes brought about by the reauthorization process and the increasing demand pressure for Pell

funds have had a dramatic impact on who received Pell aid and the level of funding provided to Pell recipients, which is the topic we turn to next.¹

THE PELL AWARD: WHO QUALIFIES AND FOR HOW MUCH?

All information needed to determine a student's eligibility, and the size of any Pell grant to be awarded, is provided to financial aid administrators through the completion and submission of a Free Application for Federal Student Aid (FAFSA) form, which can be submitted as early as the first of January of the year preceding projected enrollment. While there is no formal application deadline for the FAFSA, there are a number of states that impose their own deadline, some as early as the first of March. Likewise, many institutions impose their own deadline to submit the FAFSA to better facilitate the determination of their own financial aid offers.

Beyond broad-based requirements (e.g., qualified to enroll in postsecondary education, working toward a degree in an eligible program, U.S. citizen or eligible non-citizen, maintain satisfactory academic progress once in school, and no major convictions for the selling or possessing of illegal drugs), the Pell Grant further limits eligibility to students with the greatest amount of need. Although there are some exceptions, Pell recipients must have a high-school diploma (or equivalent) and be enrolled at an eligible institution as an undergraduate with the purpose of obtaining a degree or certificate. Pell funds, although available for the completion of more than one vocational/certificate or non-degree program, cannot be received by persons who have already earned a baccalaureate or professional degree. By design, then, the Pell program is not intended to facilitate retraining associated with career changes, for example. Formally, the eligibility requirements for federal student aid are contained in Title IV of the HEA.

To determine the level of the Pell grant, FAFSA-reported data are used to calculate two key measures: a cost of attendance (COA)

¹ Fiscal pressures affect other sources of federal, state, and institutional aid beyond Pell awards. Thus, although only briefly explored here, it is important to emphasize that broad-based budgeting issues are important for understanding the conclusions of the research with regard to the efficacy of the Pell program, because frequently changes in Pell awards are taking place in the context of broader changes in funding for financial aid that might well confound its effects (St. John, 2003). For example, the Social Security Benefits program that provided grant aid to college students whose parents died or experienced a disability was eliminated in the early 1980s at the same time that there were significant changes in the Pell program (Dynarski, 2002).

(which varies across both institutions and students) and an expected family contribution (EFC) (which varies across students). The COA is a measure of the expected educational expenses a student will undertake. Individual institutions set the COA for a given student, based on the attributes of the institution and the student. For full-time students, their COA includes such costs as tuition and fees, books, supplies, transportation, other personal education related expenses, and room and board. For part-time students and those enrolled in correspondence courses COA expenses are more limited.

Determination of a student's EFC is much more complex an undertaking. In general, the EFC is constructed to represent the amount the applicant-student and/or family can be expected to contribute toward financing the degree being sought. The student's contribution is estimated from information regarding their income, allowances against their income, number of children and their assets. However, the formula differs depending on whether the student is dependent, independent without dependents other than their spouse, or independent with dependents. To qualify as an independent student, and thus not have contribution from their parents be counted in their EFC, a person must meet one of the following criteria: be 23 years of age, a veteran of the U.S. Armed Forces, working on a master's or doctorate degree, married, being or having been a ward of the court, or having legal dependents other than a spouse. For dependent applicants, parental contributions are calculated over the same attributes, the value of which being divided by the number of dependents the parent's currently have in college. For independent students, there is no parent's contribution.

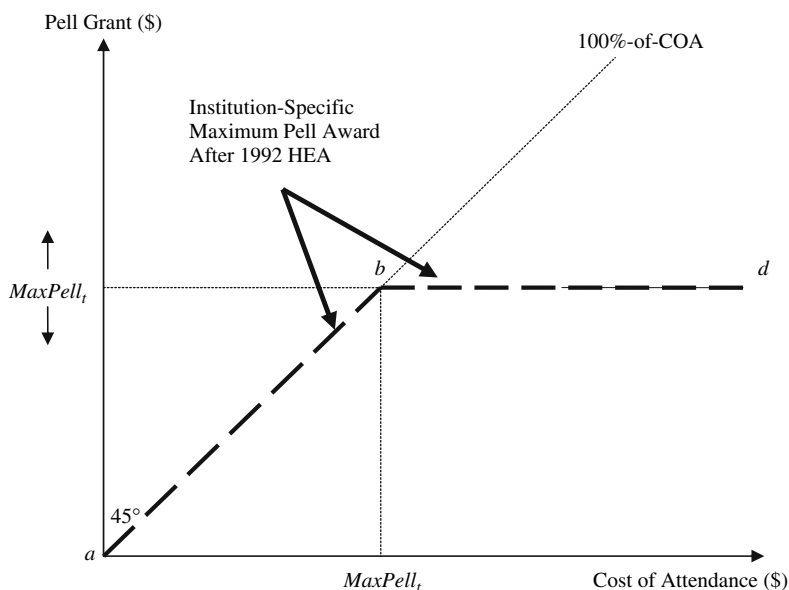
The EFC calculation includes a few *exceptions* in its formula. For example, a student can qualify to have their EFC calculated through a simplified formula, one which does not take assets into account. To qualify, they (for an independent student) or their parents (for dependent) must have an income below \$49,999 and be eligible to file the IRS 1040A or 1040EZ tax form. Further, students may automatically qualify for an EFC of zero if their (for independent) or their parent's (for dependent) adjusted gross income was less than \$15,000 the previous year and they are eligible to file the IRS 1040A or 1040EZ tax form.

Once the COA and EFC have been calculated, the value of the Pell award is formulaic. At present, conditional on being above the federally-mandated minimum grant (currently \$400), the level of an individual student's grant in a given year is the minimum of: (a)

the difference between the Federal maximum Pell Grant and the student's EFC; (b) the difference between the institution's COA and the student's EFC; and, (c) the tuition sensitivity amount.² Figure 6.2 illustrates the relationship between a student's COA and the level of their Pell grant since the 1992 HEA assuming a student has an EFC of 0. A student's Pell award is equal to their COA as long as the COA is less than the Federal Maximum Pell award. At institutions with higher costs of attendance (i.e., above $MaxPell_t$), the binding constraint on maximum Pell grants is merely the federal maximum. Positive EFCs reduce the Pell award dollar-for-dollar, as would be illustrated by a downshift of the line abc in Figure 6.2 equal to the EFC.

The majority of Pell awards, over 98 percent in the 2002–2003 award year, are constrained by one of the first two constraints, as illustrated in Figure 6.2. In fact, the tuition sensitivity amount is only applicable for the poorest students who are attending institutions

Figure 6.2: The Relationship Between the Institutional Cost of Attendance and an Individual's Maximum Pell Grant.



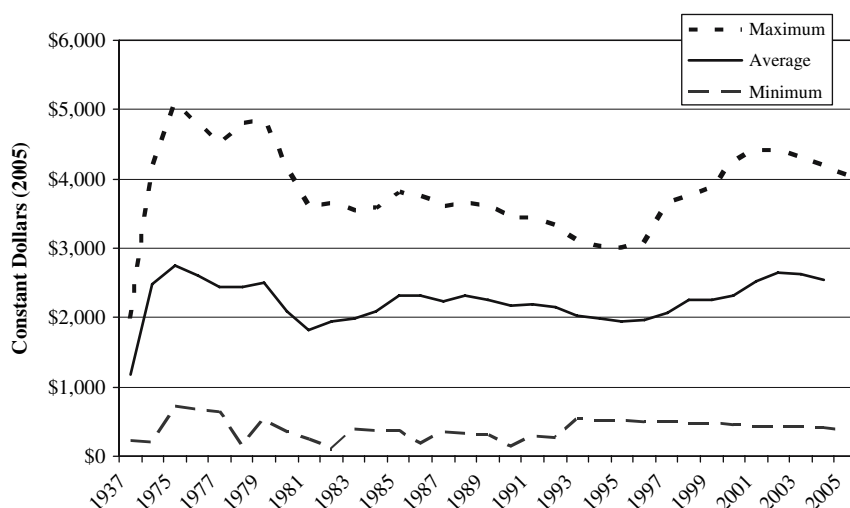
² The tuition sensitivity amount, which only applies if the appropriated maximum Pell grant is greater than \$2,700, is calculated as \$2,700 plus one-half the difference between the appropriated maximum and \$2,700 plus the lesser of (a) the remaining one-half difference or (b) tuition.

with very low tuition levels. Thus, in 2006, a student would have had to face tuition of less than \$675 for the tuition sensitivity amount to the binding factor in their Pell award.

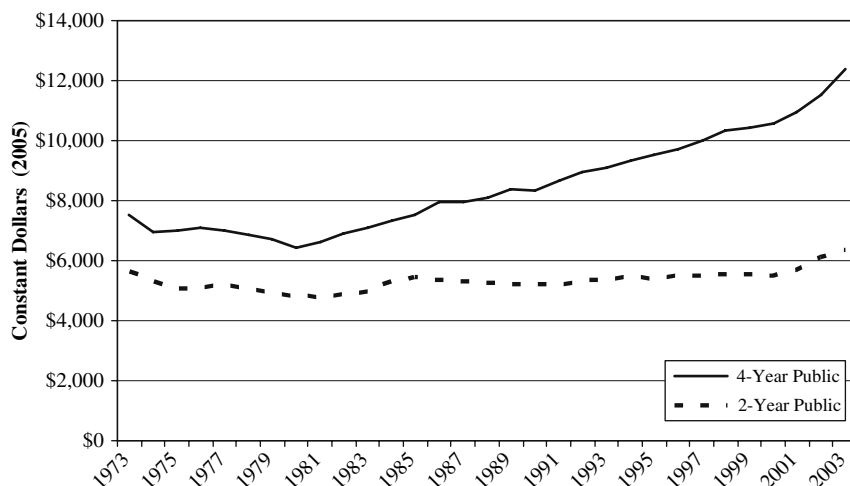
The original intent of the Pell Grant program was to provide an award that, when combined with other sources of aid and a reasonable family or student contribution, covered no less than 75% of the student's cost of attendance. However, while the average nominal award value has increased from \$270 when the program started in 1973 to \$2,466 in 2004, the real value of the Pell grant has decreased. In fact, in real dollars, the average Pell peaked shortly after the program's introduction – in 1975 at \$2,602. Figure 6.3 reports the time series of 2005-dollar Pell awards since the inception of the program in 1973, illustrating the decline in the average award value to \$1,718 in 1981, rising again to \$2,550 in 2004.

Of course, in relation to the costs of college, inflation-adjusted Pell awards still overstate their purchasing power over this time series (particularly in recent years). In fact, the cost of college has increased at nominal rates of between 5 and 8 percent since the 1980s, which has outpaced both the growth in award values and the overall rate of inflation, more generally. Figure 6.4 show a particularly strong trend for four-year public institutions, where the average cost of attendance in

Figure 6.3: Maximum, Average, and Minimum Pell Award Values.



Source: U.S. Department of Education, 2003–2004 Title IV/Federal Pell grant Program End-of-Year Report, Table 1.

Figure 6.4: Cost of Attendance at Public four-year and two-year Institutions.

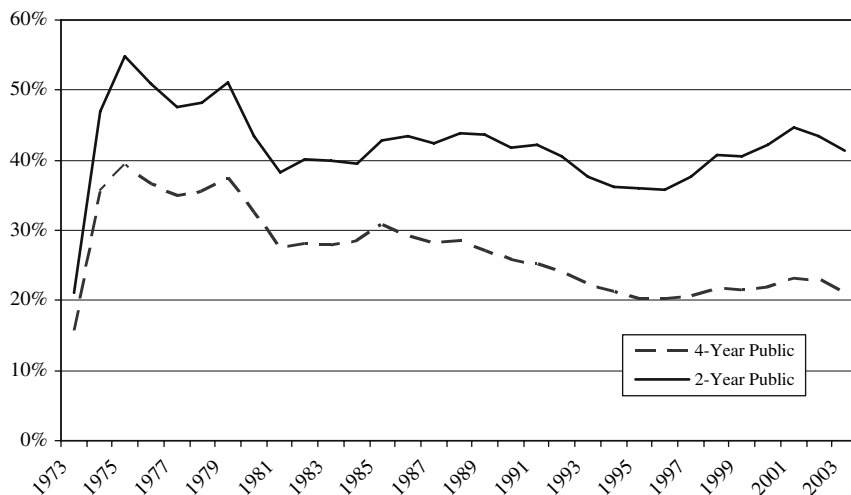
Source: National Center for Education Statistics, U.S. Department of Education, *Digest of Education Statistics*, 2004, Table 313.

2003 was nearly 93 percent higher (in 2005 dollars) than in 1981 (when costs were at their minimum). Figure 6.4 also indicates that the trend in real costs of attending two-year public institutions, although positive, is less pronounced than at four-year institutions with an increase in real costs of about 24 percent over this same period.

Figure 6.5 illustrates the changing purchasing power of an average Pell grant as a percentage of the cost of attendance at four-year and two-year public institutions of higher education. The plots show that, at its height of purchasing power in 1975, the average Pell award covered 39 percent of the cost of a four-year public university and 55 percent of a two-year public college. In 1995, the maximum award hit its lowest point, covering only 20 percent of the average cost of a four-year public university and 36 percent of the average cost of a two-year public college.

The descriptive evidence shows that there have been significant changes in the value of the Pell program over the last 30 years, which have resulted from both explicit changes in the parameters of the Pell formula and due to intermittent interest by Congress in funding the Pell program. This variation in the real value of the Pell award has been exploited in the empirical literature to evaluate whether changes in the generosity of the program do, in fact, influence the college outcomes low-income students.

Figure 6.5: The Average Pell Grant as a Percentage of the Average Cost of Attendance.



Sources: U.S. Department of Education, 2003–2004 *Title IV/Federal Pell grant Program End-of-Year Report*, and National Center for Education Statistics, U.S. Department of Education, *Digest of Education Statistics*, 2004.

EMPIRICAL ANALYSIS OF THE PELL PROGRAM

NATURAL EXPERIMENTS: TESTING THE EFFICACY OF THE PELL PROGRAM

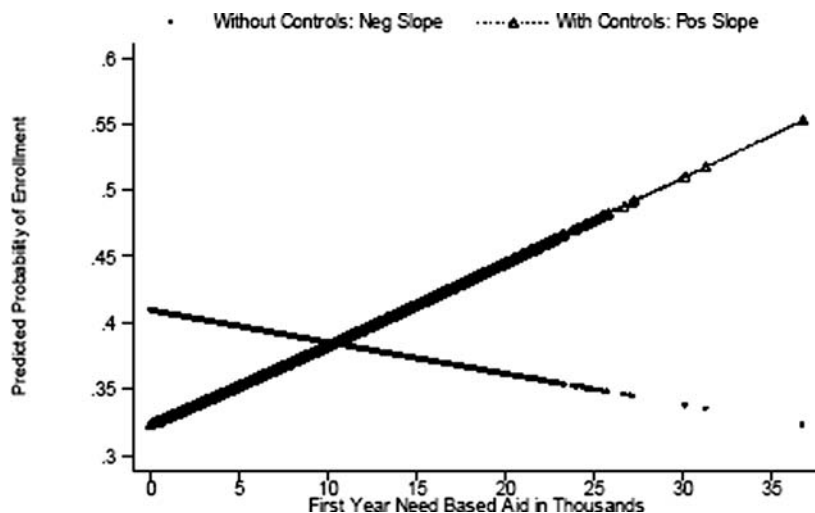
With the introduction of federal aid to students in 1973, the earliest analyses in higher education were motivated in an attempt to quantify simple student choice models which predicted that financial aid should affect both student access and enrollment choice. For example, Jackson (1978) posits that the college-entry decision depends on both sociological factors such as family background, high-school peers, and the desire to interact with similar persons and economic factors such as the investment (human capital) and consumption value of college. Such a framework suggests that empirical analyses can potentially identify both the predisposition of students to attend college and how financial aid affects college attendance controlling for this predisposition. However, the expectation that college outcomes depend on a relatively complex set of student attributes suggests that empirically testing the efficacy of the Pell program is not straightforward. In particular, Pell awards – that by design are provided to a select

set of low-income students – are likely to be correlated with omitted (unobserved) student attributes that directly affect college choice.

The potential bias arising from student heterogeneity on the predicted impact of aid on college outcomes can be demonstrated by a simple empirical exercise. Specifically, we use data detailed in Singell and Stater (2006) for freshman applicants to three large public universities (i.e., Indiana University, University of Colorado, and University of Oregon) to estimate a probit model of enrollment on need-based aid alone (i.e., the unconditioned need-based aid effect) and a probit model of enrollment on need-based aid conditioned on a detailed list of individual and institutional controls (i.e., the conditioned need-based aid effect).³ The predicted probability of enrolling in one of the three universities is plotted in Figure 6.6, which maps the unconditioned and conditioned effect of need-based aid.

The unconditioned aid effect shows a downward-sloping relationship between the amount of need-based aid and the probability of enrollment, suggesting that increases in need based aid actually reduce the likelihood of student enrollment. However, the conditioned relationship between need-based aid and the probability of enrollment

Figure 6.6: Relationship between Probability of Enrolling and Need-Based Aid.



Source: Singell and Stater, 2006.

³ The control variables include a list of personal attributes (e.g., age, gender, race, high-school GPA) and a set institutional dummies. For a full list of controls, see Table 2 in Singell and Stater (2006).

exhibits a positive relationship, which indicates that students who receive relatively large amounts of need-based aid have other attributes that make them less likely to enroll than the typical enrollee. In other words, a failure to control for these attributes can yield a downward bias on the impact of need-based aid. For example, there need be only one covariate that relates negatively to one's propensity to enroll and positively to one's propensity to receive need-based aid (e.g., family income) in order that omitting such a variable bias the observed relationship between aid and enrollment so much so that it yields the misleading conclusion that aid lowers one's enrollment probability.

However, just as inadequate controls for observable attributes may taint estimates of the effects of different types of aid, failure to account for the influence of unobservable attributes may have similarly undesirable effects. For instance, although it is possible to control for the relatively low socio-economic status of Pell recipients, these students may yet have some difficult-to-measure attributes (e.g., having a low personal taste for higher education or originating from backgrounds without highly developed academic support networks) that make them less likely to enroll or graduate than students who do not receive a Pell award.

The estimated effects of financial aid can be biased when an empirical analysis fails to control for unobserved attributes related to a student's likelihood of enrollment or graduation. In a critique of the techniques of the National Center for Educational Statistics, Heller (2004) documents how a failure to model unobserved attributes may understate the importance of a student's financial attributes in their college-going decisions. In the same volume, Becker (2004) goes further in the critique of education literature and outlines the various biases that arise through omitted variable bias and sample selection, which could confound the identification of the "true effects" of financial aid. To obtain unbiased estimates of the effect of Pell aid, one must find a source of exogenous variation in aid that is uncorrelated with unobserved student attributes that affect educational outcomes.

The concern with regard to identifying exogenous variation in aid has lead to a wider embrace of experimental methods into the field and study of economics. Laboratories now provide a proving ground for controlled experimentation with economic incentives. For example, the laboratory often makes economic incentives observable, where they may not be outside of the laboratory, and provides the researcher greater control over economic variables of interest. As such, those particular variables that theory may relate to behavior are both observable and able to be controlled by the researcher within laboratory environments.

In many cases, this ability to control the initial event to which theory predicts a response becomes an important element in achieving a legitimate test of the theory. Further, without the knowledge (or, more weakly, the assumption) that the event was not due to the behavior of agents, associating any observed change in behavior to the event in a causal way would be in error.

For example, consider the economist's standard model of demand and supply, where quantities demanded by consumers are believed to fall with price while quantities supplied by firms are believed to rise. The quantity demanded at a given price is also thought to respond to economic factors, such as it would to a new advertising campaign, for example. Likewise, the quantity supplied to a market at a given price also responds to economic factors. Even in such a simple model, measuring the responsiveness of consumers to a change in price becomes a non-trivial task, as the researcher must isolate the effect of changes in price on sales, holding constant other factors that can influence the level of demand. As a price change can occur precisely because of a change in one of the factors affecting the level of demand (e.g., advertising), it becomes difficult to assure that observed price changes are occurring independently.

What is a natural experiment? Arguably, the fundamental advantage offered through the advent of experimental methods in economics is the ability to better isolate a change in prices and therefore incentives. However, while the laboratory will often provide a cleaner environment, such isolation need not be absent from the world beyond the lab. Natural experiments, then, can offer the same ability for the researcher to test theory or measure behavioral responses to events. In a natural experiment, with the event which one is interested in measuring, a response occurs as a natural product of the economic system more generally. Outside of the particular period of analysis, the economic system driving the laboratory environment is specifically designed by the researcher. Therefore, while the laboratory researcher knows that the event of interest is exogenous to the economic agents under analysis (because he instigated it himself as part of the experimental design), the exploitation of naturally occurring events (such as the introduction of the Pell Grant) must be assumed by the researcher to be exogenous to the economic agents under analysis. Often times, evidence will suggest this as the case, making such an assumption quite reasonable. Given our particular interest in the efficacy of the Pell program, researchers must assume that the particular change in policy to which the response of economic agents is to be measured arose in a way that is exogenous to the economics agents themselves.

It is important to note that the comfort-level of researchers differs in regards to their wiliness to assume that government actions are independent of the behavior of the agents affected by the policy change. For example, one would naturally be more inclined to question the cause of a policy change at a particular institution (e.g., the introduction of a merit-based scholarship at Agnes Scott College) than if the policy change were to apply to a larger sample of institutions (e.g., all Georgia institutions). More germane to our point, one may question whether the behavior thought to be in response to the policy change (e.g., a stronger entering class) was actually caused by something else altogether – something that may have also caused the introduction of the merit-aid in the first place and therefore would spuriously assign some degree of predictive power to the introduction of merit aid. In general, by appealing to scale, one tends to be more comfortable arguing that the event be treated as exogenous to the economic agents under analysis as the size of the affected group becomes larger.

Of course, having the policy applied very broadly also comes at some cost. For example, testing for the efficacy of the naturally occurring introduction of the Pell Grant in 1973 is facilitated by the discriminating nature of the award. That is, by excluding certain observable types of students (e.g., the wealthy), such a group of students can act as a control group against which one might measure the effect of providing low-income students with financial assistance. It is a necessary assumption then (made either with support or not) that the control group is appropriate for such a role. Such analyses are commonly referred to as difference-in-difference. That is, when an isolated change occurs in one aspect of the economic environment, one can measure the difference in the behavioral changes within two distinct groups of economic agents before and after the change. Thus, the best studies of need-based grants are often those that exploit the unique attributes of the authorization process for the Pell program (e.g., changes in the maximum award) that can be argued are exogenous to the student and his or her home institution.

IDENTIFYING THE ENROLLMENT EFFECT OF PELL PROGRAM

The understanding that college outcomes depend on personal attributes, ability, family background, and a host of other factors led early Pell studies to use large national surveys that included a relatively high level of individual detail. In particular, early work utilized three nationally representative surveys – the National Longitudinal Study of the High School Class of 1972 (NLS72), the High School and Beyond survey of 1980

(HSB80), and the Current Population Surveys (CPS). These data offered the advantage of including detailed individual-level characteristics for a large number of potential college students at a variety of income levels. However, they also contained the distinct disadvantage that the information regarding financial aid was limited. In particular, the Pell Grant was not identified separately from other less-generous sources of financial aid and information on financial aid offers was only available for students that applied for college. For this reason, these early studies were generally not able to identify separate effects of the Pell program from other sources of aid and could not assess the effect of financial aid on the decision to apply for college that relate to the aspirations of potential college students. It follows that the findings from these early studies are likely to yield a biased assessment of the potential effect of the Pell program on college-going behavior.

Jackson (1978) uses data from the NLS72 to test whether the first high school classes eligible for the Pell Grant have different college-going behavior as opposed to those classes prior to the Pell program. He finds that the availability of Pell awards, while having no significant effect on college attendance, did alter the choice of college. Specifically, conditional on applying to a particular school, students who receive aid are more likely to enroll at that school than similar students who do not receive aid offers. In an attempt to control for the shortcomings of cross-sectional analysis, Jackson (1988) merges the NLS72 and the HSB80 in order to control variation across time as well as students. While throughout his sample both the percentage of students receiving financial aid as well as the award values themselves increased substantially, financial aid was found to have a consistently small role in influencing the college-going behavior of youth. Specifically, the results indicate that high school graduates who are awarded financial aid are roughly 7 percentage points more likely to attend college when compared with students without financial aid offers.

Hansen (1983) and Manski and Wise (1983) also exploit the increased generosity of financial aid brought about by the introduction of the Pell program in 1973. In particular, Hansen (1983) hypothesized that if the Pell program improved access to college then: (1) the relative enrollment rates of the poor should increase after the introduction of the Pell program, and; (2) the number of students planning to enroll in college should increase as Pell funds become available. Two data sources were used to test these hypotheses. First, CPS data were used for the two years prior to the Pell program, 1971 and 1972, and for years 1978 and 1979, when the Pell program had become well established, which allowed

for the calculation of the ratio of below-median-income enrollment rates to above-median-income enrollment rates. This descriptive analysis indicated that this ratio of enrollment rates actually decreased over this period for each of four population groups (i.e., men, women, white and black).

Second, the NLS72 data include the percentage of high school seniors that were expected to enroll in some form of postsecondary education by socioeconomic status between 1972 and 1980. A descriptive summary of the college-attendance expectations in the NLS72 indicated that the expected enrollment rate of below-median-income students declined relative to the above-median-income group between 1972 and 1980 for white college students. This ratio increased slightly for blacks. Collectively, these findings provide suggestive evidence that the introduction of the Pell program and the availability of federal aid did little to increase the access to higher education for the poor.

However, by failing to control for other factors that affect the choice to attend college that potentially vary by income (e.g., the unemployment rate, the return to education), the analysis may simply indicate that federal aid was not sufficient to offset other factors. Moreover, Hansen (1983) also concedes that lack of support for Pell improving access may result from the value of the Pell award being insufficient to overcome the liquidity constraints facing lower-income students. At the same time, the impact of Pell was likely blunted by changes in the program over the period that permitted middle- and upper-income students greater access to federal aid. Moreover, St. John (2003) also notes that the Pell grant replaced other federal grant programs such that percentage of total federal aid distributed as grants declined over the period from 55 to 47 percent. Thus, the decline in low-income enrollment found by Hansen might simply reflect that the Pell funds might have better been spent on other grant programs.

Manski and Wise (1983) exploit the dynamics of Pell generosity generated by the authorization process. In particular, in the late 1970s the Pell program expanded beyond its original intent to exclusively service low-income students such that middle- and high-income students received a growing proportion of awards by the end of the decade. Expanding access to middle-income students at the expense of funding low-income students could reduce overall college access if financial aid influences the college-going behavior of low-income students and higher-income students plan to attend college regardless of their eligibility for the program. The paper develops a model of college-going behavior that is used to forecast if and how a given student admitted to a given set of colleges would react to changes in the cost of enrollment at those schools.

Specifically, data from the first wave of NLS72 are used to estimate a model of college-going behavior where a weighting procedure is used to account for the stratification of the NLS72 that over samples low-income and non-white students. This empirical model is then used to predict the distribution of postsecondary activity choice (i.e., four-year college, two-year college, vocational/technical school, or labor force) and the distribution of Pell awards in the period between 1977 and 1979 after the generosity of the Pell program had changed. By comparing the predicted distributions with their actual distributions, the analysis is able to simulate the potential impact of the program changes. The results indicate that the number of awards and the percent of the budget given to low income students dropped from 86 to 49 percent and from 90 to 60 percent, respectively. Moreover, by comparing the predicted and actual enrollment of Pell recipients, the results show that 41 percent of low-income enrollees are *induced enrollees* that would not have been predicted to attend in the absence of aid, dropping to 16 and 6 percent for middle- and high-income students, respectively.

Collectively, the evidence with regard to the efficacy of the Pell program in increasing college enrollment is relatively mixed. These finding, although perhaps surprising, are consistent with early demand studies such as Jackson and Weathersby (1975) that suggested that college students are generally insensitive to variation in the net price of college. For example, Leslie and Brinkman (1987) conduct a meta-analysis using elasticity estimates from twenty-five college demand studies. In their analysis, variation in net price depends on both the tuition price and the level of need-based or non-need-based aid. The results confirmed the theoretical expectation of a downward-sloping demand curve for college, but also indicate an inelastic price responsiveness in the range of 0.5 to 0.8 percent.⁴ Thus, much of the early empirical evidence suggested that pulling students over the threshold from non-enrollment to enrollment may not be an easy task, particularly for the low-income students serviced by the Pell program.

⁴ Broadly, empirical studies that have estimated student responsiveness in higher education markets report elasticities of demand that are less than one despite substantial variation in both the degree of aggregation and the time period analyzed. In particular, such is the case using time-series variation in aggregate prices and enrollments for broad sets of universities (e.g., Campbell & Siegel, 1967) or single institutions (e.g., Seneca & Taussig, 1987), individual variation in net prices and decisions to enroll for a random cross-section of college-age persons (e.g., Tierney, 1982) and for applicants to a specific university (e.g., Ehrenberg & Sherman, 1984). In addition, more recent work also finds an inelastic price response for public and private universities (i.e., Dolye & Cicarelli, 1980; Parker & Summers, 1993), for in-state and out-of-state students at public universities (i.e., Curs & Singell, 2002), and across different racial and income groups (i.e., Blakemore & Low, 1983; Wetzel et al., 1998).

HETEROGENEITY IN THE ENROLLMENT IMPACT OF FEDERAL AID

More recent work has sought to examine whether the mixed evidence regarding the impact of the Pell program on college access might be attributed to either heterogeneity in the responsiveness to different type of aid or for different subgroups of the population. Jackson (1990) uses the HSB80 data to examine how different demographic groups respond to financial aid. An important contribution of this paper is a distinction between scholarships/grants and loans. Scholarships are found to have a positive effect on college entry, while the presence of loans in a financial aid package has little enrollment effect. Interestingly, the largest grant effect is found for minority students, although this differential aid effect is not significantly different between Hispanics and whites and disappears completely when a control for the tendency to attend college is introduced into the model. These findings suggest that financial issues may not be the deciding factor in whether a Hispanic student chooses to go to college.⁵

Following Jackson's model of student choice, St. John and Noell (1989) investigate the impacts of various financial aid packages on the enrollment of high school seniors. The analysis extends the literature by focusing on the type of financial aid package offered, not just the availability of aid. While evidence is found that all types of aid (grants, loans and work-study) have a positive impact on college attendance, the analysis does not find significant differences between the various types of aid. In addition, St. John (1990a) uses the sophomore class of the HSB database and finds that an increase in each type of financial aid (i.e., grants, loans, work-study) alters behavior more than a similar reduction in tuition. Interestingly, grants appear to have the largest impact on the lowest income group, while loans only are effective in changing behavior

⁵ Studies based on individual-level data at specific institutions have found similar evidence that minority students and students from lower socio-economic status respond differently to financial aid. For example, Ehrenberg and Sherman (1984) model how financial aid can be used to obtain the optimal mix of students in a selective university (Cornell University) that faces a larger number of applicants than it has capacity. They find that the enrollment yield from aid is significantly lower for minority and low-income students. In addition, individual-level, institution specific studies have also continued the disaggregation of the aid package into its separate components. For example, exploiting variation at a large public university (University of Oregon), Singell and Stone (2002) find that enrollment responses not only differ between increases in tuition versus aid, but that merit-based aid has a larger impact than need-based aid. Moreover, less generous forms of need-based aid (e.g., unsubsidized loans) have a larger enrollment impact than more generous forms of need-based aid (e.g., grants or subsidized loans). In addition, non-need-based and merit-based aid, while improving the access of all students, is found to increase the relative opportunities of well-to-do students, even with merit held constant. Thus, individual level studies of college choice suggest that needy students are less responsive to financial aid both at public and private universities.

for the middle class. Although this result is consistent with low-income students being relatively risk averse with regard to debt, it also suggests the potential presence of unobserved heterogeneity that is jointly correlated with need and the level and type of aid.

Thus, a number of studies have continued the tradition in the higher education literature of employing the natural experiment methodology that (at least potentially) can identify exogenous variation in aid. For example, Kane (1994) uses CPS data from 1973 through 1988 which includes time series and cross-sectional variation in public tuition levels, financial aid, family background, local economic conditions, and the returns to education to investigate the differential trends in college enrollment for 18–19 year old white and black students. Specifically, the analysis makes use of CPS information on home ownership, family income, number of siblings in college, and the employment status of the spouse and of the head to simulate for each sample member the expected Pell grant using the Pell grant rules in each year. Thus, the impact of the Pell grant is identified by nonlinearities in the Pell grant formula as well as changes in the Pell grant formula over time.

The results for the fully specified model that includes controls for state and year effects indicates that the Pell grant had no significant impact on college enrollment of black youth, but does significantly increase enrollment of white youth by approximately 9 percent for each \$1000 of aid. However, an analysis comparing changes in enrollment rates for eligible and ineligible students before and after the establishment of the Pell program in 1973 yields little evidence that those targeted by the Pell program (white or black) experienced relatively greater increases in enrollment. Interestingly, the results for tuition are consistently negative and significant with generally larger magnitudes than those found for the Pell award. The differential response of students to equal offsetting changes in tuition and financial aid is a common finding in the higher education literature (e.g., Curs & Singell, 2002). Such differences might arise because there are genuine differences in the value of a dollar of tuition and a dollar of aid. For example, students may be more uncertain about the actual amount of their Pell grant eligibility than they are about the level of tuition (e.g., Orfield, 1992). Alternatively, in this instance, measurement error in the simulated Pell grant variable might also bias the impact of the estimated impact of the Pell award toward zero.

Kane (1995) extends the enrollment analysis conducted in his 1994 paper by exploiting the unique information available in three different data sources: (a) the October CPS survey from 1977 to 1993; (b) NLS

data for 1979; and (c) the High School and Beyond (HSB) survey for the senior class of 1980. However, similar to Kane (1994), an examination of the growth in enrollment rates for those from families in the lowest income quartile (generally eligible students) in comparison to those from the top three quartiles (who are increasingly unlikely to be eligible) is made using CPS data for the pre-versus post-Pell period (i.e., 1970–1972 versus 1973–1979). However, in this case, a distinction is made between any college enrollment, private college enrollment, and public two-year college enrollment. The results indicate that total (private) college enrollment grew 2.6 (2.8) percent less for the lowest income quartile over the period. On the other hand, college enrollment grew between 2.4 and 3.4 percent more quickly for the lowest income quartile at public two-year colleges. This result provides the first evidence that the Pell program may yield significantly different effects across institutions of different selectivity. In other words, student concerns that the Pell program is not sufficiently generous to provide access to more selective institutions and institutional concerns that the Pell program differentially benefits certain institutions could well be warranted.

The most dramatic change in enrollment behavior over the quarter century has been the rise in the participation of students over the age of 30 in undergraduate education, which rose from 15 to 30 percent of the total of all undergraduates between 1970 and 2000. An important question is the extent to which the availability of federal aid in general and the Pell grants in particular accounts for the greater participation of older students in higher education. Sefor and Turner (2002) explicitly examine this issue by again making use of a structural change brought about by; (1) the introduction of the Pell program and; (2) a 1986 reauthorization rule change that redefined independent student status thereby restricting this group's access to Pell funds.⁶

Two separate analyses use CPS data for the period between 1969 and 1974 that span the period of the Pell program's introduction and between 1984 and 1990 that span the period of the 1986 reauthorization. The results from the first analysis show that, unlike for the broader population of college students, the introduction of the Pell program increased the enrollment of male (female) independent students by 1.5 (1.3) percent. The relatively greater responsiveness of older, independent students versus their younger dependent counterparts suggests that older students are somewhat less daunted by the complexity of applying for federal aid or

⁶ The 1986 amendment to the Higher Education Act required, for the first time, a Pell applicant to be at least 24 years old, married, or with children to qualify as an independent student.

that credit constraints are relatively more binding on older, independent students. In addition, a second analysis suggests that narrowing the definition of an independent student reduced the probability of college enrollment by between 3.9% and 4.4% relative to single students with no children. Thus, these results again suggest that the college-going behavior of nontraditional students is responsive to the generosity of federal aid. Nonetheless, the authors are careful not to suggest that providing greater aid to this population is worthwhile from a policy perspective. Specifically, to identify the merits of public subsidies for older students requires a credible estimate of the impact of additional schooling on their earnings that is not presently available and that is likely to differ from the return to education of younger students who make a direct transition from high school to college.⁷

One concern regarding the effectiveness of need-based programs, such as the Pell grant, to influence college access has been the growing use of merit-based programs by states and institutions to attract and retain the best students. For example, McPherson and Schapiro (1998) document the declining portion of subsidized need-based aid in the total financial aid package. One prime example of these merit-programs is the Georgia HOPE scholarship that, starting in 1993, provided a full tuition subsidy to attend any public university in the state to any Georgia resident who graduate high school with a B average or better along with a generous subsidy for any private university in the state. Using data on annual Pell enrollments by institution that span the 1993-introduction of Georgia's HOPE Scholarship, Singell, Waddell and Curs (2006) documents differential responses to the generous merit scholarship based on need. Contrary to that implied by other work, they find that the number of Pell recipients increased at Georgia institutions after HOPE, when compared to other southern universities, which they argue is consistent with broad merit-based scholarship programs improving college access for needy students. However, as they also document that the average Pell award in Georgia falls after HOPE's introduction, they suggest that HOPE drew students of lesser need into the Pell program. Total Pell revenues increased in Georgia relative to other southern institutions after HOPE, which also implies that broad merit-aid programs are

⁷ Other work has examined the impact of other benefit restrictions brought about by acts of Congress. For example, Tewksbury, Erickson, and Taylor (2001) examine the enrollment impact of The Violent Crime Control and Law Enforcement Act of 1994 that precluded all prisoners in federal or state penal institutions from receiving Pell Grants. This Act furthered the restrictions instituted by the 1992 reauthorization that limited awards to incarcerated persons not under a death sentence and not serving a life sentence without the possibility of parole.

effective at leveraging scholarships with greater Federal funding paid to needy students who may have not otherwise attended college.

Collectively, the results of these more recent studies suggest that the findings in prior work that the Pell program does not yield significant broad based college enrollment effects may not necessarily apply to particular groups of students or to specific types of institutions. For example, the college access of independent students appeared to be harmed by the reduced generosity of the Pell program toward this class of students in the 1992 reauthorization (Seftor & Turner, 2002), while the Pell grant appeared to increase enrollment at two-year schools but not at four-year institutions (Kane, 1995). Thus, these studies highlight the importance of understanding how exogenous changes in federal aid programs intentionally or unintentionally target particular actors in the higher education market.

THE EFFICACY OF PELL AID ON PERSISTENCE

Beyond considerations of access to college, there is a reasonable expectation that financial aid should improve students' ability to remain in college through to graduation. However, the effects of financial aid on enrollment may well differ from its effect on graduation, especially since we know only 60 percent of enrollees at four-year public universities graduate (Singell, 2004). In general there are relatively few studies of the effect on financial aid on retention and graduation simply because there are less data detailing persistence in college than on enrollment (Hu & St. John, 2001). Moreover, graduating students are a self-selected sample of enrollees who choose to first enroll and then complete a degree at a particular school versus a number of often unobserved alternatives such as enrolling at a competing school, transferring schools, or completing a degree at a later time, which present empirical issues regarding sample selection and the correlation of aid with unobserved factors that relate to graduation. For example, a first generation college student or one with unobserved family or health issues are more likely to fail to complete federal aid applications (i.e., a FAFSA form) and graduate. Such potentially unobserved student attributes can yield a negative association between the Pell grant and graduation when, in fact, the lack of need-based aid is not the root cause of the drop-out decision but is simply inversely correlated with the unobserved attribute or negative shock that ultimately leads to the student not persisting in college. Thus, it is not surprising that studies that do not account for the self-selection of Pell students find little

or no effect of the Pell grant on the persistence of recipients in comparison to non-recipients (Wei & Horn, 2002).

Institution level studies of persistence have tried to minimize the correlation of aid with *unobservables* by including relatively detailed lists of controls for personal attributes and for different types of aid that comprise the financial aid package (i.e., loans, scholarships, grants, work-study, etc.), which are generally not available in national-level data sources (e.g., Wetzel, O'Toole, & Peterson, 1999). For example, Metz (2001) uses detailed student-level data from a two-year technical college and exploits a change in the 1992 HEA which required two-year colleges to report degree completion rates to qualify for federal aid in order to examine the impact of various components of financial aid on degree completion. The results indicate that Pell grants do not significantly influence degree completion, while loans and work-study improve degree completion. A relative small retention effect of Pell grants is not uncommon in institution-level studies (e.g., Singell & Stone, 2002).

The finding that Pell awards have relatively small (insignificant) retention effect may reflect that federal grants are perceived by students as entitlements, but may also reflect the difficulty in finding sufficiently detailed data to control for the fact that grants are systematically provided to the neediest students whose unmeasured attributes are correlated with persistence. For example, DesJardins, Ahlburg & McCall (2000a & 2002b) use detailed data on students enrolled at the University of Minnesota to estimate a hazard model, which is used to simulate how changes in financial-aid packaging affect students' departure decisions. Collectively, the simulations indicate that scholarships significantly reduce stop outs, whereas grants yield insignificant effects. However, income data are missing and excluded from the hazard model specification. Thus, if low-income students are more likely to receive a grant and to stop-out for a term to work, the impact of grants on persistence may well be biased downwards if these students eventually return and complete a degree.

In general, there is a fair amount of heterogeneity in the empirical evidence regarding the persistence effects of Pell grants. Specifically, some work finds that grants do improve persistence (e.g., Thomas, 1981; St. John, 1990b), but other analyses find insignificant (e.g., Braunstein, McGrath & Pescatrice, 2001) or even negative effects (e.g., St. John & Starkey, 1995). Moreover, there is no clear consensus with regard to the types of aid that most effectively induce higher persistence, with some articles pointing to on-campus employment (e.g., DesJardins, Ahlburg & McCall, 1999), others to merit aid (e.g., Singell, 2004) and still others

to grants (e.g., Carroll, 1987; St. John, 1990b). This lack of consistent evidence regarding the graduation effect of aid in general and Pell grants in particular may well arise from the particular importance of endogeneity in regards to the receipt of Pell awards and persistence.

Thus, similar to empirical modeling issues related to enrollment, pinpointing exogenous sources of aid variation is also important in the study of persistence. A handful of studies have sought exogenous sources of variation in support to identify the effect of aid on post-enrollment outcomes. For example, Singell (2004) uses data on applicants and enrollees to the University of Oregon to estimate a bivariate probit specification that models the retention decision jointly with the decision to enroll. The results of a univariate probit model for graduation indicate that grants do not significantly increase the retention probability. However, a bivariate-probit specification that is conditioned on both the observed attributes that relate to graduation and unobserved attributes that determine enrollment (i.e., the error structure for enrollment) indicate that a \$1000 increase in grants raises the probability of remaining in school by 1.3 percent. These findings suggest that the unobserved attributes of needy students that determine the enrollment decision are inversely related to their retention probability such that there is a downward bias on the retention effect of grant aid.

Likewise, similar to studies of the impact of financial aid on access, some graduation studies have exploited changes in the aid assignment rules in the Pell program that yield different levels of support to similar students in order to identify variation in aid that is uncorrelated with the underlying propensity to graduate. The best example of this approach is Bettinger (2004), which is the only paper to directly study the affect of Pell grants on retention (as opposed to grant aid in general). The empirical analysis uses unique Ohio Board of Regents (OBR) data that permit transfer behavior of students to be tracked (at least within the state of Ohio). The OBR data provide information for all public universities in the state of Ohio for 1999 and 2000 and include detailed student demographics information along with financial information that track whether a student stops out from college as opposed to transferring to another school within the state. To isolate the exogenous variation of Pell grants independent from a students' stop-out behavior, the Pell grant is imputed for each student in the 2000–2001 school year holding constant family characteristics. The imputed Pell grants vary due solely to changes in the Pell program and tuition and also provide Pell award values for non-filers.

To examine the impact of the Pell grant on retention, the empirical analysis makes use of the discontinuity in the value of the Pell award, which arise from Pell rules regarding family size. Specifically, by assuming that the differences in family size are unrelated to a student's success in college, the analysis makes comparisons between different-sized families who have the same number of children in college. The stop-out behavior of these similar groups are compared using the Wald estimator developed by Angrist (1991), which is simply the regression of the instrumental variables estimate of stop-out behavior on size of the Pell grant. The results show that a \$1000 increase in Pell grants stemming from differences in family size corresponds to a 3 to 4 percent decrease in the probability of dropping out. However, this retention effect declines in magnitude (i.e., to approximately 1.2 percent) and becomes insignificant if the sample is restricted to those students for which the ACT exam is available or if additional campus level controls are included. The decline in the magnitude of the retention effect when individual or campus-wide ability differences are included highlights the potential importance of student self-selection, which appears to be correlated with the effect of need-based grants on college outcomes.

Overall, the broad findings with regard to the persistence effects of Pell grants are decidedly mixed. A generous assessment of the efficacy of the Pell grant on retention would suggest that it improves retention by a relatively small amount – on the order of a 1 percent increase in the probably of graduation per \$1000 of aid. These findings combined with the findings of a small and generally insignificant impact of the Pell grant on access imply that the cumulative impact of the Pell grant on college outcomes is at best modest.⁸

⁸ Some evidence has been found that grant aid can improve persistence. For example, Dynarski (2002), in addition to issues of access discussed above, exploits the natural experiment brought about by the elimination of the Social Security Benefits Program to study how the reduction in grant aid affects college completion. Using death of a parent to proxy for qualifying for Social Security Beneficiary status in the CPS data, she finds a \$1000 increase in the offering of grant aid raises educational attainment by 0.16 years, suggesting that grants improve retention and the likelihood of clearing the graduation threshold. Consistent with the institutional level studies, the retention effect of grant aid appears to be relatively small. On the other hand, the analysis can only identify whether the individual potentially qualifies for aid and not whether the person actually receives aid. It follows that the aid results are likely to be attenuated due to measurement error, which would bias the coefficient on grant aid toward zero.

SUPPLY-SIDE EFFECTS OF PELL

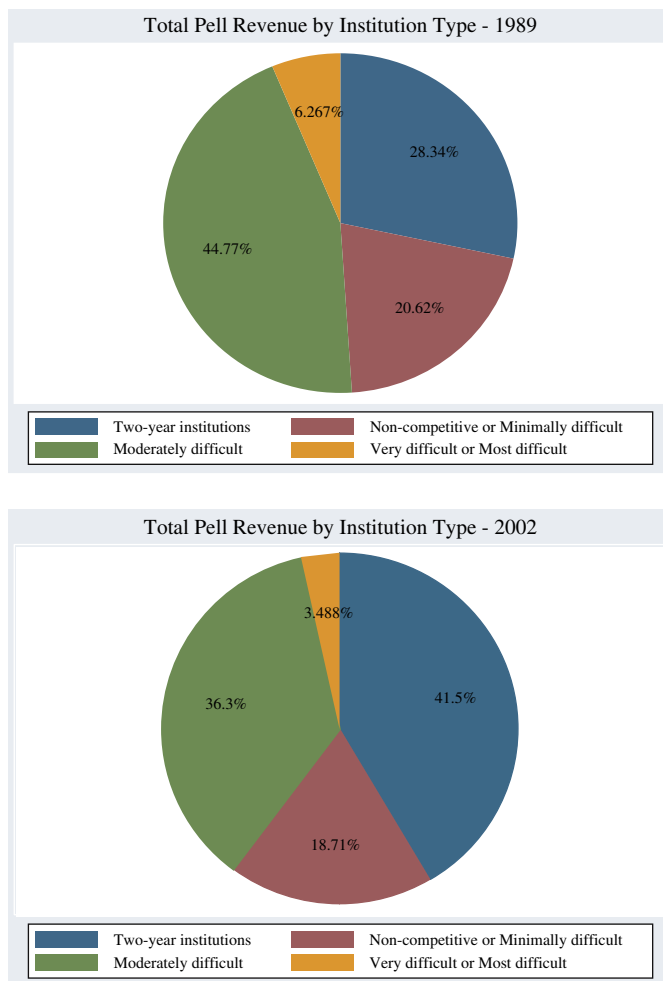
INSTITUTIONAL EFFECTS

Why does the estimated enrollment responsiveness to the Pell program appear to be so low? A common interpretation of these findings focuses on the demand side and ascribes an inelastic demand to low-income students. On the other hand, it is also unlikely that institutions sit idly by when federal aid policy changes. Thus, it is possible that supply-side responses to federal aid could be responsible for the observed overall lack of response to the Pell program. Recall that the historical design of the Pell program did not serve to exclusively promote the access interests of low-income students. For example, the half-cost rule that limited the Pell award to no more than half the cost of tuition was explicitly included in the initial authorization of the Pell program to protect less-selective, low-cost (private) institutions (i.e., limiting Pell awards kept low-income students from moving up the higher education hierarchy to more selective and expensive schools). Thus, a relevant question may be whether changes in the Pell program yield significant institutional effects.

It is easy to show that changes in the Pell program over time have greatly affected the Pell revenue earned by various institutions. Specifically, the pie charts contained in Figure 6.7 uses IPEDs and Department of Education data from Curs, Singell, and Waddell (2006) to show that there has been a significant shift in Pell resources going toward two-year institutions with the largest proportional shift in Pell revenue coming from the most selective four-year institutions.⁹ While Pell revenues may not be a particularly important source of funds for resource-rich, selective private institutions that have historically serviced relatively few needy students, Pell revenue is likely to be a critical source of funds for two-year institutions and less-selective four-year universities. Thus, some institutions might have a strategic interest in attracting federal grant aid.

Thus, while a primary interest of the Pell program and U.S. aid policy was to facilitate the match of students to institutions based on ability, it is also clear that certain changes to the Pell program

⁹ Figure 6.7 is constructed using unique institution-level Pell-related data from the Department of Education. The Peterson's Guide to Four-Year Colleges from 1989 is used as the institution's selectivity metric, which separates two-year institutions from four-year institutions classified as non-competitive, minimally difficult, moderately difficult, very difficult and most difficult. The sample used in Curs, Singell, and Waddell (2006) focuses on a well-defined set of colleges with a common academic mission that includes all non-profit institutions that offer at least an associates degree. Thus, for-profit and trade schools are excluded.

Figure 6.7: Distribution of Pell Revenue by Institution Type, 1989 and 2002.

Source: Curs, Singell and Waddell, 2006.

(e.g., the half-cost rule) might well benefit some institutions at the expense of others. Indeed, Singell (2002) shows that composition of the financial aid package depends on student attributes, institutional factors, as well as external pressures. Likewise, Turner (1998) contends that institutions with large financial aid budgets before the introduction of the Pell grant program had the capacity to undo the targeting of the federal grants. It follows that, the change in the net cost to low-income students who qualify for a Pell award might well be much smaller at well-funded universities as opposed to community colleges.

Curs, Singell and Waddell (2006) explicitly examine whether changes in the generosity of the Pell program affect the distribution of Pell revenues across the quality spectrum of universities. In particular, they analyze how generosity correlates with institutional Pell revenues by utilizing exogenous variation in the federally-determined maximum Pell Grant and federal appropriation levels, as well as the annual variation in the total number of students who are deemed Pell eligible following the application of federally-determined criteria. Broadly, Pell revenues depend on the pool of students applying for aid and their institutional choices. Thus, they also explore how the institutional Pell-revenue response relates to changes in the average Pell award per student and enrollment at each institution, which provides some of the first formal evidence of the efficacy of the Pell program in influencing the composition and net distribution of needy students across U.S. universities.

Overall, they find significant increases in institutional Pell revenues with increased generosity. Nonetheless, the magnitude (and even the direction) of the revenue response depends on the channel (i.e., the maximum Pell value versus federal Pell funds) and the selectivity of the institution. In particular, they report that revenue data show that the fraction of Pell revenues going to two-year institutions rose from just over a quarter of the total disbursements in 1989 to over 40 percent in 2002, suggesting that Pell has expanded access at less selective institutions.

Curs, Singell, and Waddell (2006) also investigates the aggregate enrollment patterns around the 1992 Higher Education Amendments (HEA) that removed tuition-based caps on maximum Pell awards. Measured against a group of slightly higher-cost but otherwise similar institutions, they report a significant increase in the enrollment of low-income students at low-cost institutions that experienced this exogenous increase in Pell generosity. In short, results are suggestive that student enrollment does respond to aid. Further, although prior evidence suggests that Pell grants do not move students over the threshold from non-enrollment to enrollment, they find that low-income students appear sensitive to the level of aid conditioned on the decision to enroll.

THE BENNETT HYPOTHESIS

Rather than argue for greater emphasis on need-based aid, some critics have argued instead that federally subsidized aid may be part of the

problem, and have even proposed federal caps on tuition increases. Several former Secretaries of Education, beginning prominently with William Bennett, have expressed concern that increases in federal support, rather than lowering college expenses for students, are instead appropriated by universities through increases in tuition (Bennett, 1987). This view has come to be known as the Bennett hypothesis.

Even without turning to idiosyncratic organizational models of university behavior (as in Hoenack & Pierro, 1990; or Netz, 1999), one can offer three basic interpretations or explanations for the Bennett hypothesis. The simplest is provided by the standard competitive model. In this case, increases in student demand for enrollment arising from increases in financial aid are met with a relatively inelastic supply response from universities, so that increases in aid are translated into proportionately large increases in tuition. In the extreme case of perfectly inelastic supply, tuition increases by the full amount of the increased aid. This result would be counter to the intent of the Pell program, which seeks solely to increase enrollment through improved access to college. Pell grants could yield a pure enrollment effect in the case of perfectly elastic supply, in which case enrollments would increase but not tuition. With public universities, tuition may be regulated directly or indirectly by the state, possibly limiting tuition responses to enrollment pressures, at least for in-state students.

A second explanation relies on imperfect competition, possibly enabling universities to appropriate an even higher proportion of aid via tuition increases. In fact, universities are highly differentiated: public and private, exclusive and nonexclusive, liberal arts and comprehensive, large and small, close and far, and so on. In this case, the demand for enrollment at many universities is likely to be downward sloping, providing an opportunity for universities to exert market power in setting tuition and exaggerating increases in tuition beyond competitive levels. As in the competitive case, though, tuition increases at most by the full amount of the increased Pell aid. It is this explanation that appears to most closely match the rhetorical arguments of former Secretary Bennett and other critics. Indeed, there is evidence not only that presidents and provosts of public colleges and universities have a significant effect on enrollment supply (e.g., Coates & Humphreys, 2002), but also that the total compensation of presidents of private colleges and universities is related to the level of tuition, even with expenditures, type of institution, reputation rankings, and other factors held constant (Tang, Tang, & Tang, 2000).

A third explanation also relies on imperfect competition, but with price-discriminating behavior by universities. In this case, the Bennett hypothesis might hold if an increase in aid to needy students with relatively elastic demand induces an even greater increase in tuition for other students with relatively less elastic demand. With price discrimination, the price charged to each type of student is set, via discounts or internal scholarships, to equate marginal revenue in each case to the common marginal cost (where there are no cost differences).¹⁰ In this case, the price increase for students with less elastic demand is *not* limited to the increased aid amount to needy students. With sufficiently steep marginal cost curves, relatively elastic demands by aid recipients, and relatively inelastic demands by other students, the increase in price for the market with relatively less elastic demand can *exceed* the increased aid amount.¹¹

EMPIRICAL EVIDENCE OF THE BENNETT HYPOTHESIS

Early empirical examinations of the Bennett hypothesis are suggestive. McPherson and Shapiro (1991), Turner (1997), and Li (1999) find evidence that tuition rises for at least some segments of the higher education market with the generosity of federal aid, but the segments where effects are significant and the magnitude of the effects vary substantially across the three studies. Such inconsistencies may arise from unobserved heterogeneity among universities, which is addressed in the subsequent literature by introducing institution-specific fixed effects.

Singell and Stone (in press) estimate a tuition regression with the average Pell award per recipient as the key explanatory variable, which the Bennett hypothesis suggests should be positively related to tuition. Theory suggests that the coefficient is expected to be between zero and one, reflecting the extent to which federal aid support is passed on to the student in terms of higher tuition. However, the cost characteristics of the Pell program and the selection decisions of needy

¹⁰ Netz (1999) finds evidence of this kind of price discriminating behavior for need-based aid and tuition for the schools that coordinate criteria for awarding need-based aid in the Ivy Overlap Group. Internally provided need-based aid substantially increases tuition for non-needy students, as well as for students who receive financial aid.

¹¹ Hill and Winston (2006), for example, using data for Williams College, find remarkably similar shares of income paid for a year of college for aided students across the five income quintiles. Specifically, the shares of pretax family incomes range from 6% to 20% – the lowest income quintile paying the smallest share and those at the 95th and 99th percentiles, paying full price, spending 22% and 9% of their family incomes, respectively. Thus, there is some evidence that the best private schools do price discriminate, typically via need-blind admissions policies.

students could bias the coefficient on average Pell awards. Specifically, because the Pell grant formula uses cost of attendance to calculate a student's award, the tuition of a school may be positively correlated with the level of the Pell grant, which would yield an upward bias on the coefficient for the Pell grants. The potential bias is limited, though, because the formula only depends in part on costs, of which tuition is only a part, and the allowable tuition has been subject to various maximums in the formula, all typically well below the relevant student costs. Alternatively, Pell grant recipients may be less likely to enroll in universities where tuition is rising more rapidly than average because they are relatively needy students, which would yield a negative bias to the coefficient for Pell grants.

A concern with potential endogeneity requires the use of instrumental variables that include both a set of binary variables that identify changes in the Pell program parameters and the lagged value of Pell grants to instrument for the current value of the average Pell.¹² Fixed-effect tuition regressions are estimated for in-state and out-of-state students at public universities and for students attending private universities using a panel of 1554 colleges and universities from 1988 to 1996 drawn primarily from the IPED data source. Hausman tests, in fact, indicate rejection of the null hypothesis of exogeneity for the average Pell grant at no less than the five percent level in each of the specifications.

The fixed-effect instrumental variable specifications indicate little evidence of the Bennett hypothesis for in-state tuition at public universities, but indicate nearly a one-to-one relationship between Pell awards and out-of-state tuition and tuition charged at private universities. Thus, while in-state students appear to be insulated from price responses to federal aid (perhaps because of the explicit mission of public universities to serve in-state students or because of agents such as Regents or legislators that represent them), public universities behave similarly to their private counterparts with regard to tuition charged to out-of-state students. These results suggest that intra-state political factors are particularly strong, especially since prior evidence on demand elasticities indicate that demand, if anything, is less elastic for in-state versus out-of-state students (Curs & Singell, 2002). Collectively, the results in Singell and Stone (in press) suggest that the pricing

¹² The binary variables for changes in parameters of the Pell program reflect exogenous government changes in the program in particular years: the percent cost rule, which mandated the maximum percentage of tuition costs that could be covered by Pell grants, was raised from 60 to 100 percent in 1993; and budget shortfalls led the Office of Postsecondary Education to decrease the grants of all but the neediest students by a linear formula in 1990.

behavior of higher education institutions is sensitive to both political and market interests, as well as, perhaps, to individual institutional objectives with regard to access for needy students.

Accounting for the potential endogeneity of Pell aid in a tuition regression is critical to testing the Bennett hypothesis and the use of instrumental variables is sometimes more of an art than a science. Thus, no single study or empirical strategy is sufficient to establish the presence of supply-side responses to federal aid. Thus, it is important to look to other studies. For example, Rizzo and Ehrenberg (2003) empirically examine the factors that drive the price responses of public institutions to changes in financial aid and state appropriations for higher education. Their sample consists of 91 (flagship) public research institutions representing all 50 U.S. states, with data drawn from IPEDS and other sources for the period between 1990 and 1998. The empirical analysis uses a 2SLS approach to simultaneously estimate four equations explaining need-based grant aid, in-state tuition, out-of-state tuition, and the percentage of non-resident undergraduate students. The system is identified through a complex set of exclusions that include, for example, state-tax revenue per capita entering in the tuition equations and SAT scores entering in the non-resident share equation. Pooled cross-section, time series and panel estimates suggest that increased generosity of federal aid as measured by the maximum Pell award are not associated with higher in-state tuition at public universities.

Alternatively, Acosta (2001) looks at whether institutions respond to an increase in federal aid that raises student demand by either raising tuition or by substituting away from institutional financial aid. The analysis uses IPEDS data for the period between 1991 and 1996, which is merged with home equity data from the U.S. Census Bureau's American Housing Survey. Fixed-effect tuition and institutional-aid specifications are estimated for 1392 four-year public and private universities that include federal student grant aid (i.e., Pell and SEOG grants) and federal loan aid as the primary variables of interest with regard to the Bennett hypothesis. The identification strategy exploits the 1992 HEA policy change that removed home equity from the aid-eligibility formula as an instrument that captures exogenous variation in federal student grant aid. The empirical results show that private universities increase both tuition and institutional aid in response to both increased federal grant aid and federal loan aid, while in-state tuition at public universities is generally not responsive to federal aid. Interestingly, the net tuition increase (tuition minus aid) at

private colleges differs distinctly across income. For example, high-income students pay \$2.75 more in tuition for every dollar increase in grant aid, middle-income students pay an additional \$1.51, and low-income students have net tuition lowered by \$4.09. Thus, the analysis, while finding support for the Bennett hypothesis at private universities, suggests that tuition increases in response to federal aid are used to price discriminate in favor of providing access to needy students.¹³

Overall, then, there is evidence both for and against the Bennett hypothesis. Specifically, the evidence for in-state tuition charged by public universities tends to reject any substantial or significant effect; alternatively, the evidence for out-of-state public and private tuition tends to support the Bennett hypothesis. Collectively, the results suggest that the pricing behavior of higher education institutions is sensitive to both political and market interests, as well as, perhaps, to individual institutional objectives with regard to access for needy students. Given recent evidence suggesting that some private universities compete and manage enrollments with financial aid (McMillen, Singell & Waddell, 2006), it is paramount to understand how tuition responds to the provision of Pell aid in evaluating whether improved generosity of the Pell program will affect access of needy students to a college education.

THE EFFICACY OF THE GI BILL AND OTHER GRANT AID ON ENROLLMENT

The overarching conclusion of the Pell research is that the demand-side effects of federal aid are relatively small (if not zero). Even worse, the dramatic rise in tuition may be, in part, due to the presence of federal

¹³ Supply-side responses to the provision of aid have also been found for the provision of state level aid. For example, Long (2004) studies a time-series of Georgia-institutions spanning the introduction of Hope using a difference-in-difference approach to identify the exogenous introduction of scholarship aid. She finds that public institutions, while not responding directly in terms of tuition increases that are controlled centrally by the state, did increase room and board fees by 5% on average. On the other hand, private universities in Georgia (with a significant number of HOPE recipients) reduced institutional financial aid by approximately 19%. Overall, the findings suggest that while public institutions recouped nearly 10% of the value of the scholarship by increasing room and board fees, private institutions recouped nearly 30% of the value of the scholarship by increasing tuition and reducing institutional financial aid. Thus, the institutions most affected by the HOPE scholarship responded strategically so as to extract rents created by the program consistent with the Bennett hypothesis.

aid that in the words of William Bennett (1987) have allowed institutions to “blithely raise tuition” (p. A31). Nonetheless, there is still room for optimism that federal grant programs can improve college outcomes. Specifically, while there is little evidence of broad-based effects of the Pell grant on enrollment, there are a number of natural experiment studies that imply that the precursor and inspiration for the Pell program, the GI Bill (and other federal grant programs), did affect the college outcomes of needy students.

The earliest such study by Angrist (1993) examines the extent to which the presence of veteran’s benefits affected the level of education and subsequent earning of veterans. The analysis uses the Survey of Veterans data for discharged military personnel from the Vietnam era and the early periods of the All-Voluntary Forces (AVF). Most Vietnam veterans were eligible for the GI Bill, but a majority of those entering under the period of AVF were eligible for the Veterans Educational Assistance Program (VEAP). The VEAP is a contribution-based program where contributions were matched by the government at a rate of 2 to 1, which induced a significant fraction of Vietnam veterans not to use the VA program. The analysis restricts the sample to men who are 30–54 years old and who have 1–15 years of service, which permits these service men to reenter into the civilian work force after discharge. An OLS regression of education on a vector of control variables including individual specific dummy variables indicates that the availability of benefits increase schooling by 1.6 years. If the individual fixed effect is correlated with the use of the program (students with more education pre-entry were more likely to obtain education post military), a separate aid effect cannot be identified. Thus, a first-difference approach is used that distinguishes between pre- and post-recruitment returns that are found to be 9.6% versus 4.3%, respectively. Moreover, although specification tests indicate that initial levels of schooling are likely to be correlated with the error terms, an instrumental variables regression using period of service interacted with the entry-level schooling yields similar findings. Thus, grant aid associated with various veterans’ programs appear to have increased both education and earnings.¹⁴

¹⁴ Other studies have found the GI Bill increased earnings. For example, Card and Lemieux (2001) use 1971 Canadian Census data and 1973 Canadian Job Mobility Survey data to identify the effects of the Veteran’s Rehabilitation Act (VRA) upon the educational attainment of Canadian men. Specifically, the analysis uses a sample of approximately 21,000 English speaking men from Ontario and French speaking men from Quebec. The analysis exploits the fact that, due to a failure to participate in WWII, most French speaking men from Quebec were not eligible for the VRA and, thus, form a valid control group. An instrumental variable approach uses an Ontario specific

Bound and Turner (2002) examine whether the combined effect of military service and the availability of subsidies through the GI Bill increased educational attainment of World War II veterans. This analysis again highlights the potential problem that treatment effects are often not randomly assigned. In this case, Census data are used to show that, because physical and mental fitness were prerequisites for military service, comparisons of the educational attainment of veterans and non-veterans from the same birth cohort are likely to overstate the causal effect of military service and the availability of postwar benefits. Nonetheless, the analysis exploits differences between birth cohorts in the likelihood of military conscription generated by changing manpower requirements in the armed forces during the World War II to identify the separate effects of conscription and GI benefits. Specifically, by aggregating data within birth cohorts and using the between-cohort variation in veteran status, the analysis identifies the independent effects of the availability of GI grant aid on the collegiate attainment net of the participation in WWII. The within cohort comparisons of educational attainment between veterans and non-veterans show that those who served in World War II received about 0.4–0.5 years more collegiate training and were eight percent more likely to graduate than those who did not serve. However, conditional on high school graduation and the fraction of veterans who have a high-school diploma, the difference between veterans and non-veterans in terms of average number of years of college completed (graduation rate) declines to 0.2 (4 percent). Nonetheless, overall, the results again suggest that veteran-specific grants improve college access and completion.

Stanley (2003) extends the work of Bound and Turner (2002) on grant-aid effects by exploiting a unique natural experiment arising from differences in the Korean War GI Bill versus the WWII GI Bill. Specifically, Korean War era veterans were eligible for an education subsidy through the GI bill provided they entered the military on or before January 31, 1955, but not after. Thus, the empirical analysis compares the educational outcomes of a sample of veterans who entered the military within a year prior to the cutoff date to those from a sample of veterans who entered within a year after the cutoff date using a difference-in-difference approach. Exploiting data

dummy variable to measure the potential eligibility for VRA benefits as an exogenous determinant of schooling, which yields a return to education for men from Ontario at 15% using an instrumental variables approach.

from the 1973 Survey of Occupational Change in a Generation, the difference-in-difference analysis indicates nearly a 20 percent increase in educational attainment for eligible Korean War veterans or an elasticity of educational attainment of about 0.4 (based on estimated subsidy of approximately 50 percent). Moreover, the estimated effect is larger for younger veterans and those with higher socioeconomic status scores. Overall, while the empirical evidence regarding the efficacy of the Pell grant on access is fairly modest, the results regarding the GI Bill indicate significant and large impacts on college attainment. It follows that understanding the differences between the GI Bill and the Pell program (e.g., entitlement versus not, size of subsidy, group targeted by subsidy) may be critical to identifying the apparent differences in their impact on observed college outcomes.

Other grant aid programs have also been found to improve college outcomes. For example, Dynarski (2002) exploits a natural experiment arising from the elimination of the Social Security Benefit (SSB) program in 1982, which had provided an average of \$6,700 to college-age students who had experienced the death of a parent. The analysis uses three years of data surrounding the elimination of the SSB drawn from the NLSY cross-sectional and poverty samples to estimate a difference-in-difference analysis that compares the educational outcomes of eligible versus non-eligible high-school seniors, before the elimination of SSB versus after. A dummy variable for a deceased father is used to determine eligibility, which accounted for 90 percent of the eligible beneficiaries. The difference-in-difference coefficients indicate that about 22 percent more students enter college under SSB by age 28, with \$1000 in grant aid estimated to increase the probability of attending college by 3.6 percent. Although the SSB program was not directly comparable to the Pell program because the benefits rose with earnings of the deceased parent, the finding of a significant impact of grant aid on college access even for a student who has lost a parent suggests that a sufficiently generous grant can improve college outcomes. Moreover, the finding of a significant impact of the SSB suggests that the elimination of other federal grant programs (including the SSB) and modifications to state grant programs that occurred concurrently with studied changes in the Pell program should have been considered in evaluating the efficacy of the Pell program (Kane, 1995).

Two papers by Abraham and Clark (2003) and Kane (2004) use natural experiment methodology to analyze the District of

Columbia's Tuition Assistance Grant Program that was instituted in 1999 and allows DC residents to attend public colleges and universities throughout the country at rates considerably lower than out-of-state tuition. Both studies use samples of unaffected college students (e.g., students in nearby cities) as a control group, and find that the number of freshman attending (particularly four-year) colleges outside of DC increased substantially. Interestingly, however, the impact on total enrollment of DC residents is actually quite modest, suggesting that the subsidy had a greater impact on where students went to college as compared to whether they choose to attend college at all. Thus, these studies again suggest that it is easier to influence college choice than it is to influence the choice of attending college or not.

Overall, studies of the GI Bill and other federal grant programs consistently indicate that the college-going behavior of veterans and other targeted groups of students are positively influenced by the generosity of federal grant aid. This evidence combined with the findings that the Pell program can affect the college going behavior of (at least) particular types of students highlights the importance of understanding the nuances in various federal aid programs and how they target federal aid. Thus, the final question to be examined is whether there is a consistent pattern to where federal grants have been found to improve college outcomes, which then can speak to how the Pell program might be altered to improve its effect?

POLICY CONCLUSIONS: WHAT DO WE KNOW?

The Pell program has provided fertile ground for testing whether the introduction of a higher-education voucher and marginal adjustments to its generosity (i.e., through the reauthorization process) affects the college outcomes of low-income students. Federal adjustments to the Pell program provide a useful foil for testing the efficacy of need-based aid because it yields variation in the access and level of financial aid that can be legitimately assumed to be exogenous to unobserved student attributes that also relate to the level of aid awards (e.g., student health status or parent's educational background). The econometric advantages of the Pell program combined with its size, breadth of student coverage, and longevity have led it to be the focus of considerable academic interest. Thus, the Pell program is the source of some of the best and most thoroughly researched analysis of financial aid in the higher-education literature.

It is, therefore, regrettable that the preponderance of evidence suggests that even the relatively large increase in the availability (and generosity) of need-based aid brought about by the Pell program and its reauthorizations appear to have had less-than-a-broad-based influence on the college going behavior of low-income students. In other words, research suggests that enticing an otherwise non-college bound, low-income student to matriculate to college with federal aid is not easily accomplished (Kane, 2001). While perhaps disappointing, the results should not necessarily be surprising given that the implicit costs of preparing for college may be quite socially and economically high for the low-income student (e.g., taking and succeeding in college-prep courses or forming the social networks necessary to be informed about the matriculation process), and that these costs are incurred far before the arrival of financial aid upon matriculation.

On the other hand, the research also suggests that the Pell program can be successful at influencing access for narrower populations of college students such as independent students for whom the benefits of enrolling in college may be relatively more apparent – e.g., persons who have entered a career and discovered *ex post* that the lack of a college degree may limit their opportunities in their chosen occupation. Moreover, some research has found that the generosity of the Pell program, while not necessarily directly influencing *access*, *per se*, has appeared to affect *choice* of college for low-income students. Thus, while the enrollment threshold may be difficult to clear for non-college inclined students, the college-choice threshold and the quality of the match may well be influenced by financial aid. Overall, these findings may indicate that the Pell program has important economic efficiencies by providing low-income students the opportunity to upgrade their skills or their college.

Ultimately, the characteristics of the Pell program that account for its longevity and political success may also have limited its economic success. For example, the Pell program by being student-based (as opposed to institution-based) yields its most direct economic benefits to students who are the least likely agent within the higher education system to politically organize and argue for the program. Regular and consistent lobbying of Congress is essential for a ‘non-entitlement’ Pell program, where the funding must continually be reauthorized. In addition, the interests of students and institutions are not necessarily aligned. For example, universities have pushed for Pell program restrictions, such as the half-cost rule, that clearly protect institutional interests at the expense of students. Even worse, the literature testing

the Bennett hypothesis suggests that federal aid might well encourage rent-seeking behavior on the part of universities. Thus, it is not wholly surprising that the history of the reauthorization process shows a steady erosion of the real value of the Pell awards at a time when more politically expedient aid programs such as deferred tax college savings plans at the federal and state level (e.g., 529 plans) and merit-based aid programs at the state and institutional level have received growing support (Dynarski, 2000, 2004).

However, the research suggest that perhaps the potentially greatest weakness of the Pell program is the reauthorization design itself that has led to a focus on marginally adjusting the pre-existing Pell parameters as opposed to more significant and creative adjustments that may be necessary to yield a real lasting effect. In particular, unlike the evidence surrounding the Pell program, studies of the GI Bill, the Social Security Benefits Program (SSB), and the DC Tuition Assistance (DCTA) Program find strong evidence that federal aid can yield significant and economically meaningful changes in college-going behavior (e.g., Abraham & Clark, 2003; Bound & Turner, 2002; Dynarski, 2002). Moreover, merit-based aid programs (e.g., the HOPE scholarship in Georgia), which might well be expected to favor the well-to-do student, have also been found to increase the enrollment propensities of needy students (e.g., Cornwell, Mustard, & Sridhar, in press; Singell, Waddell, & Curs, 2006). Thus, it is reasonable to ask what these programs do that the Pell program does not.

The programs that yield significant effects on college-going behavior are, first and foremost, entitlements. Among the related need-based aid programs, the GI Bill was broadly available to all veterans, the SSB Programs was available to all persons who experience a death in the family, and the DCTA Program is available to all DC residents. Likewise, the Georgia HOPE Scholarship is an example of a merit-based entitlement where all Georgia residents with a high-school average of "B" or better qualify for assistance toward Georgia post-secondary institutions. Thus, these programs entitle qualified students to aid, which reduces uncertainty with regard to the sources of funding and permits students to plan (prepare) for college. Uncertainty regarding funding may be the greatest barrier to college access because needy students (particularly first-generation students) may not have the social capital necessary to fully evaluate whether they have the sufficient resources to attend college and may greatly underestimate their access to financial aid (e.g., Singell & Stater, 2006).

Second, in a related point, most programs that have been found to successfully entice previously non-enrolling students to matriculate have clear and simple rules that determine whether a student qualifies for aid. The Pell program has a myriad of complex (regularly changing) rules that make it hard for a student to know, *a priori*, the level of federal grant support they will receive. This fact, combined with the non-entitlement status of the Pell grant, means that a student must first apply for college with the confidence that they have the wherewithal to enroll independent of their potential grant aid. Such confidence is likely to be lacking for relatively needy students who may require significant financial support to attend college (e.g., St. John, 2003).

Finally, the most successful programs entitle a student to grant funds that cover a well-specified and significant portion of the cost of college. At the time of their inception, the GI Bill, SSB, DCTA programs, and the HOPE Scholarship all covered most, if not all, of the costs of college, entitling students to both well-defined and generous aid packages that left the student with relatively little debt burden from college and little uncertainty. If needy students are relatively more uncertain about their ability to complete college and less certain about their earning capacity when they complete a degree, they are less likely to take on the necessary debt to go. Risk aversion combined with the rising cost of college and the increasing share of non-subsidized aid in the financial aid package may go along way toward explaining the growing gap of college attendance between needy and non-needy students.

In the end, good aid policy must weigh the costs and benefits of any program and must compare the net benefit of government funds spent in a given use versus its next best alternative. Thus, an important question to ask is whether the federal government should be subsidizing student college access. Driven by a growing return to a college education, a significant and increasing portion of the college-age population (the needy included) find it worthwhile to attend college. Thus, a relevant question might well be whether the additional resources necessary to induce the marginal needy student to enroll in college can justify the expenditure (e.g., Dynarski, 2002). The policy pundits that have been pushing for greater funding for the Pell program have done little to answer such questions.

Nonetheless, from a social perspective, it is unlikely to be optimal to permit a growing educational divide between the income classes and it is here where the evening hand of government is likely to be required to equalize opportunity. Federal courts have already insisted

that we have a constitutional obligation to fund K-12 equally and equitably, and the growing importance of college education in the labor market may well suggest that this principle should be applied to K-16. However, the growing use of merit aid and other non-need-based aid programs by both institutions and states to leverage limited federal aid dollars and influence the choice of the marginal (able) student is evidence that these levels of government are unlikely to have the financial wherewithal or the self-interest to effectively pursue need-blind admissions. Thus, given that the Pell program is the largest federal attempt to level the playing field, it is important to know what modifications to the program will best make use of the federal purse. The body of research to date suggests that the current Pell program is unlikely to be optimal.

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7. THE POLITICAL ECONOMY OF REDISTRIBUTION THROUGH HIGHER EDUCATION SUBSIDIES

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State governments provide the majority of support for higher education in the United States. Across all states in the year 2000, eleven percent of total expenditures were spent on higher education—a figure totaling 56 billion dollars. Without this level of subsidy from states, higher education as it is known in the United States simply would not exist.

Unlike other large state subsidized programs such as elementary and secondary education, higher education is not a service available to all. Instead, in different ways in different states, the provision of higher education is rationed. For example, higher education is rationed at selective institutions according to the characteristics of students. In every state, selective public institutions deny some state citizens access to their services on the basis of the citizens' academic qualifications. It is hard to imagine other services being rationed in this way—for instance, limiting transportation services to only the best drivers would never be an acceptable method of rationing this state-provided good.

In perhaps a less familiar way, higher education is also rationed on the basis of price. Since even public higher education is not offered free of charge in every state, decisions about how much to charge for higher education are also necessarily decisions about who will be able to take advantage of this state service.

As a result of this rationing, both on the basis of academic qualifications and by price, public higher education is consumed primarily by higher income individuals. Access to higher education in the United States is inversely proportional to income. Even after controlling for

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academic ability, low income children are less likely than their peers to attend higher education (Ellwood & Kane, 2000; Kane, 1999).

In effect, states subsidize higher education by using taxpayer money that they collect from all citizens through some combination of taxes. States then spend a large portion of that money on a service that benefits only a subset of citizens—a subset that is primarily made up of middle and upper income people.

This combination of circumstances led Hansen and Weisbrod (1969a) to assert that higher education redistributes wealth away from the poor and to the rich. They based this result on a study of the current costs and distribution of benefits of California higher education. Given that all people pay taxes, and mostly middle and upper-income persons receive a higher education, they reason that this is a benefit that is paid for by all income groups equally, but enjoyed mostly by the non-poor. They conclude that, unlike state programs for health care or welfare, higher education as a state service does not distribute funds in a progressive manner.

Hansen and Weisbrod's assertions created a heated debate among scholars of higher education. . The argument at the time was about the degree to which state subsidies for higher education may or may not redistribute wealth from the poor to the rich or vice versa. Conventional thought at the time assumed that voters and their elected representatives would prefer to support a program that would distribute funds in a progressive way, but had been hampered by poor policy design.

This may not be the case. Instead, what if voters and their elected policymakers recognized that the benefits from higher education as a state service accrue primarily to middle and upper income persons? If so, the regressive redistribution of benefits would result not from flawed policy design, but from a deliberate attempt on the part of state policymakers to create a program that provides a benefit mostly for middle- and upper-income voters.

This chapter will examine the theoretical and empirical support for the idea that the redistributional effects of higher education subsidies are the direct result of a rational effort on the part of policymakers to design policies that satisfy their constituents' desires. This marks a shift away from the classic policy intervention literature, which assumes utilitarian motives on the part of policymakers, to the political economy literature, which uses formal theories of individuals interacting in strategic situations to explain how policymakers attempt to satisfy their own interests (Boix, 2003; Persson & Tabellini, 2002).

I begin this examination by revisiting the classic debate on the redistributive effects of higher education subsidies. I examine the claims and counter-claims of those involved in the debate, including those who argued at the time that the debate was not so much about measures of redistribution of income, costs and benefits, but really about the underlying concepts of redistribution, progressivity, and costs and benefits (Cohn, Gifford, & Sharkansky, 1970; Hartman, 1970). I conclude this section by updating the Hansen and Weisbrod analysis using more recent data sources—an analysis which shows that higher education as a service still provides high levels of benefits to middle and upper income citizens in the states. This analysis motivates the theoretical argument in the next section, which demonstrates that such a result may not necessarily be the outcome of poorly designed policy, but rather a feature of policymakers' desired outcomes.

The debate regarding redistribution through higher education subsidies was also a political debate. By arguing for or against an expansion of subsidies, analysts were favoring a particular view of the correct form of government intervention into higher education. However, few at the time expressly characterized the debate as being about politics as opposed to a politically-neutral policy debate. This chapter reframes the question as a political one, namely, under what circumstances might a majority of voters favor a regressive system of higher education subsidies. The answer to this question can be found in recent developments in political economy.

I turn to the political economy literature on redistribution to examine the circumstances under which majorities of voters will prefer different types of taxation and redistribution of income across income groups. The political economy literature has been developed primarily in the last 25 years, after the initial debate on the redistribution of income through higher education had waned. Specifically this study makes use of theoretical developments in the area of selective welfare programs—state-subsidized programs which provide benefits to only a few, while relying on tax revenues collected from all.

The literature on selective welfare programs has spawned a series of theoretical treatments of higher education as a type of selective welfare program. I examine the formal theoretical models that have been developed to analyze the conditions under which a majority of voters might support the kinds of subsidy programs that are in place for higher education in many countries, including the United States.

In exploring this literature, I demonstrate how these theories can explain a pattern of subsidies that can appear to be irrational

from a purely societal-utilitarian or Benthamite view in terms of the rational activities of fully informed voters and policymakers. The use of political economy as a tool to understand the antecedents of higher education policy provides clear explanations in terms of motivations and outcomes for all of the actors in a political system, a strength of this theoretical approach which I highlight in the conclusion.

In the next section, I take a single formal model of higher education subsidies developed by Fernandez and Rogerson (1995) and apply its equilibrium results to the conditions existing in the American states. I provide a modest extension to the model by analyzing the conditions under which externalities would be sufficient to provide benefits equal to higher education for any group. I then restate the equilibrium results from the Fernandez and Rogerson model as hypotheses to be tested in an empirical setting. Using panel data from the fifty American states from 1984–1999, I examine whether the results predicted by Fernandez and Rogerson are in fact supported by the available data. I conclude by suggesting further empirical and theoretical developments that would shed further light on this subject. Of particular important theoretically is the idea of student ability and cross-subsidies between students and institutions. Empirically, the development of better quasi-experimental results will aid in sorting out the complex causal relationships that occur when analyzing state politics and policy.

Improving our understanding of this area is critical, as it is part of an expansion of the scope of research into higher education policy that takes into account not just the effects of a given policy, but also the antecedents of policy development. In the vast majority of research into this area in the past, the question has been about the effects of policies—for instance, the effect of higher education subsidies on the redistribution of income. While we still have much to understand, we know more than we ever have about this area. But we know very little about the conditions which give rise to the policies whose effects we are observing.

This has been changing in the last decade, as researchers have begun using theoretical frameworks adapted from sociology or political science to analyze the antecedents of state higher education policy (Doyle, in press, 2004; Hearn & Griswold, 1994; Hearn, Griswold, & Marine, 1996; McLendon, 2003; McLendon, Deaton, & Hearn in press; McLendon, Heller, & Young, 2005; McLendon, Hearn, & Deaton, 2006; Lowry, 2001a, 2001b). This chapter provides an alternative theoretical basis for understanding the origins of state policy for higher education, one based on political economy.

As a field, political economy shares a common interest with political science insofar as it seeks to understand “how policy decisions are made, what shapes the incentives and constraints of the policy-makers taking those decisions, and how conflicts over policy are resolved” (Persson & Tabellini, 2002, p. 2). To understand these decisions, theorists in this area rely on a common set of assumptions about human behavior. In particular, they assume that individuals have preferences; that these preferences can be ordered and that an individual will choose the option that she prefers, given an ability to do so. With these assumptions in hand, analysts can then model strategic interactions between individuals who are acting on a set of preferences, usually subject to simplification in the form of a utility function. The choices of individuals, given the choices of other individuals in a given strategic situation, result in an equilibrium or equilibria, which can then be described mathematically.

As this chapter will show, political economy provides a substantive addition to our understanding of higher education policy. In the single area under consideration, the use of the theoretical tools of political economy can illuminate a longstanding debate about one of the most important interactions between state politics and higher education: the provision of resources to support the institutions and students.

REDISTRIBUTION THROUGH HIGHER EDUCATION SUBSIDIES: THE HISTORICAL DEBATE

Government support of higher education has traditionally been thought of as a progressive redistribution of income, providing benefits for individuals which they would not have been able to afford otherwise (Schultz, 1968). But what if this were not the case? Could it be that higher education instead redistributes income away from the less wealthy and to the rich?

The debate on redistribution through higher education subsidies could have begun in September 1967, when the California Legislatures' Joint Committee on Higher Education asked two economists, W. Lee Hansen and Burton Weisbrod, to conduct a study that would compare the benefits and costs of higher education in the state McGuire (1976). The researcher's conclusion, stated in a monograph based on the research contained in their state report, shocked policymakers and researchers:

The effect of these subsidies is to promote greater rather than less inequality among people of various societal and economic backgrounds by making available substantial subsidies that lower income families are either not eligible for or cannot make use of because of other conditions and constraints associated with their income position ... it is clear that whatever the degree to which our current higher education programs are rooted in the search for equality of opportunity, the results still leave much to be desired. (Hansen & Weisbrod, 1969a, p. 78)

The authors' conclusions were quite controversial, and were debated in academic and policy settings for almost a decade (Carnegie Commission, 1973; Cohn et al., 1970; Hansen & Weisbrod, 1969a, 1969b; Hartman, 1970, 1976; McGuire, 1976; Pechman, 1970; Windham, 1976; Zwerling, 1973). If it was true that the extensive and complex program of higher education subsidies in the country did more to benefit high income than low income students, there was no argument to be made for the support of higher education subsidies as a progressive redistribution program. Instead, public support of higher education could be categorized as a distributive program, providing support for a group of favored constituents.

This section will review this debate, concentrating on the substantive issues raised by Hansen and Weisbrod, their particular methodology used to estimate the concepts in their work, and the debate about both. As will be seen, there are no clear answers to many of the questions raised, although more recent data leaves reason to suspect that the Hansen and Weisbrod formulation was essentially correct.

THE BENEFITS OF HIGHER EDUCATION

Hansen and Weisbrod begin by tallying the benefits conferred upon individuals as a result of receiving additional education beyond high school. Their chief contention is that the benefits are primarily, if not entirely, private. In making this argument they are echoed by many other economists, probably the most prominent being Milton Friedman (1968). Those who argue that the benefits are not primarily private have two main points. First, attendance at an institution of higher education translates into higher levels of personal income and productivity, which benefits society when that income is taxed and those revenues are translated into public benefits. Second, there are unmeasured but possibly important externalities when higher education is

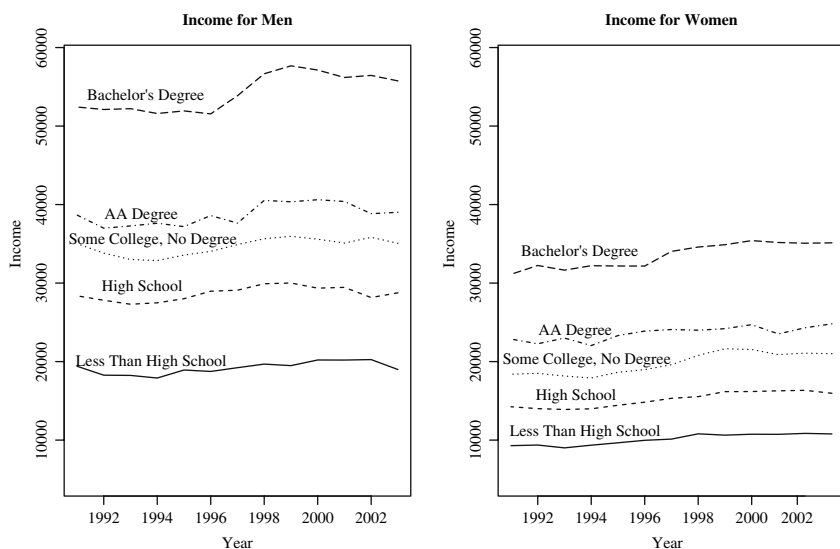
provided to individuals. This argument contends that the whole society benefits when an individual becomes more educated, as that individual becomes more likely to become involved in a range of activities which benefit everyone living in the society.

The first benefit to be conferred on any person who attends higher education is higher lifetime earnings (M. Paulsen, 1998; Pencavel, 1991). Data in support of this assertion have accumulated for decades, and current data as shown in Figure 7.1 continue to support this claim: attendance at an institution of higher education confers higher lifetime earnings on individuals. This effect is not limited to those who have attained some form of credential, but extends to those who have attained only course credits (Kane & Rouse, 1995). Hansen and Weisbrod tally the net present value of increased income as the first and primary benefit for any individual who attends higher education.

This level of increased income may result from two characteristics of individuals. It could be that increased lifetime earnings for college graduates arise as a result of the increase in skills and abilities for these individuals, and the concomitant increase in productivity realized in the workplace (Bartel & Lichtenberg, 1987; James, Alsalam, 1989; Conaty, & T. Nelson & Phelps, 1966; Wise, 1975).

Secondly, increased lifetime earnings could also be the result of innate skills and abilities, which resulted into selection into higher

Figure 7.1: Income of males and females aged 25–44, by level of education.



education (Weisbrod & Karpoff, 1968). In this case, attendance at an institution of higher education could simply be a signal of skills and abilities which remain unchanged throughout a student's career in college. As Hansen and Weisbrod state, "there is strong reason to believe that those persons who go on to college and especially those who graduate, are in general more able and ambitious than those who do not enter college" (Hansen & Weisbrod, 1969a, p. 18)

Estimates cited at the time of the Hansen and Weisbrod study put the percent of the income differential between college graduates and non-college graduates due to innate ability at somewhere between 12 and 40 percent. More recent evidence has suggested that the income differential due to student's innate aptitude could be as high as 50 percent (Hoxby & Terry-Long, 1999).

Few analysts subsequently debate Hansen and Weisbrod's assertion of higher lifetime earnings as a result of increased education. Rather, most of the debate has centered around the proportion of the wage premium associated with increased education and the distributional assumptions made in the Hansen and Weisbrod study (Pechman, 1970). None of the evidence mustered since the time of the original debate essentially disputes the assertion that individuals do benefit as a result of higher education in the form of higher incomes, even after accounting for higher levels of innate ability (Ashenfelter & Rouse, 1998). Individuals do achieve a higher level of income than they would have otherwise as a result of attending a college or university. This means that policy decisions about who goes to college are also decisions about who will, on average, have higher lifetime earnings.

Attendance at an institution of higher education also confers consumption benefits on individuals. This consumption benefit could be positive—students presumably enjoy the experience of higher education, finding it innately pleasurable to attend classes and spend time on college campuses. It is also possible that the consumption benefit is negative. Students may not like college much and may find that the entire experience is unpleasant, but presumably necessary in order to reap the income benefit described above.

Scant evidence has accumulated in support of either explanation of the consumption benefits of higher education. Some authors assume that the benefit is equal to the expenditure per student within any campus, which may or may not be the case—funds within any campus are far too fungible to assume that all funds expended go toward an individual's education. (Winston, 1997, 1999, 2000). It is most likely that there is substantial heterogeneity among individuals in

the consumption of benefit of higher education, which is on average positive, but still may be negative for a non-negligible proportion of the population—this would be in line with evidence on the heterogeneous effects of schooling in general (Ashenfelter, Harmon, & Oosterbeek, 2000).

In addition to the two wholly private benefits described above, authors have described a lengthy list of possible *public* benefits of higher education.

The important distinction to be made when discussion turns to the public benefits of higher education concerns the effect of higher education on individuals' incomes and the effect of higher education on other attributes of individuals.

Public benefits accrue when individuals with college educations demonstrate higher productivity, earn higher wages and pay higher taxes. There can also be second-order effects of this higher productivity, as more capable individuals engage in activities like starting or growing firms which then result in more individuals gaining higher wages and paying higher taxes. The public benefits from these types of activities to the extent that the government charges higher taxes and spends tax revenues on public goods (Hanushek, Leung, & Yilmaz, 2001, 2004).

The second type of public benefits of higher education concern classic externalities. These include all of the benefits that accrue to individuals who are not party to the original exchange (H. R. Bowen, 1980). The first list of externalities includes all of the types of activities and characteristics of individuals that occur as a result of their attendance in higher education. For example, individuals who attend higher education are thought to be more civic minded, to appreciate and therefore support artistic activities more than others, to have better health, and to provide for the continuation of knowledge (Astin, 1993; W. G. Bowen, 1977). All of these outcomes of higher education for individuals have benefits that extend beyond just their own personal benefit and into society at large.

Hansen and Weisbrod are quite skeptical on this point:

Our apparent skepticism about either the existence or significance of some of the widely discussed external benefits of from higher education stems principally from the absence of any substantial body of evidence in support of them. Indeed, much of the so-called evidence is anecdotal in nature. We do not, however, wish to assert that external benefits do not exist; only that they are elusive and demanding of a great deal of hard attention. (Hansen & Weisbrod, 1969a)

Others at the time were much less skeptical of these types of benefits, and roundly criticized Hansen and Weisbrod for their apparent willingness to forsake a critical goal of higher education simply because of difficulties in measurement:

The difficulty in the decision to support a public higher education system is that it is probably impossible to measure the value of the public benefits to be derived from it. Hansen and Weisbrod pay lip service to the idea that there may be public benefits ... and then proceed to allocate all public higher education costs to individual families. In practice, foregone earnings plus living costs and fees paid by college students account for perhaps 70 percent of the total costs of higher education in the United States. No one knows whether this approximates the ratio of private benefits to total benefits, but it is very doubtful to assume that the ratio is as high as 100 percent, as Hansen and Weisbrod and other economists assume. Under such circumstances, it would seem to be the better part of wisdom to proceed cautiously ... (Pechman, 1970, p. 369)

There are two equally plausible readings of the available data on public benefits of higher education. First, similar to Hansen and Weisbrod and others, including e.g. Friedman (1968), one can conclude that evidence on externalities remains scarce because the externalities themselves are scarce. On the other hand, one can conclude from the massive societal investment in higher education in the United States that externalities must be positive and real, as it would not be possible for so many people to engage in an act of mass delusion for such a long time period (H. R. Bowen, 1980; W. G. Bowen, 1977). The lack of evidence regarding possible externalities of higher education makes it impossible for either side in this debate to make an authoritative argument.

Forty years on, the debate regarding the external benefits of higher education remains unsettled. Changes in funding levels for public institutions and a smaller share of institutional budgets coming from governments have led many to conclude that the societal judgment about the benefits of higher education have shifted from an emphasis on public to an emphasis on private benefits (Coutourier, 2005). Yet we have not gotten any closer to understanding the actual magnitude and any effects of the public benefits of higher education.

The nature of the benefits of higher education are key to understanding the distribution of these benefits among individuals. If higher education is a primarily private good, then governmental decisions about the provision of higher education are decisions about how to redistribute

a scarce good among a group of individuals. However, if higher education has extensive externalities, then the benefits are not exclusive to those who attend higher education. The lack of evidence on externalities means that the only measurable benefits of higher education are private.

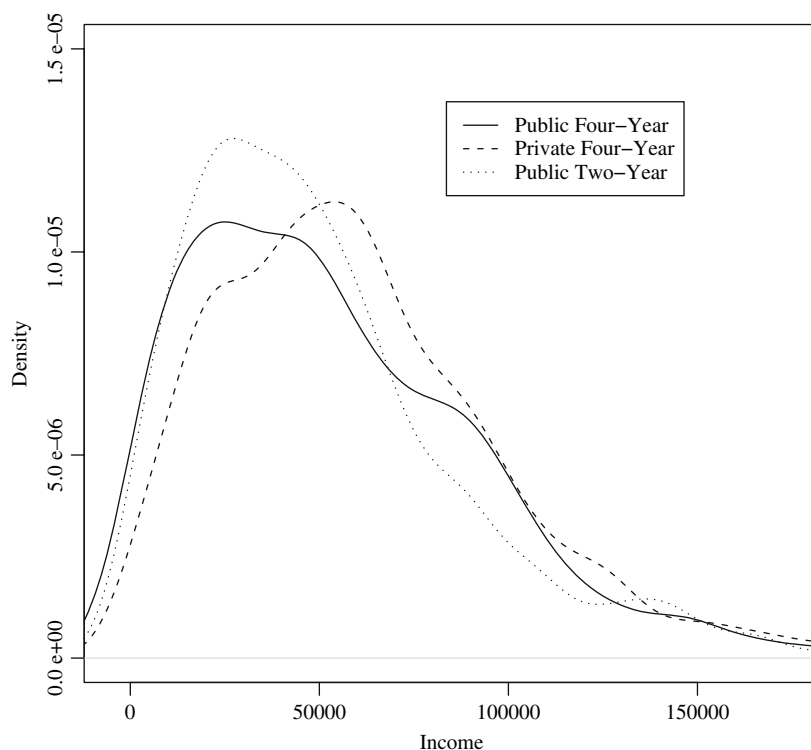
The second kind of public good that may come about as a result of individuals' attending higher education has to do with their private returns. Although infrequently stated clearly, one kind of public good that can occur as a result of increased income is increased equity of income. Highly inequitable distributions of income have been associated in the empirical political economy literature with societal instability, including the possibility of revolt (Boix, 2003). As more people attain higher education and receive the productivity and income benefits that accrue to individuals, some hypothesize that societal inequality will decrease and societal stability will decrease. Higher education may therefore confer benefits on society to the extent that it provides for increased income across a broad range of individuals (Hanushek et al., 2001, 2004; Lewis & Dunder, 2001). The opposite of this result would also hold. If higher education increases stratification by increasing incomes among those who already would be among the highest earners in society, it could increase inequality and result in a negative externality (Ferreira, 2001).

Many arguments for increased subsidization of higher education place a heavy emphasis on the idea of reducing societal inequality by conferring the income premium of a college education on a broad section of society (Levin, 1978; McPherson, 1983; Schultz, 1968; Windham, 1976). One must assume that those who make this argument further see an indivisible benefit to society of having a more equitable distribution of income, a possibility that I will explore further when discussing the political economy of these subsidies.

The current evidence on this debate does not strongly support the idea that higher education subsidies support a more equitable distribution of income. Figure 7.2 displays the income distribution for young people who fall into one of three categories: attending a four year institution, attending a two year institution, and not enrolled in higher education. The income profile for those who attend higher education remains much higher than the income of those who do not attend.

As Hansen and Weisbrod (1969a) tally up the benefits of higher education, they assume that the income benefit that can be attributed to higher education alone should be the only benefit counted when comparing costs to benefits. As this section shows, the other alternatives that they entertain and dismiss have strong support from

Figure 7.2: Distribution of income by postsecondary attendance, 1999.



many other quarters. Many suggest that experience of higher education itself constitutes a benefit in the form of consumption—a contention that has no more support now than it did when Hansen and Weisbrod began the debate. Others suggest that public benefits constitute a significant proportion of the total benefit of higher education, an assertion that still awaits further investigation and evidence (W. G. Bowen, 1977; Carnegie Commission, 1973). Finally, another form of public benefit may accrue through a more equitable society that comes about as the higher overall income that results from more education is equitably distributed throughout the population. We will consider this debate again when we turn to a comparison of costs and benefits.

THE COSTS OF HIGHER EDUCATION

Higher education provides substantial benefits to individuals, and may contribute some benefits to society as well. These benefits come

at a cost, although the nature and extent of the costs of higher education are also subject to debate. Hansen and Weisbrod's approach to the costs of higher education takes into account the amount that different types of individuals contribute to the overall system of higher education either directly, through their foregone income and tuition, or indirectly, through their tax payments (Hansen & Weisbrod, 1969a). As Hansen and Weisbrod calculate it, the cost of higher education for any individual is comprised of instructional costs, capital costs, associated costs (i.e. books, room and board), and foregone income. This formulation includes the direct outlay from the state and other sources such as tuition for instructional costs, the amortized capital cost over time of use of facilities, the indirect costs of higher education that nevertheless must be paid, and the lost income that accrues to individuals and their families as a result of their decision not to work but to instead attend higher education.

In his pointed critique of their work, McGuire (1976) suggests that Hansen and Weisbrod should include student financial aid in the costs of higher education, a decision that would substantially lower the estimated net costs of higher education for this group. Hansen and Weisbrod themselves note that at the time of their study, "students' costs are not closely related to family income" (Hansen & Weisbrod, 1969a), and that later changes in policy, particularly the implementation of the Basic Educational Opportunity Grant, led to more income-sensitive pricing policies (Hansen & Weisbrod, 1978).

McGuire states that when the subsidies for higher education are appropriately adjusted, "the total subsidy given to students from below-average-income families is larger than that extended to students from families above this average, *even in the aggregate*" (McGuire, 1976, p. 353, italics in original). McGuire's analysis depends critically both on the assumption that only appropriately aged families should be included in the analysis, and that low-income students take full advantage of the tuitions subsidies available through grant aid, points that Hansen and Weisbrod make in their response to the article (Hansen & Weisbrod, 1978).

COMPARING COSTS AND BENEFITS OF HIGHER EDUCATION

It is in the comparison of costs with benefits that one finds the most controversy surrounding the Hansen and Weisbrod study. First, the authors calculate the cost to the individual of higher education as the sum of direct expenses plus foregone income. The benefits to

the individual are calculated as the increased lifetime earnings of the individual plus any consumption benefit that the individual may gain through higher education.

From the perspective of the state, investment in higher education is not simply a payoff to an interest group if the payments to the group in question are recouped by the state. Hansen and Weisbrod suggest two methods for answering this question. First, they calculate the expected increase in taxes due to the state as a result of a student attaining a higher education, minus the subsidy provided to that student in the form of a college education. Second, they calculate the subsidies to families made through higher education expenditures compared with family payment of taxes.

The authors' results for the first analysis suggest that "in no case do state and local taxpayers recoup the full value of the subsidy" (Hansen & Weisbrod, 1969a, p. 59). As the authors note, there may be externalities that the rest of the state benefits from, but these would need to have a percent of value of "between three and five times the present value of taxes paid for each public college graduate" (Hansen & Weisbrod, 1969a, p. 59).

The second method for comparing the costs and benefits of higher education contrasts how much families pay for higher education and the level of benefit they receive. Hansen and Weisbrod choose to make this calculation for all families, a decision which others later find to be questionable (McGuire, 1976)¹. The calculation of current patterns of subsidy that occur through the higher education program involve understanding who goes to college and the subsidy they receive, compared with the amount paid by the entire population. As Hansen and Weisbrod show, many do not benefit from higher education subsidies because they do not have children in college. They estimate that the average estimated subsidy for those families with children in college ranges from \$720 to \$1700 dollars, compared with no subsidy for anyone without children in college.

These assertions are controversial in that they fundamentally challenge the premises for subsidizing higher education. First, the authors find that the costs of subsidizing higher education far outstrip the benefits that having a more highly educated population provide to the state, at least in the form of tax revenues. Second, they suggest that those who do not attend higher education are paying for those who do,

¹ McGuire's objection suggests that only parents of college-age children should be included in the calculation, as they are the only ones who *could* benefit from subsidies for higher education.

with no tangible benefit to themselves or their families. If Hansen and Weisbrod (1969b) are correct, then such a system is hard to justify on purely utilitarian grounds.

THE DISTRIBUTION OF COSTS AND BENEFITS OF HIGHER EDUCATION

After sorting through the questions of which benefits and costs are to be measured, Hansen and Weisbrod look next to the distribution of these costs and benefits across the population of California by family income. If the system of higher education subsidy in California is progressive, they should find that low income individuals receive more benefits from the system than it costs for them. Conversely, a regressive system will cost more than it benefits them, with these benefits redistributed to the middle class or wealthy. Their most famous and controversial finding from this analysis was that the system was regressive—in their words: “the net benefits of one of California’s major expenditure programs are received largely by higher income segments of the populations” (Hansen & Weisbrod, 1969a, p. 77).

Hansen and Weisbrod assume that the costs of higher education are shared by students and the general public. That is, even considering student costs, a substantial subsidy is provided by the public to every student who attends public higher education in the state. This subsidy is lowest at community colleges and highest at the University of California.

The receipt of this subsidy is therefore highest among those families whose children attend higher education, and within that group, highest among those who attend elite institutions. The authors then show that students from high income families are most likely to go to college, and when they go to college, most likely to attend elite institutions. The reverse is true for low income families: their children are least likely to go to college and, among the small group who do go, are least likely to attend an elite institution.

Based on these results, the authors conclude:

For families with a child at one of the State Colleges or one of the University Campuses, the net transfers range from \$630 to \$790 per year. Meanwhile, families without children or with children not enrolled in public institutions of higher education receive no subsidy whatsoever, while the pay an average of \$650 in state

and local taxes ... the current method of financing public higher education leads to a sizeable redistribution of income from lower to higher income. (Hansen & Weisbrod, 1969a)

Hansen and Weisbrod describe a system where everyone must pay taxes, and those taxes are not particularly progressive. These taxes pay for a subsidy that is targeted on mostly middle- and upper-income children. The result is that the poorer families, whose children do not go to high-subsidy institutions if they attend at all, finance the higher education of middle-income and wealthy students.

Not everyone agrees that this is the case, even when considering the same data that Hansen and Weisbrod utilize. Pechman (1970), for example, notes one critical flaw in the Hansen-Weisbrod analysis: the authors suggest that all of an individual's tax payments go to higher education, while in fact the state spends tax money on a variety of purposes. Pechman states that when one compares the portion of tax money spent on higher education by families from each quintile with the benefit accrued by that family, the result is a positive benefit for all groups.

Pechman also criticizes Hansen and Weisbrod for not considering the costs and benefits of higher education over the lifetime of the individuals concerned, as opposed to the single-year analysis conducted by the authors. Pechman states:

The present generation of voters must decide whether an investment in higher education is desirable from a social point of view. This involves a balancing of expected *public* benefits against costs, both appropriately discounted. If the decision to invest in higher education is affirmative, the voters must then decide how the costs should be allocated among its members.

As I will discuss later in the chapter, recent developments in the field of political economy have taken up exactly the questions Pechman raised in 1970. However, Pechman's central point was that higher education concerns an intergenerational transfer, with benefits accruing across an entire society over the lifetime of the younger generation, benefits which the older generation never expects to enjoy.

The key difference between the authors concerns their understanding of the "net" costs and benefits of higher education. When an individual's taxes are included as a part of the price of higher education, and societal subsidies are calculated for students in each income class, the result is clear: high income students receive higher

subsidies than low income students. When the exact amount of taxes spent on higher education are compared with exact amount of subsidies spent on young people from each income class, the result is equally clear—the net benefit to the poor is positive, while the net benefit to the wealthy is negative. In short, as Hartman (1970) points out, the authors do not disagree on the data, but rather on the very definition of redistribution².

James (1980) follows Pechman in suggesting that it is the future earnings of students in higher education, and not the past earnings of their parents, that are the key to any study of the distribution of benefits of higher education. James provides a model in which individuals benefit from higher education according to their skills and abilities, but repay the subsidy they receive over their lifetimes in the form of higher taxes. She is one of the few to recognize that consumption is not positive for all involved, and that many do not benefit as much as would be expected from the higher education they receive. In fact, in a formal model, she demonstrates that “contrary to popular belief, several major consumer groups in higher education do not receive a positive cost subsidy” (James, 1980, p. 135).

Hansen and Weisbrod believe that any properly redistributive program must spend more in absolute terms on low income persons than on high income persons. In contrast, Pechman believes that a redistributive program need only provide higher average benefits to a group than the amount that they paid for that specific program in taxes.

It is certainly worth noting that Hansen and Weisbrod themselves were quite cautious in interpreting their results, saying:

... The distribution of students by parental income ... are so wide for each type of system—University of California, State College, and Junior College—that any strong conclusions about the “class-serving nature” of the entire system of higher education in California cannot be drawn. While there is a tendency for higher subsidy schools to draw a higher income clientele, the overlap of distributions is very substantial. (Hansen & Weisbrod, 1969a)

Nearly 40 years later, we are not much closer to finding the answers to these questions than were the initial studies. Because of the fungibility

² In a later work, Hartman (1976) argues that the proper way to analyze redistribution through higher education subsidies is by looking at the lifetime earnings and tax payments of beneficiaries of higher education subsidies—not those of their parents.

of higher education funding (Breneman, 2001), the exact amount that is spent on any one student as they track through the system of higher education is nearly impossible to calculate precisely. Understanding distribution of tax benefits is somewhat easier, but the connections between the two are no easier to ascertain than they were for Hansen and Weisbrod.

Taking an intergenerational perspective on this issue would entail understanding how families pay for higher education and repay the subsidies provided to them through their children or subsequent generations. From this perspective, the data we would need to have in order to fully comprehend the redistributive nature of higher education would include the amount of state taxes paid by an individual's parents, along with the proportion of that tax amount that was directed to higher education. We would then need to know the exact amount spent by the state over the course of the individual's lifetime to subsidize that person's higher education.

From a lifetime perspective, one would need the same subsidy information, but instead of parent's tax payments, we would need the individual's tax payments. This would help to answer the question of whether the state is receiving adequate compensation in the form of future tax revenues when it subsidizes the individual to go to higher education.

Other benefits information could include the benefit to the state of having a more productive individual, along with the benefit to society of individuals who may have a fuller engagement with civic life. We can not measure or know in a specific way any of these things.

Although we may not be able to identify the cost of higher education and the benefit of higher education for every individual in our society, we can understand in a broad sense:

1. The amount that their families are paying into the system of higher education
2. How individuals from different income groups are currently benefiting from the system of higher education

Such an analysis could broadly replicate the data that Hansen and Weisbrod, along with Pechman, McGuire, and others analyzed in the 1970s. Understanding whether the broad trends have changed will give a sense of how the debate may have shifted since that time period.

THE COSTS AND BENEFITS OF HIGHER EDUCATION: WHO WINS? WHO LOSES?

In this section, I attempt to identify the subsidy patterns currently in place in the United States by pursuing some of the assumptions that Hansen and Weisbrod found palatable. This will provide a basis for my subsequent discussion of the political economy of redistribution. The trends are expected to be broadly negatively redistributive as suggested by much of the theoretical literature. If the trends are progressive, then the fundamental assumptions of much of the extant literature needs to be questioned.

To replicate the Hansen and Weisbrod analysis using more current data, I use data from several sources to calculate the following, all for the year 1996: the total amount of state taxes that families in different income groups paid; the attendance patterns by students from different income families in different sectors of higher education; and state subsidies on a per student basis in each sector of higher education.

Table 7.1 displays the results of the analysis. Each column describes an income group, with four income groups represented³.

The next row displays the total amount of state taxes claimed by individuals in each income group on their tax returns. While this figure is imperfect in that it does not capture all of the state taxes paid, it does represent the best data available on a nationwide basis regarding state taxes paid by income group. It does not take into account the amount of sales taxes that are paid by each income group—all indications are that such a tax is regressive and would result in a higher figure for taxes paid by the lowest income groups (N. Johnson & Tenny, 2002; United States Department of Treasury, Internal Revenue Service, 2006).

The table is then sub-classified by sector of higher education: public two year, public four year, and private four year. For each sector, the percent of students from each income group reporting their institution of first attendance is recorded in the table. For instance, among low income (\$0–10,000 family income) students, 47% reported attending a community college as their first institution of higher education⁴.

³ The income groups represented are not exactly equivalent to income quartiles. These groupings were necessary to match data from the Internal Revenue Service with data from the National Center for Education Statistics.

⁴ This data comes from the national educational longitudinal study of 1988—the sample represents individuals who were in the eighth grade in 1988, and were queried in 2000 about their institution of first attendance.

Table 7.1: Taxes, Subsidies and Net Benefit by Income, 1996

	Income Group			
	0 to 10	10 to 20	20 to 50	50 to 100
State Income Taxes Claimed	29.80	368.46	1,938.28	11,073.94
Percent Attending Public 2 year	47.03	42.31	32.45	12.67
Subsidy for 2 year	3,324.00	3,324.00	3,324.00	3,324.00
Average Subsidy, public two year	1,563.28	1,406.38	1,078.64	421.15
Percent Attending Public 4 year	27.76	32.49	42.76	45.04
Subsidy for 4 year	5,297.02	5,297.02	5,297.02	5,297.02
Average Subsidy, public 4 year	1,470.45	1,721.00	2,265.01	2,385.78
Percent Attending Private 4 year	9.99	13.97	19.60	40.80
Subsidy for 4 year	43.00	43.00	43.00	43.00
Average Subsidy, private 4 year	4.30	6.01	8.43	17.54
Total Subsidy	3,038.03	3,133.39	3,352.07	2,824.47
Subsidy-Taxes	3,008.23	2,764.94	1,413.79	-8,249.46

Next, I report the average per student state subsidy by institutional type ⁵. The figure for two year institutions shows that state appropriations for two year colleges averaged \$3,324 per student during this time period.

The next row multiplies the percent of each income group attending a particular sector by the subsidy for that sector to arrive at an aggregate per person subsidy, including those who did not attend higher education. For instance, the figure \$1,563 in Table 7.1 represents the average per-person subsidy for community colleges among those whose family income was \$0–10,000. This analysis is repeated for each type of institution.

The results in Table 7.1 repeat the findings Hansen and Weisbrod in many ways. The group that receives the highest subsidy currently is the broad middle income group with incomes in the \$20–50,000 dollar range. Those in the lowest income group receive substantially

⁵ This data comes from the financial information reported by institutions of higher education to the National Center for Education Statistics (NCES) through the Integrated Postsecondary Education Data System (IPEDS).

less than those in the middle class, while those in the highest income group receive less than all other groups.

Following the Hansen and Weisbrod approach detailed previously, it is quite clear that the system still does not operate in a redistributive manner. Subsidies generally increase with income, indicating that the system is not progressive. Using Pechman's approach, the amount that low-income individuals pay in to the system is exceeded many times over by the amount that they receive in subsidies. This is true for every income group but the highest income individuals ⁶

This analysis has a number of limiting features. First, as noted, the analysis does not include sales taxes, which are highly regressive and would raise the total tax bill for low income individuals by a large amount (N. Johnson & Tenny, 2002). It should be noted, however, that for the net benefits to exceed the net payments, the amount would need to be in the range of \$2,500, which seems quite high for this group. Second, the analysis does not include state revenues generated through lottery proceeds, which are another (highly regressive) form of taxation (Clotfelter & Cook, 1989; Clotfelter, Ehrenberg, Getz, & Siegfried, 1991). Many states have turned to lotteries to fund higher education scholarships, a trend that may decrease the degree to which the system of higher education subsidies is progressive (Dynarski, 2000; Heller & Marin, 2002).

Last, like Hansen and Weisbrod, this analysis offers only a snapshot of the patterns of subsidies and returns to higher education. Evidence suggests that high income students are more likely to attend full time and graduate from higher education, while low income students are more likely to attend part time and not to graduate from higher education. This analysis does not capture the extent to which high income students are taking fuller advantage of the system of higher education. The actual patterns of redistribution may be even more regressive than the ones described above.

Hartman, writing on the controversy generated by the Hansen and Weisbrod research, notes what he calls the "raw facts" (Hartman, 1970, p. 521):

1. Poor people pay taxes and very few of them use higher education. Those who do, gain thereby; those who don't, don't.
2. Middle income people are heavy users of the system. Their taxes don't cover costs.

⁶ Heller (2005) provides similar evidence regarding the distribution of subsidies by race and ethnicity in California.

3. A few rich people use the system and gain handsomely thereby. (Hartman, 1970, p. 521)

As it turns out, these raw facts remain true today. Higher education subsidies are distributed in such a way that low income individuals receive the lowest amount, while their middle income peers receive the most. High income people benefit to the extent that they are subsidized at all for a consumption choice that they would have pursued in the absence of any subsidies. The analysis presented in Table 7.1 most likely presents a “best case” scenario, in that regressive taxation forms like sales taxes and lotteries are not included in the analysis.. All indications are that the patterns of redistribution are even more regressive than this fairly simple attempt to capture them.

The situation in other contexts may be even more extreme. Rozada and Menendez (2002) find that the system of higher education in Argentina is sharply skewed toward subsidizing the rich: “Almost 50% of the students in public universities belong to the top 20% of the income distribution. Moreover, 90% of the students in public universities have higher than median per capita family income . . .” (Rozada & Menendez, 2002, p. 348). The authors conclude that in the Argentinian context the majority of the costs are borne by low income taxpayers, while the majority of the benefits are enjoyed by the wealthiest part of the society.

Based on the analysis provided here, it appears that the balance of evidence suggests a regressive system, one in which low income students receive among the lowest benefits. The question then, is why would this be so? The policy recommendations of most of the authors writing on this topic in the 1970’s and into the early 1980’s were formulated based on the implied belief that if only legislators knew that the system were regressive, they would change policies to make it more progressive (Hansen, 1970, 1972; Hansen & Weisbrod, 1969a, 1978; Hartman, 1970; Hight & Pollock, 1973; McGuire, 1976; Pechman, 1970; Zwerling, 1973).

But what if policymakers knew that the system was regressive all along? Indeed, what if the point of public funding of higher education was to introduce a publicly financed middle and upper income benefit?

Cohn, writing in 1970, acknowledges this possibility:

First, an assumption implicit throughout the analysis is that resulting distributive effects are “undesirable.” But this assumes that either the policymakers are unaware of redistributive effects of higher educational subsidies or that, even if aware of the results,

they are constrained in some way, in correcting the deficiency ... We may assume the legislature is perfectly aware of the situation. However, the legislators choose to remedy it through income transfers (using taxes and/ or expenditures in other areas) or they choose not to remedy it at all. (Cohn et al., 1970)

Mumper (2003) suggests that state policymakers have knowingly engaged in goal substitution, moving from a system of subsidies designed to help low-income students and families to one that emphasizes benefits for middle income students. As Mumper states “the efficiency of targeted design and the sustainability of universal design were no match for the relentless pressure of subsidy creep” (Mumper, 2003, p. 57).

More recent developments in the field of political economy have led to a fuller understanding of the conditions under which legislators might choose to implement a regressive redistribution of income through a selective benefit such as higher education. The next section will examine this literature in order to better understand why the system that Hansen and Weisbrod describe might be the product of deliberate intentions of both voters and their elected leaders.

POLITICAL ECONOMY AND REDISTRIBUTION THROUGH HIGHER EDUCATION SUBSIDIES

The previous section examined the debate Hansen and Weisbrod fomented through their contention that higher education subsidies serve as a benefit to the rich, instead of the poor. The studies they inspired all had a common purpose: to document the extent to which the system of higher education subsidies in the United States serves to benefit any particular income group (Cohn et al., 1970; Hansen & Weisbrod, 1969a, 1978; Hartman, 1970; McGuire, 1976; Pechman, 1970; Peltzman, 1973; Windham, 1976).

The goal of most of these studies seems clear. If the system is shown to work in a way that is not progressive, then legislators and other policymakers must be informed so that they can change the system. As Hansen and Weisbrod (1969a) conclude:

there is presently no effective device for shifting more of the financial costs of higher education from those who benefit little or are least able to pay to those who derive the most direct monetary benefits or who are most able to pay. Either a change in the state and local tax structure—to make it more progressive—or a change

in the system of user charge for higher education—to charge on the basis of ability to pay, and where necessary, to provide generous supplements to low income students—seems called for. (Hansen & Weisbrod, 1969a, p. 86)

Recommendations such as these are commonplace conclusions in the various studies I have described. But what if systems are designed to work in the way that they do? In other words, what if state policy-makers, even if they knew the systems were not functioning in a perfectly progressive way, were still unwilling to change them? And if not, why not? The remainder of the chapter takes up this question.

To do so, I turn from the field of higher education finance to the field of political economy. Political economics, broadly defined, seeks to understand the formation of policy (typically economic policies, such as redistributive programs) in modern democracies, using the same analytical tools that are used in economics. This means “modeling policy choices as the equilibrium outcome of a well specified strategic interaction among rational individuals” (Persson & Tabellini, 2002, p. 2). In other words, political economy seeks to understand how rational individuals, acting on their own preferences, can interact with one another to create stable policy outputs, which reflect the best efforts of all involved to achieve their own goals.

I begin this section by describing the canonical model of redistribution in a democracy—the so-called median voter model, widely credited to Meltzer and Richard (1981). I then briefly review some of the empirical tests that scholars have conducted to evaluate this model. I next turn to the political economy of selective programs, where goods are redistributed to a particular group. Finally, I turn to the recent literature on the political economy of redistribution through higher education subsidies, paying particular attention to the foundational work done by Fernandez and Rogerson (1995). Last, I examine various extensions and empirical applications of this model. Throughout this section, I intend to show how the development of formal theories in the area of political economy can explain how a majority of the population, voting with full information and awareness of the consequences of their actions, might nevertheless choose the kind of system that Hansen and Weisbrod describe.

GENERAL RESULTS ON THE REDISTRIBUTION OF INCOME

Meltzer and Richard (1981) describe the most widely cited and utilized model of voters choosing a redistribution scheme based on a simple

model of the economy and voter preferences. As will be shown in later sections, their very general model of the relationship of the size of government to the characteristics of the voting population has specific implications for all types of government activities, including subsidization of higher education.

In their model, Meltzer and Richards posit a static economy with one commodity being produced. Each individual works and consumes. As participants in a democracy they vote on a single policy: a proportional tax rate which will result in a single lump sum payment made evenly to every individual in the society⁷. Voters must each individually choose the tax rate that they would prefer—candidates will act on this information and choose a policy that will guarantee election by winning half of the vote plus one additional voter.

The essence of the problem facing each individual voter is a tradeoff between giving up some of their income in the form of a proportional tax, and receiving income from the government in the form of a lump sum payment. For the purposes of illustration, consider two voters, one with an income of 100 dollars a year and another with an income of 100 thousand dollars a year. A tax will be levied that will be proportional to income. Further assume that income is approximately normally distributed throughout the population, and that average income is about 50 thousand dollars

For the individual with 100 dollars of income, a tax rate of 25 percent implies a tax payment of 25 dollars and a lump sum income transfer of about \$ 12,500—a net *gain* of \$12,475. For the individual with 100 thousand dollars of income, a tax rate of 25 percent implies a tax payment of \$25,000 and the same lump sum transfer of \$12,500—a net *loss* of \$12,500. Under this scenario, we can predict that the low income individual would prefer tax rates to be even higher, while the high income individual would prefer a much lower tax rate.

This relationship holds true at the extremes, but as we approach the position of the median voter (the enfranchised citizen at the exact middle of the income distribution), Meltzer and Richards theoretical model predicts that the difference between the average income in the society and the income of the median voter will dictate the size of the tax rate for the hypothetical society. As Meltzer and Richard (1981) state:

⁷ All of the normal assumptions about rational voters in a direct democracy apply to this model. This includes citizens deciding on policy choices directly, voting sincerely on issues, and having single-peaked preferences.

With majority rule the voter with median income among enfranchised citizens is decisive. Voters with income below the income of the decisive voter choose candidates who favor higher taxes and more redistribution; voters with income above the decisive voter desire lower taxes and less redistribution. The decisive voter chooses the tax share. When the mean income rises relative to the income of the decisive voter, taxes rise, and vice versa. (Meltzer & Richard, 1981)

The implications of this model for understanding the size of government and the structure of welfare states in democracies are profound. Meltzer and Richard's model predicts that the effective redistribution in any society will be based on the distance of the middle class (those with incomes around the 50th percentile) from the poor. As the two are closer, the size of taxation, government, and redistribution will increase. As the two are farther apart, taxation and redistribution will decrease.⁸

Meltzer and Richard (1981) provide an elegant model of government size based on the characteristics of the population one which refined earlier models and inspired several reformulations and refinements in the years since (Cukierman & Meltzer, 1986; Krussell & Rios-Rull, 1999; Meltzer & Richard, 1985; Roberts, 1977; Romer, 1975). While the model is theoretically compelling, the question remains: does it fit reality? The available empirical literature on the determinants of regime type, government size, and government policy suggest that the formal electoral models constructed by Meltzer and Richard and others do describe the reality of government behavior in convincing ways (Cameron, 1978; Husted & Kenny, 1997; Lindert, 1994, 1996; Mueller, 1989; Mueller & Stratmann, 2003).

Mueller (1989) contains a survey of much of the literature that tests the predictions generated by the Meltzer and Richard Model. Among the notable examinations that have yielded positive results include Lindert (1994, 1996), who finds substantial support for the prediction that expansion of the franchise results in larger government size, using a large data set covering the years 1880–1930. More recently Mueller and Stratmann (2003) find that increased levels of democratic participation are associated with more equal distributions of income and larger governments (but also slower economic growth). I review

⁸ This treatment of the Meltzer and Richards model is deliberately non-technical. For a complete description of the model and its implications, see Persson and Tabellini (1992) and Meltzer and Richard (1981).

below several of the many studies on this topic, with an emphasis on those who take up the more problematic aspects of discovering empirical support for the theoretical predictions generated by Meltzer and Richard (1981). These predictions, regardless of the difficulties illustrated by many of these studies, have found support in multiple contexts, using different data sources and modes of analysis.

One of the basic predictions made by the Meltzer and Richard model of voting is that an expansion of the franchise will lead to an expansion of the size of government. In general, since the mean is below the median, any increase in the population voting will push the location of the median voter toward the mean of the population. In their model this will result in an expansion of the redistribution scheme. Such an expansion should also expand the size of government, because government size must increase in order to administer ever-larger redistribution schemes. This is the question addressed by Lott and Kenny (1999). Using data from the American states, Lott and Kenny demonstrate that the extension of the franchise to women is associated with higher levels of state government spending. This occurs because the expansion of the franchise means that the position of the median voter must be lower on the income scale as more persons receive the vote. Their empirical strategy also deals with some of the problems of causality by controlling for states that voluntarily extended the franchise with states that extended the franchise only after the adoption of the nineteenth amendment.

Neoclassical economic theory suggests that increased government size, and the higher tax rates that support it, inevitably slow economic growth and should lessen prosperity. However, Slemrod (1995) begins his survey of the literature on government size and prosperity by noting a compelling feature of modern countries: there is a strong correlation between government size as measured by government spending as a percent of GDP and the overall level of prosperity in the country, measured by GDP per capita or otherwise. This finding, taken at face value, would contradict much of the literature that suggests that larger government impedes economic growth and prosperity. While there is a substantial body of evidence suggesting that intervening variables account for the positive correlation observed, these studies are hampered by issues of specification: only a very carefully selected set of independent variables will result in a negative coefficient for government size when regressed on growth—in short, this finding is not robust to alternative specifications. Slemrod concludes that “this review of the existing cross-country literature suggests that there is no

persuasive evidence that the size of government has either a positive or a negative impact on either the level of growth or the growth rate of per capita income (Slemrod, 1995, p. 401).

An expanded government does not come without cost, as Mueller and Stratmann (2003) and others point out. Schleifer and Vishny, in their book *The Grabbing Hand: Government Pathologies and Their Cures* take nearly the opposite views from Slemrod. They emphasize the multiple possibilities for governments gone bad: growth-stunting taxation corruption, and predatory regulation. They seek in their words, “to examine the consequences for resource allocation of the choices of policies and institutions made by political actors, and to consider the cures for adverse consequences of excessive political power” (Shleifer & Vishny, 1998, p. 14). A particularly interesting chapter in this book examines the determinants of privatization in the provision of public services in counties in the United States. The authors find that factors that might reduce the payoffs to patronage for elected officials also are associated with higher levels of public services. This provides support for the hypothesis that the size of government is related to the amount of payoff that elected officials can extract given the institutions in place.

The robust association between democratic participation and government size may not be directly casual. Instead, these two may be related only through an indirect link. Rodrik (1996) suggests that this link may be economic openness, a feature of countries with both democratic participation and large government size. Rodrik begins with an initial finding that both government size and growth in government size are associated with more open economies. Economic openness is measured via the share of exports plus imports in GDP. These findings are robust to alternative specifications. Rodrik suggests that this relationship is caused by the elevation of risk associated with openness. As economies grow more open, government size increases in order to provide a safe haven for some proportion of the country's economy from the shocks inherent in participation in global markets. Rodrik tests this hypothesis by explicitly measuring risk, holding the openness variable constant. In this specification, risk is highly significant both in statistical and substantive terms, while openness is no longer significant. This provides strong support for his hypothesis that government acts as a safe haven. His results contradict the received wisdom that globalization requires less government intervention, while adding support to the hypothesis that governments are acting in response both to economic and political realities.

The massive literature on democratic participation and government size has provided an enormously rich theoretical and empirical background for other applications of political economy to public policy. The next section examines the literature dealing with the more specific problem of how individuals choose among specific types of government programs, which may or may not benefit them.

REDISTRIBUTION AND TARGETED PROGRAMS

The model posited by Meltzer and Richards does not apply to specific, targeted programs, which form the bulk of many welfare payments in developed democracies. This section will describe a general model of local public goods and a few empirical results from the literature. Higher education is a specific kind of targeted program, and the findings from this section will be applied later to the practice of redistribution through higher education subsidies.

In the formal Meltzer and Richards model described above, redistribution takes place equally across all groups within the society, with every individual receiving precisely the same lump sum payment. However, government welfare programs designed this way are rare. Instead, most government programs are targeted on one particular group, with benefits limited to that group, but paid for by everyone. A common example would be agricultural subsidies, which nearly every government provides.

The central problem when making collective decisions about these types of policies is the centralization of resources combined with the decentralization of benefits—by definition, everyone must pay for these programs, while only certain individuals will benefit from them. (Persson & Tabellini, 1992). This is also sometimes referred to as the public choice problem: everyone must contribute to support a given policy, while not everyone in the society may benefit from the policy. In the case of higher education, no public choice problems would apply if we could isolate all benefits and costs onto discrete groups demarcated by region or income, and further by college attendance. However, the problem of redistribution through higher education subsidies comes about because of the combination of a universal tax scheme with subsidies paid out only to those who attend higher education. The additional possibility of externalities (if they exist) does not obviate this problem (Besley & Coate, 1998)⁹.

⁹ Again, a full description of this model is omitted, but can be found either in Persson and Tabellini (1992) or Baron (1993).

In “common pool” problems such as this one, each group receives benefits that are proportional only to the number of people in the group. Agricultural subsidies, for instance, need only to be divided up among the farmers in a society. However, the payments are shared by everyone. The benefit to an individual group of any targeted welfare scheme is the ratio of the per-group-member benefit to the per-societal-member tax payment. Smaller groups therefore will demand higher targeted benefits to their group. This leads to a striking conclusion:

Concentration of benefits and dispersion of costs imply that with centralized spending, each group retains a political incentive to demand over-provision of goods to its own group and under-provision to the other groups so as to avoid paying higher taxes. Which groups will be most politically powerful in taking advantage of this opportunity depends both on group attributes and on political and budgetary institutions. (Persson & Tabellini, 1992)

The common pool problem provides a theoretical basis for the empirical finding that no society provides public goods on a purely utilitarian basis. In the area of higher education, benefits are not distributed on the basis of the costs associated with each group. The question that can be answered making use of a specific model of higher education subsidies is not whether the benefits of higher education are redistributed in a progressive or regressive way, but under what conditions we would be more or less likely to see these benefits redistributed in a certain way. As we will see, theoretical results suggest that this depends crucially on the voting power of those in the different groups.

Research on the common pool problem has been focused primarily on the United States, both at the federal and state level (Alt & Lassen, 2006; Besley & Case, 1995, 2003; Brender & Drazen, 2005; Caplan, 2001; Cuzan, 1996; Esteller-More, n.d.; Levitt, 1999; Matsusaka & McCarty, 2001; M. Nelson, 2000; Pujol & Weber, 2003; Wagner, 2001). Researchers have in general found a strong common opposition to increased spending in general as indicated by electoral results.

Peltzman 1992 describes electoral results for both American presidents and governors in states as a function of spending policies of these executives. Under the model described above, all voters will oppose increased spending on any other group than their own, with the intensity of this preference determined in part by their group size. Peltzman finds that increased spending on any type of program

is “poisonous politically” (Peltzman, 1992, p. 346). These results hold at both the federal and state level. Interestingly, this result is not ameliorated at all by deficit spending—voters seem opposed to increased spending of any kind, whether financed by increased taxation or increased deficits. Despite differences in their approaches and differing time spans, Peltzman’s findings echo those of Niskanen (1975), and are supported by other studies (Besley & Case, 1995, 2003; M. Nelson, 2000).

REDISTRIBUTION AND HIGHER EDUCATION

The literature on whether and how to subsidize higher education from the perspective of efficiency or equity is quite substantial. Much of it has been covered earlier in this chapter. However, more recently analysts have applied the methods of political economy to the analysis of redistribution through higher education subsidies. This section will review some of the major theoretical contributions in this area. In reviewing this literature, I focus on those who have theorized specifically about the issue for this chapter: can voters support a system of subsidies for higher education that is regressive?

One of the very first analyses to take this subject up from a societal perspective is G. E. Johnson (1984), which suggests that the observed pattern of redistribution might be the result of the poor in a society seeking the side-benefits available to having a more highly educated population in general. Johnson suggests that low-skill workers benefit from the advances in productivity achieved by college educated and publicly subsidized high-skill workers. Their support of higher education is therefore warranted, since their own income will go up as a result of their support of higher education subsidies.

Creedy and Francois (1990) outline a similar, but more complex, route by which lower income individuals might come to support a subsidy scheme from which they will not benefit. The authors posit a general level of economic growth that will arise as a result of having a more highly educated population. All members of the society will be willing to invest in this public good, since all members will benefit from this investment in the future. That such a human capital investment that directly benefits a subset of the society does not necessarily dissuade those who will not benefit from supporting the subsidy, according to Creedy and Francois (1990).

Of course, it should be noted that considerable uncertainty surrounds the college investment decision, both for individuals and for

the society at large. For individuals, the payoffs derived from higher education can be highly variable and are by no means guaranteed. For society, the aggregate increase in income as a result of having a more highly educated population is only possible to the extent that all people feel that they have a chance to benefit from higher education (since a suboptimal investment level may result if people are unwilling to pre-commit to financing of higher education).

These issues are considered by Garratt and Marshall (1994). They explain that higher education financing can be described as a social contract in which all parents of students provide funding for higher education, with the subsidies for higher education allotted on the basis of a lottery that is based on the skills of children. Since all parents would like their children to go to college, but can not know before having children whether or not they would benefit from going to college, they enter into an insurance contract in which all families in the society pool risk. Given this set of circumstances, it makes sense to pay for "insurance" in case one's children have enough ability to attend college. Individuals will therefore vote for such a policy—Garratt and Marshall's equilibrium results show how voting equilibria can arise in which subsidies for a group of high ability individuals can be supported by the entire population.

The Garratt and Marshall model relies heavily on two assumptions: first, that ability can be measured in the same way across an entire population, and that the college admissions process is purely meritocratic. If either of these two assumptions fail to hold, then the process looks less like a redistribution from families with less able children to families with more able children, and more like a redistribution based on other characteristics of families, such as wealth or social connections.

Fernandez and Rogerson (1995) provide the most comprehensive model of public voting on higher education subsidies. Their model directly accounts for voter preferences for regressive higher education subsidies without relying on assumptions regarding externalities or unobservable characteristics of students. In short, their model can explain voter and official preference for a regressive system of higher education subsidies with minimal assumptions. Their foremost insight into the political process of determining higher education subsidies is that "a vote on the extent to which education is subsidized is also implicitly a vote over who receives the subsidy" (Fernandez & Rogerson, 1995, p. 250)

Fernandez and Rogerson (1995) assume a society with homogeneity of skills and distinct income groups. The authors demonstrate the

conditions under which a majority of the society can form an extractive subsidy policy which taxes all groups equally but provides benefits only to middle- and/or upper-income groups. The key distinguishing characteristic of societies that should be more likely to redistribute away from the poor is inequality. Societies in which the middle class are much wealthier than the poor will have lower subsidies for higher education, combined with more exclusion of the poor. Societies in which the middle class are not much wealthier than the poor will have higher levels of subsidies for higher education, combined with lesser levels of exclusion for the poor.

Fernandez and Rogerson (1995) also demonstrate conditions under which this redistribution might in fact be efficient. They note: “in a poor economy subsidizing education may enhance efficiency by increasing attainment, whereas in a wealthy economy efficiency never is enhanced and may be decreased ...” (Fernandez & Rogerson, 1995, p. 260).

The equilibrium results of Fernandez and Rogerson’s model have far-reaching implications. If correct, their findings suggest that the observed patterns in higher education subsidies, which indicate a general redistribution of wealth from the poor to the middle class and rich, may not be the result of myopia, poor information on the part of policymakers, or of policy design flaws. Instead, policymakers may be following the express wishes of their constituents by designing a program that systematically excludes a portion of the population with an anticipated exchange of votes sufficient to ensure re-election.¹⁰

One problematic result from Fernandez and Rogerson is that the only support for higher education will come from those who benefit from it. Bevia and Iturbe-Ormaetxe (2002) provide a model in which even those parents who have no expectation of having children attend college may decide in favor of a policy proposal that subsidizes other children to attend. The authors posit that families will seek to maximize utility in terms of their children’s well being by pushing for policies that increase their children’s income. One way to do this, of course, is to push for a general redistribution of income. Another way, however, would be to vote for pro-growth policies such as higher education as long as there was a reasonable expectation of high marginal tax rates along with a separate redistribution policy. As the authors state:

¹⁰ This result can be extended beyond the field of higher education. For example, (Goldin, 1999) suggests that the distribution of income in localities is critically tied to the historical development of high schools in the United States.

In our model there are only two ways for parents to transfer resources to their children. One is to pay for the education for their own children. The other is to invest in other families' children, and, in that way influence the size of the guaranteed minimum income the children will obtain in the future. We provide that this second type of investment will be carried out, provided that the future marginal tax rate is high enough. (Bevia & Iturbe-Ormaetxe, 2002, p. 337)

Like G. E. Johnson (1984) and Garratt and Marshall (1994), Bevia & Iturbe-Ormaetxe provide a framework that is based on cooperation—in all three frameworks, those who do not benefit from higher education are fully aware of this fact, and support the redistribution of resources away from their families and to others on the basis either of payment on an implicit contract (Garratt & Marshall) or as an investment in a societally optimal and personally beneficial level of higher education (Bevia & Iturbe-Ormaetxe, 2002; Creedy & Francois, 1990; G. E. Johnson, 1984).

A further issue with the Fernandez and Rogerson model is that of homogeneity of voting power among individuals. A long literature in political science has documented the ability of well-educated and well-connected individuals to shape the formation of public policy (Alford & Friedland, 1975; Bartels, 2002, Dahl, 1974). For example, Ferreira (2001) provides a model in which voting power can be concentrated as a result of initial educational inequities:

If voting power is not distributed uniformly, but increases with private wealth, a self-sustaining high-inequality trap may arise, whereby educational inequality ensures the persistence of political inequality, which in turn guarantees the continuation of educational inequality. (Ferreira, 2001, p. 549)

The evidence of differing access to government power among groups notwithstanding, there is little reason to suspect that, beyond suffrage rules, there are systematic differences in ability to vote, particularly in western democracies. Even given the somewhat frightening results of Ferreira, it seems unlikely that educational inequality results in anything more than economic inequality. However, it should be made clear that Ferreira suggests a self-reinforcing dynamic cycle wherein not just economic but social and political power are concentrated in the hands of a few citizens, with a society that becomes more stratified with each generation. This by itself may have implications for the society as a whole, as we will consider shortly (Boix, 2003).

I will return to the Fernandez and Rogerson model in the next section. However, the discussion here illuminates several important features and weaknesses of the model in the context of the overall literature on the political economy of higher education subsidies. The model does not take into account long run dynamics of the society in the mode of Bevia and Iturbe-Ormaetxe (2002), nor does it assume much about the possible externalities or complementarities of production along the lines of G. E. Johnson (1984) or Creedy and Francois (1990)¹¹. Finally, the model does not consider the possibility of heterogeneity of ability among individuals, with consequent shifts in the ability to benefit from higher education (DeFraja, 2002).

DeFraja (2002) provides a model that fundamentally questions whether spending more money on wealthier students is, in fact, a regressive system of subsidies. Unlike Fernandez and Rogerson, who treat all individuals in the population as equally able and equally capable of benefiting from a higher education, De Fraja posits that individuals who are more capable are in a better position to benefit from higher education. In the maintained model, it is in society's interest to invest the most in those who would benefit the most from higher education.

Wealthy and bright individuals in De Fraja's model may underinvest in higher education, since their parent's endowment combined with the tax rate necessary to generate subsidies for higher education will distort their labor versus leisure decision-making. The only way to ensure that they will invest in themselves is to provide them with very high subsidies. Conversely, low income but capable individuals have every reason to invest in more education, but are subject only to credit constraints. Hence, De Fraja concludes:

... the wealthier the household the greater subsidy: the worse-off subsidizes the better-off. The households who contribute the least to the education budgets are the wealthy households with bright children, poor households with children of average intellectual ability make the greatest contribution to the education budget. These conclusions are driven both by the need to provide sufficient incentives to the brightest children to acquire more

¹¹ Possible externalities not included in the model include the classic possible externalities considered in the economics of education literature, such as greater civic involvement or appreciation of the arts. Complementarities of production include the ability of all individuals to benefit from a society that is generally more productive as a result of advances in human capital, even among just a few citizens.

education, and be the fact that the poorer a household, the greater the benefit it derives from a system of public education, and therefore the greater its willingness to pay for it.

Empirical support De Fraja's model is sparse. As shown in Table 7.1, the percentage of high income young people who attend higher education under the American system is at least as high as 95%, a figure that must approach unity once those who can not possibly benefit from higher education for some reason are left out of the calculation. But the American system of higher education is characterized by some level of redistribution of subsidies away from the very richest student, indicating that the results in the De Fraja model may not apply to the American context.

By contrast, De Fraja's point about heterogeneity of ability is strongly supported and is an important qualification to the Fernandez and Rogerson model—there is ample evidence that the ability to benefit from a higher education varies by individuals (Heckman & Carneiro, 2003). Further refinements in the area of redistribution through higher education subsidies must take into account differential ability of individuals, and the differing impact that higher education can have on persons of different abilities.

The possible limitations pointed out by the studies cited here do not in any way take away from the strengths of the model proposed by Fernandez and Rogerson (1995). First, for the purposes of this paper, I attempt to establish only the short term decision making process of individuals voting on higher education subsidies, recognizing that a very long time horizon may be inappropriate, particularly in the context of local voting decisions. Second, as noted, the evidence mustered up until now on the externalities of higher education has been rather weak. In a small extension of the Fernandez and Rogerson model, I will model the necessary size of externalities in order to be supported by majority vote in the section specifically describing the Fernandez and Rogerson model, and show that they would need to be quite large under the maintained assumption of their model.

The literature on redistribution through higher education subsidies provides several key insights into the dilemma originally posed by Hansen and Weisbrod. First, decisions about the subsidy for higher education are also decisions about the price of higher education, and therefore decisions about who will attend, since at any given tuition some potential students will be priced out. Second, in a democracy, these decisions take place in a strategic environment, with voters and policymakers seeking to maximize their advantages along one of several

lines. Given these basic insights, theorists come to differing conclusions, depending on their assumptions about the characteristics of both policymakers and individuals. The key differences have mostly to do with inequality: to what extent are individuals unequal in terms of income, education, political power, or academic ability? The assumptions made about any of these will inform the resulting model and results.

FURTHER RESULTS

The model for higher education subsidies provided by Fernandez and Rogerson sparked a rich literature, with several authors positing alternative models or extending their results. the most important of these is the work done by Austen-Smith (2003). The most important aspect of this study Austen-Smith's finding that the Fernandez and Rogerson model applies beyond just the context of education. In general, when redistribution is done by subsidies for a particular good that is not available to all citizens, there are certain characteristics of a society that will make higher or lower levels of these subsidies more likely.

Austen-Smith (2003), builds on and extends the Fernandez and Rogerson model to apply to any redistribution scheme that funds a particular good or service which is not universally enjoyed. The author suggests that Fernandez and Rogerson's equilibrium results have implications that extend beyond the field of higher education. Austen-Smith's model shares many of the features of Fernandez and Rogerson's model of higher education subsidies, but with more general implications. He posits a single good valued by all members of the society, but which is too expensive for many to afford. As with almost every country in the world, the economy in this society is characterized by a median income that is less than the mean. The redistribution scheme to be considered only provides subsidies for consumption—those who do not end up with the good or service in question receive no subsidies at all.

Austen-Smith's model depends on several further assumptions about the distribution of income in the society and the proportions of different groups who can benefit from the good or service in question. His final results are quite intuitive. First, he answers the question, why would a majority of any society choose a policy that redistributes income on the basis of consumption of a good or service, instead of a lump sum scheme as discussed in Meltzer and Richard (1981) Austen-Smith's model suggests that the decision to subsidize consumption takes place in two parts: first, a decision about whether to

have a subsidy policy or a direct redistribution scheme, second, a decision on the tax rate for either the subsidy policy or redistributive plan.

A majority will choose the subsidy policy, under the conditions set forth by Austen-Smith:

Although the net utility gain to the median under direct redistribution is positive, it is relatively small compared to that under consumption subsidies. In the latter case total consumption is lower and so the per capita subsidy for those able to afford the good is relatively high. (Austen-Smith, 2003, p. 1629)

The exclusionary nature of subsidizing consumption goods guarantees that the median voter under this set of assumptions will strictly prefer a subsidy policy to a general redistribution scheme, since the median and those grouped around the median will only realize a small benefit from a purely redistributive policy.

For example, consider the case of a middle-income voter. The voter can choose a pure redistributive scheme, which will tax all income proportionally and then provide a lump sum benefit of say, \$1000 to every individual in the state. This person pays 1% of income, \$ 500, and receives the a net subsidy of \$500. However, if the policy is subsidies for higher education the person could pay the same tax, but receive a much bigger benefit. Say college tuition is \$5,000, but the actual cost of college absent the subsidy is \$7,500. The total benefit for this person would then be \$2,500, five times what they paid in taxes.

The wealthy group in Austen-Smith's model would favor such a plan since their net benefit would remain positive up to a much higher income level than under a pure redistribution scheme. So would the middle income voters, under a key set of conditions:

The poorest members of the community do not consume the good although they pay taxes, while the richest members consume the good but pay more in taxes than they gain through the subsidy. Hence, the net redistribution of income and welfare is from the rich and poor to the middle income group.

This result, as Austen-Smith points out, is not only a far cry from a pure Benthamite plan, but can be quite inefficient under most circumstances. Nevertheless, an interior majority can prefer such a plan, provided one key condition holds—the median income is not too far from the mean income. To understand this result, consider the California median voter above. As this person's income declines relative to average income, the tax rate that they will pay goes down while the subsidy under the

pure redistribution scheme goes up. As the lump-sum to be received under a pure redistribution scheme increases, and the subsidy to be received under the consumption subsidy policy gets more difficult to pay because of price rationing, this person will prefer a pure redistribution scheme.

Austen-Smith's extension of the Fernandez and Rogerson model suggests both that the case of higher education is not unique and that the conditions under which a subsidy policy can be obtained under majoritarian voting can be clearly described: "Subsidy policy is majority preferred to redistribution when mean income is not too much greater than median income, where 'too much' is determined relative to other parameters such as the unsubsidized consumption price" (Austen-Smith, 2003, p. 1618). Under these conditions, middle income individuals should favor a redistribution scheme that can "price out" those who make less than they do, thereby guaranteeing that only those who can afford to pay (part of) the price of the subsidized good will receive it. This prevents the good from being diluted or rationed as it would have to be under other circumstances, while still providing for government subsidies for the good or service in question.

This model provides a groundwork for extending the findings of Fernandez and Rogerson to other areas, such as cultural subsidies or subsidies for entertainment, where a general taxation scheme pays for a good or service which only a few enjoy. This is an important finding because it means that the behavioral model posited by Fernandez and Rogerson may be reflective of broader characteristics of a particular strategic situation.

FERNÁNDEZ AND ROGERSON MODEL OF REDISTRIBUTION THROUGH HIGHER EDUCATION SUBSIDIES: AN APPLICATION TO THE AMERICAN STATES

This section will outline the Fernandez and Rogerson (1995) model of education spending. This model, despite its apparent simplicity, has profound implications for the study of higher education politics and policy. It provides both a theoretical and an analytic framework explaining how higher education might serve to redistribute benefits from lower income to higher income individuals without resorting to exploitation or manipulation of the political process. Instead, they show how voters acting rationally might nevertheless create a system in which the rich benefit from higher education at the expense of the poor.

I will then review their findings for possible hypotheses to be tested empirically. I am particularly interested in looking at the conditions that hold in the American states. I find that their model is directly applicable to all states under two clearly defined circumstances, which result in clear hypotheses to be tested.

Several aspects of the Fernandez and Rogerson model are distinct from the previously mentioned literature on selective welfare policies. First, in their model, income determines exclusion restrictions. As the authors state: "a vote on the extent to which education is subsidized is also implicitly a vote over who receives the subsidy" (Fernandez & Rogerson, 1995, p. 250). Since subsidies lower the price of higher education, any non-zero price for higher education will by definition exclude some individuals from attendance. However, unlike other models reviewed previously, there are no *other* exclusions restriction (e.g. grades, test scores) on attending higher education.

Second, the authors make no provision whatsoever for externalities. "We assume there are no spillovers from educated to non-educated individuals and that the returns to education are unaffected by the number of individuals that obtain an education" (Fernandez & Rogerson, 1995, p. 251). This is important because many have argued that externalities are the primary reason the public subsidizes higher education (DeFraja, 2002; G. E. Johnson, 1984). While the authors do not extend the model in order to incorporate this possibility, I will take up this possibility later in this section in order to at least bound the size of the externalities that would be necessary to affect voting equilibria. In other words, I will establish the conditions under which every low income person might be excluded from higher education yet gain enough benefits from externalities that they would still be willing to subsidize others to attend.

Last, the authors assume that the cost of education itself is exogenous. This assumption greatly simplifies the model, but further work could help to clarify the role of individuals with differing preferences in affecting the costs of education. If individuals in the model could act to make education more expensive, this could add further to the exclusion restrictions mentioned above.

DESCRIPTION OF THE MODEL

The economy in this model takes place over two time periods, the period before individuals get an education and the period after individuals get an education. It posits one consumption good,

education. Individuals have a linear utility function defined over both periods. The future is not discounted. The society is divided into three groups with an initial income: $y_1 > y_2 > y_3$ denoting rich, middle class, and the poor, in order. Each section of the society is represented by λ_i , where $\sum_i^3 = 1$.

E = represents the unsubsidized cost of education, and second period income for those who receive an education is denoted by $f(y_i)$. The authors further describe an economy in which the net increased income that individuals receive as a function of their education will always be greater than their income before receiving an education.

$$f(y_i) - E > y_i \quad \forall i \quad (1)$$

Any individual's utility will be a function of their first period income plus γ_i .

$$u_i = y_i + \gamma_i \quad (2)$$

$$\gamma_i = \begin{cases} f(y_i) - E & \text{if } y_i \geq E, \\ y_i & \text{if } y_i < E. \end{cases} \quad (3)$$

The term γ_i summarizes the amount of education that an individual will pursue. When income is more than the cost of education, then the individual will pursue an education, incurring cost E , but realizing increased income in the form of $f(y_i)$. When income is less than the cost of education, the individual's income will remain unchanged, making total utility over the two time periods $2y_i$.

In such an economy, many may be unable to afford an education unless some subsidy is provided. To finance this subsidy, all individuals will be taxed at a uniform proportional rate, called θ . This tax will then subsidize education at a uniform amount.¹² The result of any tax rate will be a lowered cost of education, which some larger proportion of the population will be able to afford.

This tax θ is assessed on the entire population, which has an total income of μ .

$$T(\theta) = \theta \sum \lambda_i y_i = \theta \mu \quad (4)$$

¹² Notice the distinguishing characteristic of this model from the Meltzer and Richard (1981) model and others—redistribution takes place on an exclusionary good, not on a uniform lump-sum payment.

Total tax revenues are equal to θ times sum of the income in each group times the proportion in each group. Since the mass of agents is one, μ is total income and tax revenues equal θ times the total income.

At any given θ , a certain number of people will get an education. This group is represented by the term: $N(\theta)$. As mentioned previously, the given tax rate will translate into a certain per-person subsidy. This subsidy is represented as: q

$$s(\theta) = \frac{\theta\mu}{N(\theta)} \quad (5)$$

As equation (5) shows, the per person subsidy equals the tax revenues divided by the number of people who get an education. This becomes quite important later, since it leaves two possible ways to increase the per-person subsidy: increase taxes (θ) or decrease the number of people receiving subsidies (N).

$$\text{Max } j \text{ s.t. } (1 - \theta)y_j - E + \frac{\theta\mu}{\sum_{i < j} \lambda_i} > 0 \quad (6)$$

Where $\sum_{i < j} = 0$ for $j = 1$ Given this j (j can be either 2—the middle class¹³ or 3—the poor). The authors evaluate the benefit for each group starting with the rich, then turning to the middle class and poor. For each group, the question is: what does it benefit this class to have the next class(es) down also getting some subsidy? Next, find the greatest value of $\rho_i \in (0, 1]$ such that:

$$(1 - \theta)y_j - E + \frac{\theta\mu}{\sum_{i < j} \lambda_i + \rho_j \lambda_j} \geq 0 \quad (7)$$

For any $s(\theta)$, an individual from group i can obtain an education if $(1 - \theta)y_i - E + s(\theta) \geq 0$, that is, only if the money left over after taxes minus the cost of education plus the subsidy for education is greater than zero.

If any individual from j can afford an education then all individuals from i can afford to be educated. if $\rho_j \in (0, 1]$ then $\rho_i = 1$ for all $i \leq j$.

$$N(\theta) = (\sum_{i < j} (\lambda_i) + \rho_j \lambda_j)$$

¹³ In the Fernandez and Rogerson model, the income of the middle class is equal to the median income by construction. I refer to median voter and income and middle class interchangeably throughout this section.

The number of citizens who receive an education is determined by the proportion of people in groups $i \leq j$ that can afford an education, plus a random selection of group j , the proportion of which are determined by the value ρ .

The expected utilities for each of the groups as a function of θ is written as:

$$EU_i(\theta) = (1 - \theta)y_i + \rho_i(\theta)[s(\theta) - E + f(y_i)] + (1 - \rho_i(\theta))y_i \quad (8)$$

Fernandez and Rogerson then set out a proposition, detailing the expected utilities for certain levels of θ for each group. In effect, when deciding on a tax rate, each of the income groups—the wealthy, the middle class, and the poor—are looking for a tax rate that will allow everyone in their group to attend higher education.

The notation for expected utilities is as follows:

$\hat{\theta}$ is defined as the maximum value of $\theta \in (0, 1]$ for which $\rho_i(\theta)$ is 0. If $y_i \geq E$ then $\hat{\theta}$ is 0. $\hat{\theta}$ bounds the lower reach of θ for individuals in group i , any increase in θ will allow more from group i to get an education.

$\bar{\theta}_i$ is the value of θ at which all members of group i can afford an education.

Fernandez and Rogerson then provide a set of propositions that describe the different $\hat{\theta}$ and $\bar{\theta}$ for each group. These proportions follow a natural course, with rich at one end and poor at the other, ranging from 0 to 1. The rich would rarely prefer a higher tax rate, since they typically can afford higher education. The poor usually want the highest possible tax rate, since they can usually not afford higher education. Each group prefers a tax rate that benefits their own group and as few of the other groups as possible. As Fernandez and Rogerson state: “Utility thereafter can alternate between decreasing and increasing as a function of θ ” (Fernandez & Rogerson, 1995, p. 256)

In its simplest form, the model described here pits the middle class group, y_2 , against the other two groups. The middle class attempts to find a value for θ , the tax and subsidy rate, that will allow individuals from their group to attend higher education, while allowing as few as possible individuals from the low income group to attend higher education. As will be shown, only when the middle income and low income groups are sufficiently similar in income will the middle income groups begin to prefer higher tax and subsidy rates.

For their equilibrium results, Fernandez and Rogerson assume that $\lambda_i < .5$. This is a key assumption, guaranteeing that no one group

in the society has a majority. Any voting equilibrium therefore results in two of the three groups agreeing on a tax and subsidy policy.

Theorem one states that θ^* and that the equilibria must be one of the set $(0, \hat{\theta}_2, \hat{\theta}_3, 1)$. But $\hat{\theta}_2$ is not an option—neither groups 2 nor 3 will ever favor $\hat{\theta}_2$. So the set is actually $(0, \hat{\theta}_3, 1)$.

Since preferences are not single peaked, there is no Condorcet winner among these options¹⁴. The authors therefore provide equilibria that will hold under multiple conditions. I will consider only the subset of equilibria that pertain in wealthy countries, where average income is greater than the cost of education ($\mu > E$).

The Fernandez and Rogerson model suggests that in most cases, the rich will prefer not to pay subsidies for higher education, since they can afford to attend regardless. The middle class will most likely want subsidies that help them to attend higher education, but without providing the same benefit for the poor, since that would dilute the amount of subsidy that they can receive. The poor will almost always want high levels of subsidies for higher education, since they will be unable to attend otherwise. In the next section, I will examine the stable outcomes predicted by Fernandez and Rogerson when the middle class have sufficiently high incomes to pay for higher education, but still would prefer subsidies to defray the cost.

EQUILIBRIUM RESULTS

In Table 7.2, the authors describe the predicted equilibrium outcomes under a variety of possible conditions. I will consider each of these in turn, with possible applications to the conditions prevalent in the United States. Throughout this section, I will reference Table 7.3 in order to discuss the types of states under which the conditions specified in Table 7.2 may or may not hold.

The first broad subset of conditions concerns those states in which the income of the middle class is less than the the average cost of higher education ($y_2 < E$). Under such a condition, three equilibrium results pertain. In the first two, the wealthy y_1 essentially provide an offer to the middle and lower income groups, offering first $\hat{\theta}_2$ and then $\hat{\theta}_3$, tax rates at which some middle income and then some lower income individuals would be able to attend higher education. Under

¹⁴ A Condorcet winner is the option that would win an election when compared pairwise with all of the other options one at a time. When no Condorcet winner exists, there are multiple outcomes that can be supported depending on other characteristics of the strategic situation.

Table 7.2: Voting Equilibria in the Fernandez and Rogerson Model for Wealthy Societies Only

Parameter Restrictions		$\bar{\theta}_1$	$\bar{\theta}_2$	$\bar{\theta}_3$	Equilibrium	
1. $y_2 < E$		$\hat{\theta}_2$	1	1	1	
		$\hat{\theta}_3$	1	1	1	
		$\hat{\theta}_2$	$\hat{\theta}_3$	1	NE	
		$\hat{\theta}_3$	$\hat{\theta}_3$	1	$\hat{\theta}_3$	
2. $y_2 \geq E, y_3 < E$	$a.y_1 < \left(\frac{\mu}{\lambda_1+\lambda_2}\right)$					
		i. $y_2 < \mu$	$\hat{\theta}_3$	$\hat{\theta}_3$	1	$\hat{\theta}_3$
			$\hat{\theta}_3$	1	1	1
		ii. $y_2 \geq \mu$	$\hat{\theta}_3$	$\hat{\theta}_3$	1	$\hat{\theta}_3$
	$b.y_1 > \left(\frac{\mu}{\lambda_1+\lambda_2}\right)$					
		i. $y_2 < \mu$	0	$\hat{\theta}_3$	1	NE
			0	1	1	1
		ii. $y_2 \geq \mu$	0	$\hat{\theta}_3$	1	NE
	3. $y_3 \geq E$					
		a. $y_2 > \mu$	0	0	1	0
b. $y_2 < \mu$		0	1	1	1	

these conditions, lower and middle income voters choose the highest possible tax rate, 1, and redistribute income and benefits accordingly¹⁵. In the third scenario, the upper income voters posit a tax rate sufficient to allow some middle income persons to attend higher education, while middle income voters suggest a policy sufficient to allow some low income persons to attend. This offer is declined by low income persons, who prefer a very high tax rate, and no equilibrium results. In the fourth scenario under section 1 in Table 7.2, both high- and middle-income voters favor $\hat{\theta}_3$, a tax rate under which a small proportion of low-income voters can attend higher education. Even though low income voters dislike the policy, the preferences of the first two groups form a stable equilibrium result, meaning that their preferences will prevail, and subsidies will be sufficient so that all wealthy and middle-income voters can attend higher education, along with a small number of low-income citizens.

As Table 7.3 shows, these conditions are unlikely to hold in the American states. There are no states where the income of the middle

¹⁵ In fact, low income voters *always* choose a tax rate of 1, since they benefit the most from a pure redistributive scheme. Hence, their decision-making process is not considered in detail in these explanations.

Table 7.3: Income by Quintile and Costs of Higher Education in the American States, 1999–2000

State	Cost per FTE	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Alabama	21945	9546	23510	40404	62000	99050
Alaska	25749	15000	34004	52112	77040	120807
Arizona	15471	11000	22752	36001	57000	99476
Arkansas	20609	9500	22000	33256	50919	85080
California	19158	11328	24047	40000	63500	113200
Colorado	17399	15000	31000	48738	72000	115500
Connecticut	23924	14592	33628	56331	86000	141679
Delaware	22865	12330	30056	47870	69338	108929
Florida	14956	11212	24257	38961	60000	101076
Georgia	19981	12000	26000	42020	62274	102550
Hawaii	23042	11975	29262	47096	74067	124212
Idaho	16754	11660	24210	38850	56130	92425
Illinois	16897	13176	30832	50040	73889	120600
Indiana	20925	13150	29751	45050	63203	102412
Iowa	24446	13278	27500	44325	63300	103808
Kansas	16091	11913	26300	43300	61433	102500
Kentucky	21886	10400	24500	40633	63535	107592
Louisiana	21457	7950	21000	35000	55734	94479
Maine	18655	12582	27013	41300	61820	102131
Maryland	20628	15000	35000	57851	83240	141615
Massachusetts	18486	11910	27642	49512	75453	130999
Michigan	24455	12716	30402	50642	74755	123800
Minnesota	19169	15000	33500	54046	76351	120100
Mississippi	20435	9132	20334	34242	52912	89215
Missouri	19432	12820	30100	47200	66293	103316
Montana	17177	9100	20607	35004	51659	84098
Nebraska	19321	11653	26048	42790	63942	99868
Nevada	15747	13824	28034	42438	63000	110000
New Hampshire	18876	15000	33004	50693	75030	126973
New Jersey	21629	13881	33020	55116	82500	142904
New Mexico	24923	8916	20200	34338	53895	84824
New York	30877	9246	24261	42224	67592	119207
North Carolina	21343	10943	24632	40949	62200	105896
North Dakota	16535	10595	22526	37364	56100	86104
Ohio	20839	12000	28692	47437	69404	113866
Oklahoma	18549	10194	24033	37396	56382	96550
Oregon	25543	10800	25000	40895	61160	102520
Pennsylvania	23917	12420	28946	47000	70646	117152
Rhode Island	16951	10188	27000	47996	71405	116440
South Carolina	18896	12000	25180	40220	61000	98880
South Dakota	13616	12234	26480	41001	60200	97500
Tennessee	15911	10969	24077	39001	59000	104500
Texas	20339	10125	23000	37000	58010	100745

Table 7.3: (Continued)

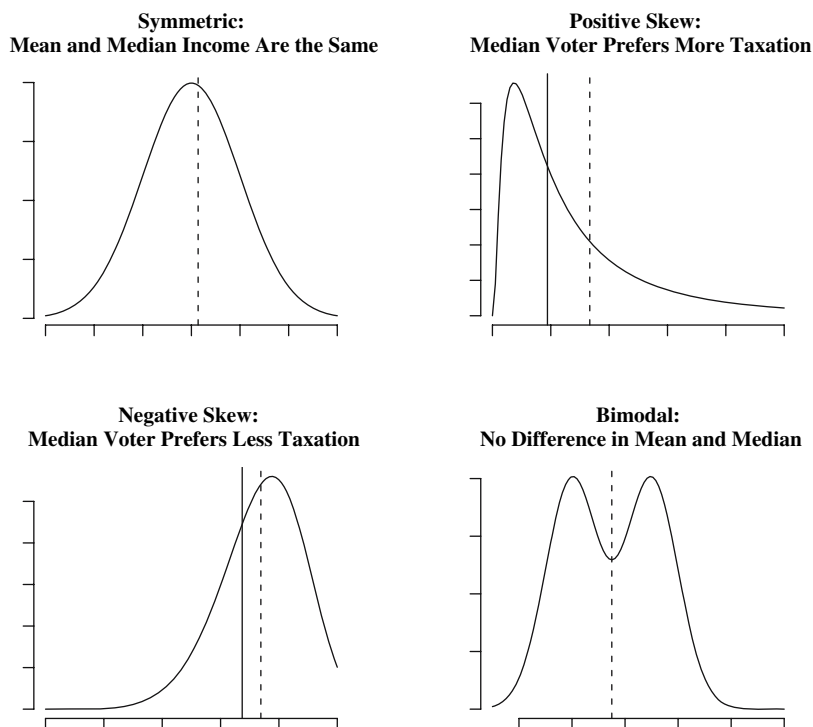
State	Cost per FTE	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Utah	23581	14346	32334	48800	67616	105606
Vermont	27640	11572	26500	42400	61598	102469
Virginia	20046	13836	32229	51945	79400	133040
Washington	21172	12420	29600	47054	69610	113600
WestVirginia	14748	8814	20065	32926	50800	86199
Wisconsin	20412	13489	30277	50000	71700	111000
Wyoming	17489	11615	26080	40266	58000	91322

class is less than the overall cost of public higher education, making the scenarios outlined above exceedingly unlikely.

Condition 2 in Table 7.2 concerns a more complex set of circumstances that pertain when the income of the middle class is greater than or equal to the cost of higher education, while the income of the lower income class is less than the cost of higher education ($y_2 \geq E$, $y_3 < E$). There are two subset of equilibria when these conditions hold: when the highest income group does not receive a greater proportion of the total income of the middle and upper classes ($y_1 < \frac{\mu}{\lambda_1 + \lambda_2}$), and when the highest income group does receive the greater share of income of the upper two classes ($y_1 > \frac{\mu}{\lambda_1 + \lambda_2}$).

When upper income people do not control most of the income in the upper part of the income distribution, everything depends on the position of the median voter relative to the average income level. If the median voter has less than average income ($y_2 < \mu$), then two equilibria are possible: voters may choose the outcome $\hat{\theta}_3$ under which some low income persons can attend higher education, or they may choose a complete redistributive scheme, with a tax rate of 1. However, if the median voter has greater than average income, then a majority of the population will vote for a tax rate at which some low income individuals can attend higher education. The intuition for these equilibria is that under conditions when the rich do not have too much to lose, they will be willing to vote for a relatively high tax rate of $\hat{\theta}_3$. The decision then depends on the position of the median voter relative to average income, as shown in Figure 7.3. When the median voter has less than average income, then a more redistributive tax policy may be preferred. When the median voter has average or greater than average income, then a less redistributive tax policy will be strictly preferred.

Figure 7.3: Possible distributions of income and preferences of median voter.



The second subset under condition 2 in Table 7.2 concerns voting equilibria when the wealthy group y_1 , control the lion's share of income of the upper classes ($y_1 < \frac{\mu}{\lambda_1 + \lambda_2}$). Under this condition, the wealthy can only lose under any tax policy, and as a result will not vote for any taxes at all. This can be seen in Table 7.2, where the preferred tax rate for this group is 0 under any conceivable set of circumstances. Middle income voters under this condition may prefer a tax rate under which a few low income persons can attend higher education ($\hat{\theta}_3$), or they may choose a very high tax rate of 1—in the first case no equilibrium results, while in the second case, an equilibrium result of 1 results. Last, if the median voter has greater than average income, then the middle class group chooses ($\hat{\theta}_3$) and no equilibrium results.

As Table 7.3 shows, the state of the world posited under condition 2 in Table 7.2 does not pertain in most of the American states. While the income of middle income persons does exceed the cost of public higher education, it is also the case that the income of many low income persons also exceeds the cost of public higher education. Some

possible exceptions include very poor states, where the income of the poorest and even those in the second income quintile is in fact less than the cost of public higher education.

The final set of conditions laid out in Table 7.2 concerns voting equilibria when the income of the poorest group is greater than the cost of public higher education ($y_3 \geq E$). Here, low income persons will still strictly prefer a highly redistributive policy, with a tax rate of 1. High income persons, on the other hand, will prefer a 0 tax rate, since even under a moderately redistributive policy such as $\hat{\theta}_2$, a large number of persons will attend higher education, and the benefit of the exclusionary benefit will be diluted to the point of being less than its cost in taxes (see equation (8)). The preferences of these two groups are clear: the poor want a high tax rate and benefits in terms of higher education subsidies, while the rich want a low or zero tax rate, and to pay for higher education out of their own pocket.

The decision in states regarding the type of higher education subsidy policy falls to middle income voters. If middle income voters have an income that is greater than average, then they are in the same position as high income voters—any redistribution scheme will cost them more than they will receive in benefits. They will choose a low or zero tax rate under this circumstance. If middle income voters have an income that is less than average, they stand to benefit from a redistributive policy, and will vote for a high tax rate (again, see Figure 7.3).

As can be seen in Table 7.3, the third condition in the table of possible equilibrium results (Table 7.2) are prevalent in the American states. In general, the cost of public higher education is less than the income of those in the lowest quintile in the American states. The amount of subsidies provided for higher education in the American states can be summarized as follows:

Hypothesis 1 *When the income of middle income voters is greater than the average income (high inequality), a voting equilibrium of low subsidies for higher education will result.*

Hypothesis 2 *When the income of middle income voters is less than the average income (low inequality), a voting equilibrium of high subsidies for higher education will result.*

The implications of these results when considered over time result in a stark set of conclusions.. As Fernandez and Rogerson write:

... Increased inequality makes it more likely that the poor are excluded in equilibrium. Although our model is effectively static, this result has some potentially interesting dynamic implications. Since exclusion of the poor may be expected to increase future income inequality, exclusion at one date enhances the possibility of future exclusion. Thus inequality may beget further inequality. Alternatively, economies with a large middle class relative to the poor and rich may be expected produce more educated individuals.

The above discussion describes the equilibrium results found under Fernandez and Rogerson's model of voting for a redistributive education policy. I find that under conditions that hold in most of the American states (i.e., the cost of education is less income for many of those at the bottom of the income distribution), the authors posit that the key distinction has to do with the position of the median voter relative to average income.

EXTERNALITIES IN THE MODEL OF REDISTRIBUTION

We can use the equilibrium results in this model to answer one of the lingering questions left from the literature on redistribution through subsidies for higher education: could the externalities generated by those who attend higher education account for a voting equilibrium under which all voters, including those who do not benefit directly from higher education, support a general redistribution of income to fund a system of high subsidies for higher education? That is, under what conditions would the poor vote for a system of higher education that benefited only the middle class or the wealthy?

Using the maintained model, consider the expected utility for any group i under any tax rate, as defined in equation (8). The additional externality in this case would be the sum of the externalities generated by all groups and individuals that do manage to attain a higher education: $\sum_i \lambda_i e$

This amount is by necessity indivisible, and goes back to all members of the society equally in the form of a benefit ϕ . We can use this sum ϕ to examine conditions under which any group y_1 would have a greater expected utility for higher education subsidies even when they do not benefit from them.

$$(1 - \theta)y_i + \phi > (1 - \theta)y_i + \rho_i(\theta)[s(\theta) - E + f(y_i)] + (1 - \rho_i(\theta))y_i \quad (9)$$

That is, the remaining income after paying for higher education subsidies plus externalities would have to be at least equal to the expected utility of sending a certain proportion of the population to higher education. Further assuming that $\rho_i = 0$ and the group in question had no participation at all in higher education yields the following result:

$$\phi > 1 + y_i \quad (10)$$

In other words, the externality for any group would not have to be equal to the size of the subsidy given to any other group, but equal to the total amount of income for that group in the first period. This follows from the concept that income in the second group for educated people is $f(y_i) > E$, which means that the group in question would need an additional payoff at least equal to y_i to strictly prefer receiving externalities to actual higher education subsidies.

It is not inconceivable that these results could hold in very poor countries. In poor countries, the benefits generated indirectly through the creation of a more highly educated population could indeed be larger than the income of the very poorest group in the society, which for 20% of the world population is less than \$1 a day (United Nations Educational, Scientific and Cultural Organization, 2006). In these societies, the poor may be quite willing to forgo their own education in order to receive the societal benefits of having a more highly educated population.

In developed countries, it seems much less likely that externalities could possibly be this large. In the United States, average income for those in the lowest quintile is \$11,400, meaning that per person externalities for the entire population (not just low income persons) must exceed this amount (United States Department of Commerce, Bureau of the Census, 2003). Our inability to measure externalities makes this calculation problematic, but this analysis suggests that externalities must be much bigger than previously thought to sustain any kind of voting equilibrium. In any case, it is difficult to imagine that such benefits as increased civic participation, more support for cultural activities, and other externalities from higher education are large enough to justify systematic exclusion of any single income group from attendance.

This is by no means the final word on the value of externalities from higher education. However, in the ongoing debate about the public and private benefits of higher education, this does at

least provide some theoretical basis for the required size of externalities needed to justify the system of higher education currently in place.

AN EMPIRICAL APPLICATION OF THE MODEL OF REDISTRIBUTION

In the previous section, I derived from the work of Fernandez and Rogerson a set of hypotheses regarding the distribution of appropriations for higher education in the American states. This section provides an empirical test of these hypotheses, drawing on data for the fifty states for the period 1984–1999.

As a review of the formal theory provided earlier, Fernandez and Rogerson posit higher education subsidies as a policy whose value includes not just the explicit amount to be spent but an implicit decision regarding who will go, since sufficiently low subsidies will result in high prices for higher education which the poor can not afford. Under conditions that pertain in most of the American states, the position of the median voter relative to the average income will determine the voting position of the middle class regarding subsidies for higher education.

For the purposes of an empirical application, I seek to answer the question: to what extent does state-level inequality lead to lower or higher appropriations for higher education? This follows directly from the theory laid out previously in the chapter which establishes that in a more unequal society (middle class income is high relative to average income) there will be less incentive to invest in higher education subsidies. I posit the following hypothesis: As inequality increases/decreases, state appropriations for higher education will decrease/increase.

To test this hypotheses, I examine the relationship between measures of state-level inequality and state tax appropriations for higher education in a fixed-effects model (Greene, 2003; Stimson, 1985). To minimize the possibility of endogeneity, I utilize an instrumental variables approach, making use of the two stage least squares estimator. The results indicate a negative and statistically significant relationship between inequality and state tax appropriations for higher education, providing strong empirical support for the Fernandez and Rogerson model of higher education subsidies.

DATA

The data for this study come from a panel dataset I constructed to track state-level information on a variety of political, economic, demographic and educational variables. Variables in the dataset were derived from a variety of sources. The source of each variable will be described in detail.

DEPENDENT VARIABLE

The dependent variable for this analysis is state tax appropriations for higher education. Since the late 1960's, researchers at the Center for the Study of Education Policy at Illinois State University have been collecting data on higher education tax appropriations by state. (Center for Higher Education and Educational Finance, 2000). This measure, aggregated to the state level, forms the basis for the dependent variable.

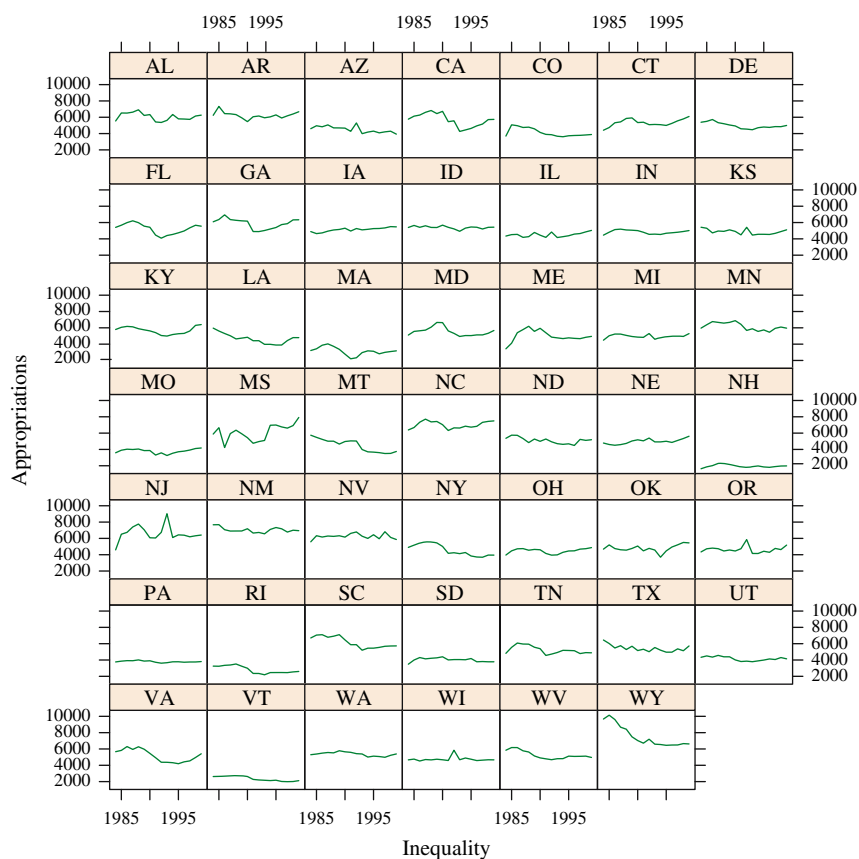
In addition, this measure is made comparable on a state by state basis by reporting it on a per full-time-equivalent (FTE) basis. The figures for FTE enrollment come from the National Center for Education Statistics Integrated Postsecondary Education Data System, which surveys the universe of higher education institutions (U.S. Department of Education, 2001).

Finally, this measure is also inflation adjusted, using the Bureau of Labor statistics consumer price index (CPI) for all urban consumers. Adjusting this measure (and all other dollar measures in the study) for inflation ensures that all changes observed at the state level reflect actual changes in state funding for higher education.

This measure may be flawed in several ways. First, measuring only state tax appropriations can miss other important sources of revenues for the states. For instance, in many states lottery revenues have grown to be an important part of state funds for higher education—this data does not capture these funds. Second, many states rely on a complex mix of state and local appropriations to fund higher education, with states maintaining some level of control over the disposition of local funds.

Even with these difficulties, the indicator used in this analysis represents the best available indicator of a state's commitment of tax funds to subsidize higher education, the exact outcome being modeled in the formal theory outlined above. A state-by-state plot of this variable against time is available in Figure 7.4 .

Figure 7.4: State appropriations per FTE (inflation adjusted), 1984–1999.



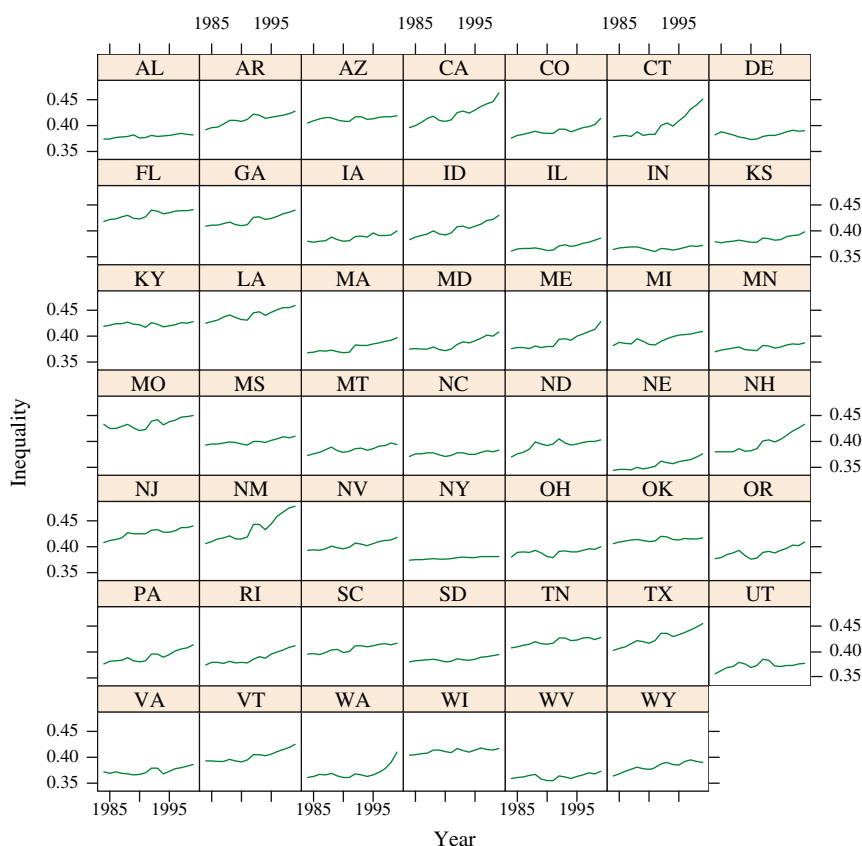
INDEPENDENT VARIABLES

The primary independent variable of interest is state level inequality. The measure of state level inequality to be used in this analysis is reported in Galbraith and Hale (2006). As the authors note, “the ideal dataset for constructing state inequality measures would contain individual-level income for every American-by state- in every year. Such data do not exist” (Galbraith & Hale, 2006, p. 1). To overcome this difficulty, the authors make use of industry level income data available for every state for every year from the Bureau of Economic Analysis. The authors use Theil’s T statistic measured at the state level, combined with the same statistic measured at the

national level ¹⁶. The resulting measure tracks closely with Gini coefficients calculated using state-level income data using decennial census data.

Based on this high level of correlation, the authors use the linear combination of Theil statistics described above to predict the value of the Gini coefficient in each state in each non-census year. The results of this approximation are used in this study as a state-level indicator of income inequality. A state-by-state time series for this variable is displayed in Figure 7.5.

Figure 7.5: State level inequality, 1984–1999.



¹⁶ Theil's T is a measure of inequality that shares many of the properties of other inequality measures like the Gini Coefficient. The statistic ranges from 0 (perfectly equal distribution of income) to $\ln n$, where n is the size of the population. Several authors argue that Theil's T is a more flexible measure than the Gini Coefficient, as it relies less heavily on parametric assumptions.

To control for possible changes in the structure of the system of higher education within states, I include two variables to describe the system of higher education within the state. First, I include a variable that measures the percent of FTE in the state enrolled in private higher education. Previous research has suggested that states with higher levels of private enrollment will have different political and policy environments than their counterparts with low private enrollment (Breneman, Finn, & Nelson, 1978; Doyle, 2004).

The second variable describing the system of higher education in the state describes the structure of the state board of higher education. The governance structure for higher education has been shown to be related to various aspects of state policy for higher education in a number of studies (McLendon, 2003). Changes in the governance system are therefore controlled for in this study, using the classification described in McGuiness, Epper, and Arredondo (1994).

States may also vary in their support for higher education based on the ideological position of state legislators. Recent research has indicated that the liberalism of state legislators is related to several higher education-specific policy issues (Doyle, 2004). I use the index designed by (Berry, Ringquist, Fording, & Hanson, 1998), which measures state-level government liberalism as a function of the voting records of that state's congressional delegation.

In looking at the effect of inequality on state appropriations for higher education, it is appropriate to control for changes in state income and production. I use gross state product per capita in order to control for the effect of broad changes in the state's economy on higher education appropriations, since I am interested in the effect of inequality regardless of general levels of income or wealth United States Department of Commerce, Bureau of Economic Analysis (2001).

Last, simple demand for higher education may drive appropriations up, since having more people eligible for a service has been shown to be related to legislative demand for that service in other settings (Grogan, 1994). I include the percent of the population aged 18–24 as a control for the effect of demand for higher education on appropriations for higher education.

INSTRUMENTAL VARIABLES

The causal direction implied by the formal theory described previously implies that inequality will lead to higher or lower levels of

state appropriations for higher education. Given the observational nature of the data in this study, the opposite direction of causality must also be entertained: it is entirely plausible that low levels of state appropriations for higher education could cause inequality, indeed this is exactly the kind of “vicious cycle” that several authors have suggested may take place (Fernandez & Rogerson, 1995, 2003; Ferreira, 2001).

To account for the possibility of endogeneity in the relationship between appropriations for higher education and state level inequality, this study makes use of an instrumental variables approach (Greene, 2003). To satisfy the conditions required for this approach, the instrumental variables must be correlated with the endogenous variable, but not correlated with the error term in the equation relating the endogenous variable to the dependent variable.

For this study, the instrumental variables to be used measure the extent to which each state relies on extractive industries for both income and employment. Extractive industries are those which rely on specific assets located within the state, as opposed particularly to industries which rely on mobile assets such as human capital (Boix, 2003).

Research on the “resource curse”—the relationship between authoritarian and unequal regimes and a country’s dependence on natural resources (particularly oil)—has demonstrated that a country that is dependent on natural resources may neglect the development of its own human capital, leading to conditions of inequality and inhibiting the growth of a democratic society (Ross, 1999; Sachs & Warner, 2001). Further research in the American context has linked the development of legal institutions to the prevalence of natural resources in the states (Berkowitz & Clay, 2003).

The concept of the “resource curse” is deployed in this paper to suggest that states that have a high level of dependence on extractive industries are likely to have a higher level of inequality, a relationship that is not related to the error term in the relationship between inequality and state appropriations for higher education. Tests of the econometric specification of this relationship are held until the section on methods.

Two variables measure the extent to which states rely on extractive industries. First, the percent of income derived from extractive industries is measured on a state by state basis, using industry-level data from the Bureau of Economic Analysis. Second, the percent of the

working population employed by extractive industries is also reported, using the same data source.

For the purposes of this study, extractive industries include mining (included oil-related industries), agriculture (farming), forestry, and logging. In effect, each of these industries combines asset specificity (the assets are tied to the physical location of the state) with an emphasis on physical as opposed to human capital. Under conditions where these industries are prevalent, research suggests that a small proportion of the population will amass a large amount of income, while most make little, resulting in high levels of inequality (Sachs & Warner, 2001).

METHODS

To estimate the relationship between inequality at the state level and state tax appropriations for higher education, I make use of a fixed effects model, with an AR(1) error structure. Fixed effects are particularly appropriate in this case, as the differences among states are sufficiently large that failing to account for unit heterogeneity would lead to bias in the results (Stimson, 1985). Further, a random effects specification would not be appropriate, as unit level effects are correlated with the covariates (Hausman, 1978). The fixed effects model is given by:

$$y_{it} = \alpha_i + \beta x_{it} + \epsilon_{it}$$

Where y is the dependent variable for unit i in year t , β is a vector of coefficients, x is a vector of covariates, ϵ_{it} is an error term, and α_i is a group-specific error term (Greene, 2003).

I use an AR(1) error structure to account for serial correlation in the error terms within units. Failure to account for the dependence in the error structure could lead to inconsistent estimators. The AR(1) specification transforms the variance covariance matrix by an estimate of ρ_i , where ρ_i is given by:

$$\begin{aligned} \epsilon_{it} &= \rho_i \epsilon_{i,t-1} + \mu_{it} \\ \text{Var}[\epsilon_{it}] &= \sigma^2 = \frac{\sigma_{\mu i}^2}{1 - \rho_i^2} \end{aligned}$$

Assuming that ρ_i can be consistently estimated by r_i , the data can be transformed using the Prais-Winsten transformation¹⁷ (Greene, 2003).

Finally, since I am estimating a system of equations, I make use of two stage least squares as an estimator for the reduced form equation specific in model (12).

MODEL SPECIFICATION

The model specified in this section is designed to assess the impact of state-level inequality on higher education appropriations. To accomplish this, a system of simultaneous equations are specified, with inequality as the endogenous variable. The relationship between inequality and appropriations is identified through the exclusion of two variables in the first structural equation (11). The second structural equation specifies the relationship between state-level inequality and higher education appropriations conditional on state educational, political, and demographic characteristics.

$$\begin{aligned} \text{Inequality}_{ij} = & \delta_i + \gamma_1(\text{Private Enrollment}_{ij}) \\ & + \gamma_2(\text{Board}_{ij}) + \gamma_3(\text{Gross State Product}_{ij}) \\ & + \gamma_4(\text{Percent 18-24}_{ij}) + \gamma_5(\text{Income from Extractive}_{ij}) \\ & + \gamma_6(\text{Employment in Extractive}_{ij}) + u_{ij} \end{aligned} \quad (11)$$

$$\begin{aligned} \text{Appropriations}_{ij} = & \alpha_i + \beta_1(\text{Inequality}_{ij}) + \beta_2(\text{Private Enrollment}_{ij}) \\ & + \beta_3(\text{Board}_{ij}) + \beta_4(\text{Gross State Product}_{ij}) \\ & + \beta_5(\text{Percent 18-24}_{ij}) + \epsilon_{ij} \end{aligned} \quad (12)$$

Where:

Appropriations = Appropriations for state i in year j

Inequality = Inequality measured in each state in each year

Private Enrollment = Percent of full time equivalent enrollment
in private institutions

Board = Structure of state board for higher education

Gross State Product = Gross State Product in each state in each
year

¹⁷ The Prais-Winsten transformation is given for each value of the dependent variable and independent variables by $x_{it} - rx_{it} - 1$ for all values of x and y , with a special adjustment for the first values.

Percent 18–24 = Percent of the population aged 18–24

And:

γ_{1-6} = Coefficients in the first stage equation

u_{ij} is an error term in the first stage equation

β_{1-5} = Coefficients in the second stage equation

ϵ_{ij} is an error term in the second stage equation

Following hypotheses one and two, a negative and significant sign on β_1 will indicate support for the idea that increasing inequality will lead to lower appropriations for higher education. The next section details the results of the estimation of these models.

RESULTS

This section details the results of the analysis described above. The model as specified is identified, but with weak instruments. The results are highly specific to a particular formulation of the model. Results from two-stage least squares indicate initial support for the Fernandez and Rogerson model in the context of the American states.

SPECIFICATION TESTS

For a system of equations to be identified, two conditions must be met. First, the instruments excluded from the second stage equation must be correlated with the endogenous variable. Second, the relationship between the instruments and the error term in the structural equation must be sufficiently weak in order to meet the overidentification requirements.

I use two specification tests to ensure that these requirements are met. All of the results reported here refer model four in Table 7.5, the fully specified model. To ensure that the instruments excluded from the second stage equation are correlated with the endogenous variable, I calculated the F statistic when the excluded variables are removed from the first stage equation (Bound, Jaeger, & Baker, 1995). The test statistic in this case was 5.07, with 6 degrees of freedom. This indicates that the first condition is met—the excluded variables are sufficiently correlated with the endogenous variable to ensure that the instrumental variable estimates will not be biased.

In the second specification test, known as the Hausman test (Hausman, 1978), the error term from the structural equation is regressed on the instruments in the first stage equation. The r^2 term

from this regression is then multiplied by the sample size. In this case, the resulting χ^2 test statistic is 20, which is statistically significant at any level. This indicates that the instruments are too strongly correlated with the error term in the structural equation to consider the model properly overidentified, and the results must be considered in the face of having weak instruments.

ESTIMATION RESULTS

Results from the ordinary least squares regression of appropriations on state inequality and other characteristics are reported in Table 7.4 . As with all of the other results reported in this section, a fixed effects model is used, meaning that results only pertain to changes within states. As Table 7.4 shows, inequality shows a positive and statistically significant relationship with appropriations for higher education when no other variables are entered into the equation (model 1). The zero order relationship between these two variables shows the exact opposite of the predictions from the Fernandez and Rogerson model.

Yet, in the fully specified model (model 4), the coefficient for inequality is statistically significant, but negative. Only when other changes within states are controlled for does a negative relationship between inequality and appropriations surface. This indicates that the negative relationship between inequality and appropriations for higher education is dependent on the specific functional form specified in model 4.

The results from two stage least squares reported in Table 7.5 show a similar pattern, with a negative and statistically significant relationship between inequality and appropriations for higher education. The coefficient for this variable is \$12,362, with a 95% confidence interval bounded by [1,753,22,898]. As model 4 shows, an increase in inequality equal to the range reported in the data (.13) would result in a \$1,600 decrease in appropriations. A more representative figure is the amount of change in inequality that occurred between 1984 and 1999 within any given state. The biggest change for this figure occurred in Connecticut, which saw a .07 change in inequality over this time period, which results in a predicted increase of \$862 in appropriations for higher education. Results from first stage estimates are reported in the Appendix, Table A1

These results indicate initial support for the Fernandez and Rogerson model of state subsidies for higher education. Under the parameter restrictions which most closely resemble the characteristics

Table 7.4: Results of OLS, Dependent Variable=Inflation-Adjusted Per Student Tax Appropriations

	Model 1	Model 2	Model 3	Model 4
Inequality	2215.20 (4369.33)	-174.79 (4434.20)	-312.69 (4448.28)	-9292.41 (4173.44)
Percent of FTE in Privates		6687.86 (1996.38)	6718.81 (1999.17)	5699.60 (1854.14)
Board: Centralized Four Year		-181.44 (468.80)	-183.92 (469.09)	-269.28 (406.84)
Board: Strong Coordinating		89.93 (457.94)	81.90 (458.62)	312.04 (396.58)
Board: Weak Coordinating		78.96 (488.36)	74.85 (488.73)	231.55 (423.44)
Liberalism			75.24 (188.21)	249.28 (178.14)
Percent of Population 18–24				332.91 (61.63)
Gross State Product (Per Capita)				0.15 (0.02)
Intercept	4347.71 (426.27)	3781.18 (427.94)	3797.35 (428.50)	-484.73 (747.74)
Fixed Effects	Yes	Yes	Yes	Yes
R ² (Within)	0.00	0.02	0.02	0.15
F	5.95	4.68	4.63	12.32
N	750.00	750.00	750.00	750.00

of American states, the authors suggest that median voters with greater than average income will prefer lower tax and subsidy rates, while median voters with less than average income will prefer high tax and subsidy rates. I find in this analysis that increased inequality (indicating median incomes approaching or greater than average) leads to lower appropriations for higher education, conditional on state educational, economic, political and demographic characteristics.

Other findings from this analysis are worth briefly highlighting. There is a statistically significant and positive relationship between state appropriations and the percent of students enrolled in private institutions, a finding that is similar to Doyle (2004), where higher levels of private enrollment were found to be related to higher levels of state financial aid. In addition, states with a higher percentage of the population aged 18–24 were more likely to have higher levels of appropriations. This contrasts with Leslie and Ramey (1986), who find

Table 7.5: Results of Two Stage Least Squares, Dependent Variable= Inflation Adjusted Appropriations per FTE, Endogenous Variable= Inequality, Instruments: Employment and Earnings from Extractive Industries

	Model 1	Model 2	Model 3	Model 4
Inequality	13229.19 (7254.00)	8512.64 (4097.57)	8432.84 (4110.56)	-12326.14 (5394.17)
Percent of FTE in Privates		4767.11 (2301.36)	4841.60 (2294.37)	4978.99 (2450.73)
Board: Centralized Four Year		-183.30 (488.66)	-178.25 (488.58)	-116.92 (454.06)
Board: Strong Coordinating		-15.35 (481.11)	-15.50 (480.99)	301.31 (452.10)
Board: Weak Coordinating		-19.23 (511.03)	-16.87 (511.09)	170.46 (476.70)
Liberalism			44.18 (200.28)	315.36 (205.67)
Percent of Population 18–24				383.78 (80.98)
Gross State Product (Per Capita)				0.14 (.02)
Intercept	-296.66 (3069.36)	678.50 (348.24)	665.87 (348.81)	865.43 (393.59)
Fixed Effects	Yes	Yes	Yes	Yes
R ² (Within)	0.06	0.03	0.03	0.16
F	N/A	4.75	4.68	11.52
N	772.00	722.00	722.00	722.00

that enrollment growth does not strongly affect state appropriations. Last, states with higher levels of per-capita income were also found to have higher levels of appropriations for higher education.

To further buttress the argument that high inequality leads to lower appropriations, several improvements in this empirical test could be implemented. The most important improvement involves identification of the model. Better instrumental variables would result in a more appropriately specified model, with fewer issues resulting from endogeneity between the independent and dependent variables. A longer time span may be able to identify any possible changes in the relationship between inequality and state appropriations for higher education. Finally, a more nuanced analysis could look at the influence of inequality on higher education appropriations to different income groups within states.

Nevertheless, these results do show that there is an empirically verifiable negative correlation between inequality and appropriations for higher education. As states grow more unequal, appropriations for higher education are predicted to go down. According to the formal theory laid out previously, this is exactly what would be expected.

IMPLICATIONS OF EMPIRICAL RESULTS

In this chapter, I have argued that political economy provides an important theoretical addition to our understanding of the determinants of higher education policy in the American states. Specifically, the empirical treatment in this section indicates support for the conclusions reached in previous studies on the political economy of higher education subsidies. My analysis finds that state subsidies for higher education are higher when state-level inequality is lower. This explanation is quite different than the results suggested by other authors, including (Lowry, 2001b), who uses institutional perspectives as opposed to a majoritarian voting framework to suggest that the structure of a state's relationship with its higher education sector will be determinative of institutional expenditures and tuition rates at public institutions. It is also quite different from traditional studies of higher education appropriations, which have tied state support mostly to economic and demographic characteristics of states (Hearn & Griswold, 1994; Hearn et al., 1996; Heller, 1999).

These results also have important implications for the future. As Figure 7.5 shows, inequality has been growing in almost every state in the union for the last two decades. Other analyses support this conclusion. Given the theoretical and empirical argument laid out in this chapter, this trend is worrisome for the future of higher education. If it is true that having a smaller and wealthier middle class relative to lower income groups leads to lower appropriations for higher education, we may well begin to encounter the kind of vicious cycle of increased inequality as a result of decreased educational opportunity described by Fernandez and Rogerson and others (Ferreira, 2001).

These results do not suggest a direct solution to this problem. The behavioral model maintained throughout this paper does not include persons acting against their self-interest, and when acting in their self-interest, the kinds of majoritarian results shown in the section describing the Fernandez and Rogerson model are predicted to hold. However, income inequality is not an inevitable outcome. Various programs, including higher education, can be supported on the basis of creating a more equitable society, an outcome which can be supported

by a majority of the society when the externalities attained are deemed to be worth the costs incurred (Boix, 2003). It is beyond the scope of this chapter to discuss when those conditions might occur, but it is worth noting that they are not beyond the realm of possibility.

There are several theoretical limitations to the Fernandez and Rogerson model. Probably the most important, and the basis for the critique by DeFraja (2002), is that not all individuals receive the same benefit from higher education. As detailed previously, a substantial body of evidence suggests that the wage benefit that accrue to individuals who attend higher education comes about as a result of individual ability first, and the educational experience second. While we do not know the exact distribution of ability in the population nor do we know the amount of value added by higher education, it is a major simplification to assume that all individuals in a population will receive the same benefit from higher education. A refinement of the Fernandez and Rogerson that incorporates this insight but maintains the structure of the model would provide additional insight into possible voting equilibria that may result.

Second, the model as structured does not contain any provision for income-contingent subsidy schemes. Unlike the Fernandez and Rogerson model, most of the American states do provide an additional subsidy for low income students to attend higher education, most likely making it a more progressive system than it would initially appear to be. Under the model described in this chapter, all individuals who attend higher education receive exactly the same subsidy. Further work might detail both the amount and the distribution of subsidies to individuals in different groups.

Related to the above, any model of policymaking that concerns the American states must consider the federal structure of decision-making. Incorporating state-level responses to federal changes in policy would constitute a major theoretical innovation in our understanding of this area.

It should also be noted that this analysis does not include variables that reflect institutional structures within the states, such as trustee appointment, official government functions, or government control. An analysis that took into account these variable may have resulted in different findings (Lowry, 2001b; McLendon et al., 2005)

The empirical analysis reported in this chapter is hampered primarily by an only partially successful attempt to sort issues of endogeneity between state-level inequality and appropriations to higher education. Further research may take a different approach, making use of other quasi-experimental techniques such as

differences-in-differences or regression discontinuity designs to understand the causal impact of changes in state-level economic characteristics on higher education finance (Angrist & Krueger, 1998).

CONCLUSION

The use of political economy to study the politics of higher education is still in its infancy. This chapter shows how a relatively simple model of redistribution through higher education subsidies can accurately predict the outcomes of state policy making in the American states. The model's creators followed the standard set of assumptions made in any theoretical approach which utilizes rational choice theory: that individuals have preferences; that these preferences can be ordered; that an individual will choose the option that she prefers, given an ability to do so. Given these conditions, the rest of the results follow naturally from the structure of the model.

This approach has not been used widely to study the politics of higher education. Instead, many rely on either sociological theories that make reference to norms of behavior or structural interpretations that depend on organizational theory.

There are multiple advantages in using rational choice theory to explain the choices of policymaker. First, the assumptions that may be implicit in other theories are made explicit, particularly in the formal models presented. While simplified and sometimes stripped of the nuance that is available in other approaches, the directness and the clarity of formal modeling creates opportunities for updating and refining assumptions about human behavior that other theoretical approaches sometimes lack.

Take for instance the Fernandez and Rogerson model explicated in this chapter. The model is vastly simplified from what we know to be the real world conditions. In the the model, there are only two time periods. Individuals choose whether or not to pursue more education based only on whether the cost exceeds their income. Their choice of policy is based on the benefit to them of having higher or lower subsidies for more education. Last, all individuals in each income class have the same income, and all individuals in the society have the same ability to benefit from higher education. These conditions, of course, do not mirror real world conditions. Yet, given this structure, the model provides real insight into the role of income inequality on voting and policy choices.

Second, the clarity of propositions created as a result of formal modeling lead directly to empirically testable hypotheses. Because the

analysis of formal models leads to posited equilibrium results, it is possible to test these results in a way that other theories may or may not be testable.

For instance, the agenda setting theory created by Kingdon (based on the Olson-March garbage can theory) posits the creation of "policy windows" under certain circumstances (Cohen, March, & Olsen, 1972; Kingdon, 1984). Within these policy windows problems, solutions, and politics converge to create a change in the policy agenda and a possible change in policy. This theory has been cited widely in the literature on politics of higher education. However, testable hypotheses are not readily derived from this theory. Mintrom (1997) tests Kingdon's hypothesis that policy entrepreneurs can drive changes in the policy agenda. Other examples are few, because the process that Kingdon's theory describes is haphazard and, in some sense, irreducibly complex.

In contrast, theories from the political economy literature typically have clearly stated propositions that can be tested empirically. For example, Nordhaus (1975) provides an explanation of the political business cycle based on rational anticipation of elections on the part of both policymakers and voters that provides clear hypotheses about the timing of monetary policy. In short, Nordhaus suggests that policymakers will emphasize policies to maximize employment shortly before elections, while they will emphasize policies to minimize inflation shortly after elections. These results have found empirical support in the work of M. Nelson (2000).

These arguments are not intended to suggest that rational choice theory and the political economy approach ought to supplant other theories used in studying the politics of higher education. Instead, the strengths of politically economy make it ideally suited to studying certain questions about the behavior of policymakers and voters when engaged in strategic decision-making about higher education policy.

For instance, there is a strong empirical regularity in the disconnect between demand for higher education and state support for higher education funding. A simple supply and demand model of higher education does not function well in explaining appropriations, tuition, or enrollment in higher education (G. Johnson & Leslie, 1976; G. E. Johnson, 1984; Leslie & Johnson, 1974; M. B. Paulsen, 1991).

However, viewed from the perspective of political economy, it could be that policymakers are responding to cues from the voting public that have not been observed previously. Tuition levels may be a result of rational anticipation of voter's preferences, rather than a price set in a market environment. Appropriations (as demonstrated in this paper) may be a result of voters' desire to exclude certain parts of the population from attendance in higher education. And last,

enrollment may be equally a function of individuals' taking advantage of a government subsidy conferred on them by policymakers as a desire to invest more in human capital.

Policy analysis in higher education has generally assumed a Benthamite view of government—policymakers ought to do what is best for the most people at least cost. This assumption motivated much of the early literature on redistribution through higher education subsidies. As this chapter has shown such a view is extremely limiting. A theoretical perspective that takes into account the strategic motivations and limitations of policymakers, voters and other actors in the system can tell us much more about both the effects of our current higher education policies, and where those policies come from in the first place.

APPENDIX: RESULTS OF FIRST STAGE ESTIMATION

Table A1 contains first stage estimates used for estimation of final results in table 7.5.

Table A1: First Stage Estimates: Endogenous Variable= Inequality

	Model 1	Model 2	Model 3	Model 4
Percent of Income:	0.02(0.03)	0.02(0.03)	0.01(0.03)	0.00(0.03)
Extractive Industries				
Percent of	0.56(0.13)	0.51(0.13)	0.51(0.13)	0.41(0.13)
Employment:				
Extractive Industries				
Percent of FTE in		0.14(0.02)	0.13(0.02)	0.15(0.02)
Privates				
Board: Centralized		0.01(0.00)	0.01(0.00)	0.01(0.00)
Four Year				
Board: Strong		0.01(0.00)	0.01(0.00)	0.01(0.00)
Coordinating				
Board: Weak		0.01(0.01)	0.01(0.00)	0.01(0.01)
Coordinating				
Liberalism			0.00(0.00)	0.01(0.00)
Percent of Population				0.00(0.00)
18–24				
Gross State Product				0.00(0.00)
(Per Capita)				
Intercept	0.39(0.00)	0.36(0.00)	0.36(0.00)	0.26(0.00)
Fixed Effects	Yes	Yes	Yes	Yes
R^2 (Within)	0.03	0.10	0.11	0.27
F	0.18	0.20	0.25	2.15
N	722.00	722.00	722.00	722.00

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8. ADJUSTING FOR NONRESPONSE IN SURVEYS

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ADJUSTING FOR NONRESPONSE IN SURVEYS

It is safe to say that surveys have become one of the dominant methods of data collection in higher education research. Dey and his colleagues, for example, identified almost 200 articles, conference papers, and published reports that were based on data from national surveys (Dey et al., 1997). My own informal review of research published in the *Journal of College Student Development*, *Journal of Higher Education*, *Research in Higher Education*, and *Review of Higher Education* during 2005 revealed that more than 60% of the articles made use of survey data. Surveys are also an important element in college and university assessment efforts. The National Center for Postsecondary Improvement reported that three-quarters of the 1400 institutions responding to its study used surveys in their assessment programs (Peterson, Einarson, Augustine, & Vaughan, 1999).

In most survey research, costs necessitate interviewing or sending questionnaires to a sample of individuals, analyzing the results, and then making inferences about the population of interest based on the responses of those sampled. As a result, obtaining a sufficient number of responses is critical to ensuring the accuracy and appropriateness of the generalizations being made. Unfortunately, response rates have been declining in surveys of the general populace and surveys of faculty and students (de Leeuw & de Heer, 2002; Jones, 1996; Porter & Whitcomb, 2005). Dey (1997), for example, reported that response rates on surveys conducted as part of the Cooperative Institutional

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Research Program (CIRP) declined from 60% in 1961–1965 to 21% in 1987–1991. The problem posed by survey nonresponse is that the individuals who do not respond to a survey may differ from respondents in important ways on survey variables. In addition, differences in response rates across subgroups may produce biased estimators (Kish, 1965). Thus, the results of current surveys may be systematically over- or under-estimating levels of student engagement and satisfaction (Porter & Whitcomb, 2005). Compounding this problem, no adjustments for sampling and nonresponse are made in many surveys (Kalton, 1983a).

Nonresponse in survey research may take the form of not answering any survey questions (i.e., survey nonresponse) or answering some questions, but not others (i.e., item nonresponse). Although both can pose serious problems, the remedies for the two types of nonresponse are quite different. This chapter examines the problems associated with survey nonresponse and reviews a variety of methods that can be used to adjust for this type of nonresponse. Because the consequences of survey nonresponse can best be understood within the context of survey sampling, the chapter begins with an overview of sampling theory. Next, approaches for adjusting for nonresponse are described. The chapter concludes with a discussion of general principles of adjusting for survey nonresponse.

INTRODUCTION TO SURVEY SAMPLING

Thomas (2006) noted that the topic of survey sampling has received relatively little attention in the higher education research literature. This is surprising because the selection of a sampling strategy can substantially affect population estimators and have serious consequences for decision making. Ideally, selection of a sampling strategy is an integral part of the survey design process. Integrating sampling decisions, survey construction, and data analysis helps ensure that the sampling strategy selected is appropriate for answering the research questions and that data analyses are appropriate for the sampling method.

The first step in survey sampling is identifying the population to be studied. The population should include all of the elements representing the units of analysis in a study. For example, a campus-wide survey of students attending a university would have as its population all of the students enrolled at the institution. Kalton (1983b) recommended first identifying the ideal target population and then, based on practical

constraints, identifying the survey population. He argued that starting with the ideal and then moving to the survey population allows a researcher to see the magnitude of the restrictions imposed by practical considerations. In the preceding example, all of the students enrolled at an institution would be the ideal population. Based on practical considerations related to identifying students who were enrolled at a given point in time, the survey population might be students enrolled on the institution's official census date (e.g., the tenth day of class). At many institutions, a substantial number of students enroll in classes after the census date. Consequently, the difference between the ideal and survey populations would not be trivial for those institutions.

The second step in survey sampling is defining the sampling frame. The sample used in the research will be drawn from the sampling frame. A sampling frame is as complete a list as possible of the individuals or elements in the survey population. Consequently, the sampling frame will have all of the limitations of the survey population. It may be further limited due to information being unavailable for some individuals or elements in the survey population. In the campus survey example, the sampling frame would be limited to students who were enrolled on the census date. The sampling frame could be further limited by some students being excluded from the listing because they requested, under the Family Educational Rights and Privacy Act (FERPA), that their directory information remain private.

The third step in survey sampling is the selection of a sample. There are two broad approaches that can be used in sample selection: probability and nonprobability sampling. In probability sampling, each element has a known, nonzero chance of being selected. Probability samples can be used in conjunction with inferential statistics to make generalizations about the population based on data from the sample. In a campus survey of enrolled students, a simple random sample of 10% of the students in the sampling frame would constitute a probability sample in which every student would have a 1 in 10 chance of being selected.

A variety of different techniques can be used in nonprobability sampling. These methods include convenience sampling, purposive selection, quota sampling, and snowball sampling (Kalton, 1983b; Kish, 1965). A common feature of nonprobability samples is that some individuals or elements have zero probability of being included in the sample. As a result, nonprobability samples do not provide a statistical basis for making inferences from a sample to a population. Administering a survey to students taking an introductory psychology

course automatically excludes students not enrolled in introductory psychology and is an example of a nonprobability convenience sample. Likewise, surveying students who attend institutions that volunteer to participate in a survey is another example of a convenience sample because students attending institutions that do not volunteer to participate in the survey have zero chance of being selected. In both examples, the survey population can be restricted in such a way as to permit generalizations to be made (e.g., making generalizations about all students at an institution who are taking introductory psychology or making generalizations about all students attending the “volunteer” institutions), but inferences cannot be made about the larger populations. Noting that convenience samples are the least systematic and defensible nonprobability samples, Thomas (2006) concluded: “Neither random nor representative, little can be inferred from such a collective, and samples such as these would best be avoided at all costs (p. 401).” Although Thomas’ conclusion may be overstated, particularly when convenience sampling occurs at the institutional level, it is nevertheless true that no amount of statistical adjustment will provide a basis for making inferences about a population from a convenience sample.

The remainder of this chapter presumes that researchers are interested in making inferences about populations based on data collected from probability samples. Simple random sampling is perhaps the best known and most widely discussed method of probability sampling, but it is not the only method available. Different types of probability samples use very different approaches to sample selection, and the precision of the sample estimators vary greatly. The next sections cover some of the common approaches used in survey sampling. In order to compare these approaches, however, a common system of notation is needed.

BASIC NOTATION

The notation used throughout this chapter is adapted from Kalton (1983b), Kish (1965), and Levy and Lemeshow (1999). In general, population parameters are represented by capital letters, and lower-case letters are used to represent sample statistics. Thus, N represents the number of elements in the survey population. In the campus survey example, N would be the number of students enrolled at the university on the census date. The score of an unspecified (i.e., i^{th}) student on a survey question or variable is symbolized by Y_i . In the campus survey, this variable might be the responses of students to a question about

overall satisfaction with college measured on a four-point scale from (1) very dissatisfied to (4) very satisfied. Y represents the total score for the population on the survey variable, such that $Y = \sum_i Y_i$, and \bar{Y} represents the population mean where $\bar{Y} = \sum_i Y_i / N$. The population variance is represented by S_Y^2 and is defined as $S_Y^2 = \sum_i (Y_i - \bar{Y})^2 / N$. The population standard deviation is the square root of the population variance and is represented by S_Y .

When the survey variable is a question about satisfaction with college, the total score for the population has little meaning. However, when the survey variable is dichotomous (i.e., 0, 1), population totals may be meaningful. If, for example, the survey variable consists of responses to whether students have taken "Introduction to Psychology" (0 = No, 1 = Yes), the population total represents the number of students who have taken the course, and the mean represents the proportion (P_Y) of students who have taken the course. The variance of a dichotomous variable (S_{PY}^2) is defined as $S_{PY}^2 = P_Y (1 - P_Y)$, and the standard deviation is the square root of the variance.

The number of elements (e.g., students) in a sample is represented by n , and the score for an unspecified element is y_i . The total score for the sample is represented by y , and the sample mean is represented by \bar{y} , such that $\bar{y} = \sum_i y_i / n$. The sample variance is s_y^2 where $s_y^2 = \sum_i (y_i - \bar{y})^2 / n - 1$. The sample standard deviation is the square root of the variance and is symbolized by s_y . When survey variables are dichotomous, p_y is the mean and the proportion of the sample with characteristic y . The variance of the sample proportion (s_{py}^2) is defined as $s_{py}^2 = np_y (1 - p_y) / n - 1$. The standard deviation is the square root of the sample proportion's variance.

SIMPLE RANDOM SAMPLING

Simple random sampling (SRS) is discussed in virtually all elementary statistics texts because it is the most basic process for selecting a probability sample. All other selection procedures are modifications of SRS. In selecting a simple random sample, all elements in the sampling frame are numbered consecutively, and a random numbers table is used to select the sample. In the campus survey example, every enrolled student listed in the sampling frame would be assigned a unique identification number. If there were 20,000 students in the sampling

frame, the numbers 1 to 20,000 could be used. Numbers would then be randomly chosen until a sample of the desired size was selected. When a sample is selected with replacement, all elements have an equal probability of being included in the sample. This is termed an “equal probability selection method” (i.e., epsem) design. If the sample is selected without replacement, the probability for selection changes slightly as each element is selected and removed from the sampling frame. Although sampling without replacement is technically not an epsem design, it is treated as an equiprobability method when the population is large (Kalton, 1983b).

In SRS designs, the sample mean (\bar{y}) is an unbiased estimator of the population mean (\bar{Y}). That is, if a researcher were to select an infinite number of sufficiently large random samples (i.e., at least 20 elements in each sample), the sample means would be normally distributed and the mean of the sample means would be the population mean. Using sample statistics it is possible to estimate sampling variance with the formula:

$$\text{var}(\bar{y}) = \left(1 - \frac{n}{N}\right) \frac{s_y^2}{n} \quad (1)$$

In the equation, n/N is referred to as the finite population correction (*fpc*), and it is needed when there is sampling without replacement. The *fpc* term may be omitted if the population is large relative to the size of the sample (Kalton, 1983b). The square root of the variance of the sampling distribution is referred to as the standard error of the estimator $SE(\bar{y})$ and provides an indication of the precision of the estimator. The standard error is also used to establish confidence intervals for the estimator.

SYSTEMATIC SAMPLING

Simple random sampling using a table of random numbers can be a tedious and time-consuming process when the sample to be selected includes a large number of elements. Systematic sampling, also referred to as pseudo-random selection, is an easy and flexible alternative to SRS. In systematic sampling, a researcher randomly picks a starting point then selects every k th member of the sampling frame. The selection interval (k) is usually chosen such that $k = N/n$. In some cases it may be necessary to round k to an integer. In the campus survey example, selecting a sample of 1000 students from a sampling frame containing 20,000 students would require taking every 20th student. If the sample size is fixed and the elements in the sampling frame are randomly

ordered, a systematic sample will be equivalent to a simple random sample. That is, the sample mean will be an unbiased estimator of the population mean, and the formula for calculating the sampling variance of a SRS will be appropriate for the systematic sample. Problems can arise, however, when the elements in the sampling frame are not randomly ordered. If the list of elements in the sampling frame is ordered in a pattern (i.e., periodicity) a systematic sample may be biased, and the calculation of the sample variance will be substantially more complex (Kish, 1965; Thomas, 2006).

STRATIFIED SAMPLING

Stratification is a sampling technique that is used in many national surveys. Stratification allows researchers to draw samples that are representative of major subgroups, and it even allows researchers to use different data-collection methods within different strata (Kish, 1965). Stratified sampling can also yield more precise estimators of population parameters than simple random sampling or systematic sampling (Kalton, 1983b; Thomas, 2006).

The first step in stratified sampling is identification of the strata to be used. The campus survey discussed previously could be stratified in a variety of ways. It would be possible, for example, to stratify the sample based on students' class standing (i.e., freshman, sophomore, junior, senior, and graduate student). Gender, whether students are females or males, is another possible stratification scheme. Researchers are not limited to a single stratification variable. It is possible, for example, to stratify on both class standing and gender. In this instance, the researcher must cross-classify students according to their class standing and gender so that the strata are freshman females, freshman males, sophomore females, and so forth.

Because misclassification of elements can eliminate the benefits of stratification, care must be taken to ensure that the elements (e.g., students) in the sampling frame are properly classified (Thomas, 2006). In order to ensure proper classification of elements, researchers must be able to divide the population into mutually exclusive and exhaustive categories. Researchers must also be able to independently sample each stratum. In the example of a campus-wide survey of enrolled students, class standing and gender would yield mutually exclusive and exhaustive categories. Stratification based on the ethnicity of students would be more problematic. It is possible to identify strata corresponding to the ethnic categories of African American, Asian and

Pacific Islander, Caucasian, Hispanic, and Native American, but what categories should be used for mixed race students? Also, how should students who refuse to provide their ethnicity be classified?

Once the strata have been identified, a sample can be selected using either simple random sampling or systematic sampling within strata. The number of elements selected within each stratum can be proportionate to the size of the stratum in the population, or it can be disproportionate. If a proportionate sampling strategy is used, the characteristics of the sample will match perfectly the characteristics of the population for the stratification variables. For example, if the sample for a campus survey is to be stratified on class standing, and 3000 of the 20,000 students in the population are freshmen, then 150 of the 1000 students in the sample would be freshmen. When proportionate sampling is used with two or more stratification variables, the final sample will represent perfectly the contingent (i.e., cell) proportions in the population. Thus, if 7% of the 20,000 students are freshmen females and 8% are freshman males, a sample of 1000 students would include 70 female and 80 male freshmen.

Although proportionate stratified sampling ensures a sample that is representative, it does not ensure that adequate numbers of elements will be selected from each strata. In a survey of enrolled students at a predominantly women's university, for example, 90% of the freshmen might be female and 10% male. In the preceding example, this would produce a sample of 15 freshmen men, which would almost certainly be too small to yield dependable generalizations. Disproportionate stratified sampling allows researchers to over sample under-represented groups. Because the precision (i.e., the standard error) of estimators is generally related to sample size, over sampling will usually increase the precision of estimators for small strata (Kalton, 1983b; Kish, 1965). However, disproportionate stratified sampling is not an epsem design, and the mean for the total sample will not be an unbiased estimator of the population mean (Kalton, 1983b),

In stratified sampling, weights are used to ensure that sample means are unbiased population estimators. These weights, symbolized by W_h , are generally the proportion of the population within a given stratum ($W_h = N_h/N$). Calculation of a weighted sample mean involves first calculating means for each stratum, then multiplying each stratum mean by its weight. The sum of the weighted stratum means is an unbiased estimator of the population mean. This process is represented by the formula:

$$\bar{y} = \sum_h W_h \sum_i \frac{y_{hi}}{n_h} \quad (2)$$

Calculating the variance of the sampling distribution and the standard error of the estimator follows a similar process. First, variances are calculated for each stratum. Next the variances for the strata, divided by the strata sample sizes, are multiplied by the weights for the strata. The resulting coefficients are summed and multiplied by the correction term $(1 - fpc)$ to produce the variance of the sampling distribution. The equation representing this process is:

$$\text{var}(\bar{y}) = (1 - fpc) \sum_h W_h \frac{s_h^2}{n_h} \quad (3)$$

The square root of the variance is the standard error of the estimator. In a proportionate stratified sample, the standard error of the estimator cannot be greater than the standard error of the estimator based on a simple random sample. To the extent that stratification increases the heterogeneity of strata means and/or increases the homogeneity (i.e., decreases the variance) within strata, the standard error of the estimator for a proportionate stratified sample will be less than the standard error of the estimator based on a simple random sample. Stated differently, the estimator for a proportionate stratified sample is at least as precise, and frequently more precise, than the estimator for a simple random sample. In general, the precision of the estimator for a disproportionate stratified sample will be somewhat less than the precision of the estimator based on a proportionate stratified sample (Kalton, 1983b). Even so, the precision of the estimator for a disproportionate stratified sample may be greater than for a simple random sample.

The design-effect statistic is frequently used to contrast the precision of a sampling design to the precision of a simple random sample of the same size. The design effect (*DEFF*) is defined as the ratio of the sampling variance for a given design to the variance of the sampling distribution for a corresponding simple random sample:

$$DEFF = \frac{\text{var}(\bar{y}_1)}{\text{var}(\bar{y}_0)} \quad (4)$$

A design effect of less than 1.0 indicates that a sampling design increases the precision of the estimator, whereas a design effect greater than 1.0 indicates that a sampling design decreases the precision of the estimator relative to the estimator for a simple random sample (Thomas, Heck, & Bauer, 2005). Thus, a proportionate stratified sample

will always produce a *DEFF* value of 1.0 or less, whereas a disproportionate stratified sample may produce a *DEFF* value that is less than 1.0.

In some instances, data about population strata may be known prior to sampling, but data about the characteristics of the elements in the sampling frame may not be known until after the sample has been selected and the survey has been conducted. In these instances, researchers must rely on simple random samples or systematic samples. However, the researchers may be able to use poststratification to improve the precision of their estimators (Holt & Smith, 1979). For example, researchers conducting a campus survey may have data about the age distribution of all students enrolled at an institution, but not have data about the ages of individual students. In this instance, stratification prior to selection would not be possible. However, if the researchers were able to gather data about students' ages using the survey, poststratification of a simple random sample or a systematic sample would be possible.

Poststratification is also used to adjust for problems with simple random samples or systematic samples. By chance alone, simple random samples and systematic samples will, on occasion, not accurately reflect the characteristics of the survey population. In those instances, poststratification may be used to fine tune a sample (Kalton, 1983a). Also, poststratification can be more efficient than stratified sampling because different (post)stratification factors can be used with different survey variables (Holt & Smith, 1979). A potential limitation of poststratification is that the number of elements in a sample may be zero for smaller population strata. The presence of "zero" cells precludes the use of poststratification.

The steps involved in poststratification are similar to those for selecting a stratified sample. First, data about the population are used to create strata and calculate strata weights (i.e., the proportions for the strata in the population). Using data from the survey, participants are assigned to the appropriate strata. Strata means and variances are calculated for the survey variables, and the weighted sums of the strata means are unbiased population estimators. Holt and Smith (1979) noted that the appropriate formula for calculating the variance of the sampling distribution under poststratification is:

$$\text{var}(\bar{y}_{ps}) = \sum_h \left(\frac{N_h}{N} \right)^2 \left(1 - \frac{n_h}{N_h} \right) \frac{s_h^2}{n_h} \quad (5)$$

This formula is similar to the formula for a proportionate stratified sample except that the term representing the finite population

correction (n_h/N_h) is specific to a stratum. Kalton (1983b) observed that when the poststratification expected sample sizes are greater than or equal to 10, the sample variances for poststratified means will be approximately equal to the sample variances for a proportionate stratified sample. As a consequence, poststratification frequently results in a net gain in precision relative to simple random sampling.

CLUSTER OR MULTI-STAGE SAMPLING

Cluster or multi-stage sampling also is frequently used in national surveys. The difference between stratified sampling and cluster or multi-stage sampling lies in how groups are selected for inclusion in the sample. In stratified sampling, elements are selected from all strata, whereas cluster or multi-stage sampling involves first selecting a sample of groups, termed primary sampling units (PSUs), then selecting elements from the PSUs. Cluster and multi-stage sampling differ in how elements are selected. When a sample of PSUs is selected, then all of the elements within those PSUs are included in the final sample, the approach is termed cluster sampling. If a sample of PSUs is selected, and then samples of elements within each PSU are selected, the method is classified as two-stage sampling. When the sampling frame contains a hierarchy of groups (or clusters), the approach is termed multi-stage sampling (Kalton, 1983b). For example, researchers might select a sample of colleges and universities, then select a sample of academic majors within each college/university, and finally select samples of students in each major.

As with stratified sampling, cluster or multi-stage sampling requires that all elements be included in one and only one group (Kalton, 1983b). Thus, researchers involved in a national survey of college students that made use of cluster or multi-stage sampling could first select a sample of colleges and universities then select students from those colleges and universities. Problems could arise, however, if some students attend more than one university. In a campus survey, cluster or multistage sampling based on major field of study could pose similar problems if students have more than one major. In both of these examples, some method of uniquely classifying students would have to be utilized.

Cluster or multi-stage sampling offers several practical advantages over SRS or systematic sampling. One advantage is in making large-scale surveys practical. In many large-scale surveys it may not be feasible to create a complete sampling frame of all elements. For

example, it may not be possible to identify all students enrolled in colleges and universities in the United States. Cluster sampling can be used to address this problem. Presuming that a complete listing of colleges and universities is available, researchers can first select the institutions to be included in the study. Sampling frames of students attending those institutions can then be generated, and the samples for each university can be selected (Thomas, 2006). Cluster or multi-stage sampling also allows for flexibility in the use of sampling frames and can be used to reduce the geographic distribution of sample elements (Kalton, 1983b; Thomas, 2006).

In cluster or multi-stage sampling it is critical that the PSUs selected be similar to the PSUs that are not selected in order to assure that the sample is representative (Kalton, 1983b). In many cases, stratification can be used in conjunction with cluster or multi-stage sampling to ensure that the selected PSUs represent all important segments of the population (Kish, 1965). For example, researchers interested in selecting a sample of colleges and universities might first stratify the population by Carnegie classification and then select samples of institutions from within each stratum.

Issues related to probability of selection and sample size can become complex in cluster and multi-stage sampling. In cluster samples, where all of the elements within a PSU are included in the sample, the probability of an element being selected is the same as the probability that the PSU will be selected. For example, if the population of colleges and universities includes 3000 institutions and researchers plan to survey students attending 300 institutions, the probability that a student (or institution) will be selected is 1 in 10 or 0.10. Although the selection probability is the same for all elements, the size of the sample will vary unless the PSUs all contain the same number of elements. In both the national and campus-wide survey examples the number of students within each PSU could vary substantially, leading to differences in sample sizes depending on which institutions or academic majors are selected.

In the case of multi-stage sampling the selection probability is the product of the probability that a PSU will be selected and the probability of an element within a PSU being selected. In a national survey in which 1 in 10 institutions are selected and then 1 in 10 students are selected, the overall selection probability for a given student would be 0.10×0.10 or 0.01. Once again, overall sample size could vary depending on which institutions are selected. Kalton (1983b) noted that the variation in sample sizes can be substantial when relatively few

PSUs are selected and there are substantial differences in the number of elements within each PSU. Conceivably, researchers could eliminate differences in sample size by selecting a fixed number of elements from within each PSU to be included in the sample. However, such a sampling design would lead to unequal probabilities of selection.

One consequence of variations in sample size is that means for survey items are random variables (also referred to as ratio means). These ratio means are biased estimators of population parameters, although they are generally good approximations of unbiased estimators when the number of PSUs in the sample is relatively large (Kish, 1965). Kish also noted that variance formulas will produce biased estimators when sample size varies. Here again, the variance formulas generally provide good approximations. Also, selection of PSUs based on probabilities proportional to size (PPS) can be used to achieve an epsem design that minimizes problems related to fluctuations in sample size (see Kalton, 1983b; Kish, 1965).

Special notation is required to identify PSUs and elements within PSUs for cluster and multi-stage sampling. Generally, A is used to represent the number of PSUs in the population, and a is used to represent the number of PSUs in the sample. For simplicity in this illustration, the number of elements within each PSU is assumed to be equal and is represented by B when all elements are selected (i.e., cluster sampling). If a subset of elements are selected (i.e., multi-stage sampling), b is used to represent the number of elements within each PSU to be included in the sample. The number of elements in the population (N) is AB , and the number of elements in the sample (n) is either aB for cluster sampling or ab for multi-stage sampling. The score on a given survey variable for a given element within a PSU is $Y_{\alpha\beta}$, and the mean for all elements is

$$\bar{Y} = \sum_{\alpha} \sum_{\beta} Y_{\alpha\beta} / N \quad (6)$$

With PSUs of equal size, the population mean is the simple mean of all PSU means and the sample mean is the simple mean of the sampled PSU means. It also follows that the variance of the sampling distribution for \bar{y} is

$$\text{var}(\bar{y}) = \left(1 - \frac{a}{A}\right) \frac{S_a^2}{a} \quad (7)$$

where

$$S_a^2 = \sum_{\alpha} (\bar{y}_{\alpha} - \bar{y})^2 / (a - 1) \quad (8)$$

Kalton (1983b) noted that these estimators are also appropriate for probability proportional to selection (PPS) designs because they are epsem designs. He also noted that clusters are generally more internally homogeneous than random groupings of elements. As a consequence, cluster means will tend to be more heterogeneous than means formed by random groups of elements from a simple random sample. The net effect is that the variance of the sampling distributions of cluster and multi-stage samples tends to be greater than the variance for a simple random sample, and means for cluster and multi-stage samples will be *less precise* estimators than means based on simple random samples.

COMPLEX SAMPLE DESIGNS

In higher education, researchers who rely on data from national surveys are frequently confronted with a lack of clear sampling frames and a need to include sufficient numbers of respondents from relatively rare groups. In order to overcome these challenges, many national surveys rely on complex designs that involve stratified multistage cluster sampling (Thomas, Heck, & Bauer, 2005). For example, the 1996 National Postsecondary Student Aid Study (NPSAS: 96) made use of a two-stage stratified sampling design (National Center for Education Statistics, 1997). Initially, colleges and universities were classified into nine strata based on institutional control and highest degree offered. Next, institutions were selected from the strata using probability proportional to size. Students attending the institutions were then selected using stratified systematic sampling. The strata at this stage were first-time students, other undergraduates, graduate students, and first-professional students.

The 1999 National Survey of Postsecondary Faculty (NSOPF: 99) made use of three-stage sampling. In the first stage, colleges and universities were selected from eight strata based on size, type of institution, and highest degree awarded. In the second stage, faculty members were selected from five strata: Hispanic, Non-Hispanic Black, Asian and Pacific Islander, full-time female faculty, and all other faculty. Stratification at the second stage of selection allowed minority and

female faculty to be oversampled. In the third stage, a subsample of nonrespondents was selected for intensive follow-up (National Center for Education Statistics, 2002a).

Complex sampling designs are not limited to NCES surveys. National norms for the Cooperative Institutional Research Program (CIRP) utilize 26 stratification cells based on the racial composition of the student population at the institution, institutional type, institutional control, and selectivity (Pryor et al., 2005). The Community College Survey of Student Engagement (CCSSE) utilizes a complex design based on stratified random cluster sampling (Marti, n.d.). A sample of classes at an institution is first selected from a list of all credit courses stratified by time of day. Each class is a cluster, and all students in a selected class are included in the sample. The survey is administered in class.

Two issues arise from the analysis and interpretation of data from complex sampling designs. First, stratification and unequal probabilities for selection in complex designs produce biased estimators (e.g., means). Second, due to clustering, sampling variances and standard errors will be larger for complex designs than for simple random samples (Muthén & Satorra, 1995). Regarding the problem of biased estimators, Thomas, Heck, and Bauer (2005) noted that complex sampling designs are effective for securing sufficient numbers of the correct types of respondents, but the sample is unlikely to be representative of the population. This problem is most likely to occur when rare groups are oversampled. When oversampling is used, sample means will be unduly influenced by the responses of elements that were oversampled. However, biases can exist when oversampling is not used. Marti (n.d.) reported that full-time students tended to be over-represented among CCSSE respondents due to the fact that full-time students took more classes and had a greater probability of being selected through the CCSSE sampling design.

The problem of biased estimators can be addressed through weighting, and most standard statistical packages allow researchers to use case weights to adjust for oversampling and unequal selection. The most frequently used type of weighting is raw or expansion weights. These weights are provided in most national datasets and are usually calculated as the reciprocal of an element's probability of selection. One disadvantage of raw weights is that they can substantially increase the statistical power of hypothesis tests because the weights trick statistical programs into thinking a sample is bigger than it really is (Thomas, Heck, & Bauer, 2005). The second type of weight, relative weights,

avoid increasing sample size by dividing every weight by the mean of all of the weights: $W_{rel} = W_{raw} / \overline{W}_{raw}$. Although the use of weights seems relatively simple and straightforward, Kalton (1983b) offered the following cautionary advice:

In practice, the development of weights can become a complicated task, because a combination of adjustments is often required. In the first place, weights may be assigned to adjust for unequal selection probabilities, then the weights may be revised to adjust for differential response rates within classes of the sample, and finally further revisions may be made to adjust the sample distributions to known population distributions. Careful attention is needed to the development of weights, because serious errors are easily made. (p. 75)

The second problem associated with complex sampling designs is related to the precision of the estimators and the accuracy of statistical inferences about the estimators. As previously noted, different sampling designs can produce standard errors that are substantially larger or smaller than the standard errors for simple random samples. For example, proportionate stratified sampling generally produces more precise estimators with smaller standard errors than SRS, whereas disproportionate stratified sampling can produce standard errors that are either larger or smaller than SRS. Kalton (1983b) noted that standard errors are likely to be larger than with simple random samples when disproportionate stratified sampling is used to provide large samples of rare cases (i.e., oversampling). The loss of precision can be serious when strata are of substantially different sizes. For example, a ratio of 9 to 1 in strata sizes can increase the variance in the overall sample mean by a factor of 1.64 (Kalton, 1983b). Likewise, cluster sampling generally increases sampling variance and the increase can be substantial when the average size of the clusters is large (Kalton, 1983b).

The problem with making inferences about estimators (e.g., means and proportions) from complex samples is that standard statistical packages presume simple random sampling and calculate standard errors based on a SRS design (Gelman & Carlin, 2002). For a proportionate stratified sample, the SRS standard errors would be too large, whereas the SRS standard errors for disproportionate stratified samples and cluster samples are likely to be too small. Kalton (1983b) further noted that the problems created by using inappropriate SRS standard errors with complex sampling designs are magnified when the objective of the statistical analysis is to test for differences among subclass means (i.e., ANOVA or t-tests). This is particularly serious given that

many studies seek to identify differences between subgroups. Similar problems are encountered in correlational studies. DuMouchel and Duncan (1983), Pfeffermann (1993, 1996) and Winship and Radbill (1994) noted that the use of sample weights based on complex sample designs are needed in many explanatory regression analyses. In those cases, however, traditional OLS standard errors are inappropriate. Not surprisingly, the NCES Statistical Standards (2002b) require the use of specialized statistical analyses that account for the effects of complex sampling designs on standard errors.

Thomas, Heck, and Bauer (2005) identified two types of approaches for analyzing data based on complex sampling designs. The first, design-based approaches, involves the statistical adjustment of standard errors and is appropriate for research focusing on a single level of analysis (e.g., individuals). The three most common adjustment techniques are Taylor expansion or the delta method, balanced repeated replications, and jackknife repeated replications (Kalton, 1983b; Muthén & Satorra, 1995; Thomas, Heck, & Bauer, 2005). A discussion of the technical merits of these methods is beyond the scope of this chapter, except to note that Monte Carlo studies reviewed by Muthén and Satorra (1995) revealed that differences between the approaches tend to be small. Thus, all three methods of adjusting standard errors appear to be acceptable in most situations.

Model-based approaches represent the second class of methods for analyzing data produced by complex sampling designs. Model-based approaches are appropriate when hierarchical models with multiple levels of analysis (e.g., individuals and institutions) are the focus of the research. Muthén and Satorra (1995) conducted a Monte Carlo analysis of two model-based approaches: aggregated structural equation models and disaggregated structural equation models. They concluded that both approaches are appropriate for multilevel analysis of complex survey data. Ultimately, the choice of design-based or model-based approaches, as well as the use of a specific analytical method, should be guided by the research questions to be answered, not statistical criteria (Thomas & Heck, 2001).

SURVEY NONRESPONSE

The importance of having a large number and/or high proportion of survey respondents is widely recognized, and survey-research specialists have investigated a variety of methods for increasing response rates (Dillman, 2000). Approaches that are used to increase

response rates include simple and attractive questionnaire design, persuasive communication to encourage participation, and multiple follow-up contacts (Dillman, Eltinge, Groves, & Little, 2002; Groves & Couper, 1998; Groves, Singer, & Corning, 2000; Redline & Dillman, 2002). Although proper survey design and administration can significantly increase response rates, some level of survey nonresponse is inevitable. In the face of the inevitability of survey nonresponse, the critical questions become what are the consequences of nonresponse and what can be done to minimize the adverse effects of nonresponse.

CONSEQUENCES OF NONRESPONSE

Survey nonresponse is a particularly serious problem because it increases the variance (i.e., decreases the precision) of point estimators and creates the potential for biased estimators of survey variables (Dillman, Eltinge, Groves, & Little, 2002; Oh & Scheuren, 1983; Tremblay, 1986; Vartivarian, 2004). Although the loss of precision is serious, its cause is straightforward—a reduction in sample size. In contrast, there are at least two ways in which nonresponse can produce biased estimators. Both sources of bias deserve further elaboration in order to understand the strengths and limitations of different methods of adjusting for nonresponse.

Survey nonresponse can produce biased estimators when respondents and nonrespondents differ significantly on survey variables. In the campus survey example, if respondents are more involved in campus activities and more satisfied with their college experiences than nonrespondents, estimators (e.g., sample means) of involvement and satisfaction will be biased—overstating levels of student involvement and satisfaction with college. To better understand this form of nonresponse bias, assume for the moment that the population is divided into two groups: individuals who always respond and individuals who never respond. These groups can be thought of as strata in the population, and survey respondents and nonrespondents are random samples drawn from the strata. Based on a stratified sampling design, the population mean (\bar{Y}) is the weighted sum of the mean for respondents (\bar{Y}_r) and nonrespondents (\bar{Y}_m), such that

$$\bar{Y} = \frac{N_r}{N} \bar{Y}_r + \frac{N_m}{N} \bar{Y}_m \quad (9)$$

Bias is the difference between the mean for respondents and the true population mean ($\bar{Y}_r - \bar{Y}$). Thus, bias is represented by the formula

$$B(\bar{y}_r) = \frac{n_m}{n} (\bar{Y}_r - \bar{Y}_m) \quad (10)$$

An examination of equation [10] reveals that this type of bias will be small if the proportion of nonrespondents is small or the difference between the population means for respondents and nonrespondents is small. However, high nonresponse rates (i.e., > 50%) increase the likelihood of bias even when there are small differences between respondents and nonrespondents. Jones (1996) noted that for a small difference between respondents and nonrespondents (e.g., effect size = 0.25), a 50% response rate gives a researcher a 48% chance of correctly estimating the population mean correctly within a 95% confidence interval.

Bias is not limited to estimators of population means. For example, Groves and Couper (1998) noted that when the population parameter of interest is the population total, survey nonresponse will always produce a sample total that underestimates the population total. When sample means are used as estimators of the difference between two subgroup means in the population ($\bar{Y}_a - \bar{Y}_b$), bias will be influenced by the nonresponse rates for the subgroups and differences between the population means for respondents and nonrespondents (Kalton, 1983a). In the case of differences between subgroup means, it is possible that the biases will cancel out.

Nonresponse bias can also affect regression (i.e., slope) coefficients, influencing both the numerator and denominator of slope calculations (Groves & Couper, 1998). If the relationship between X and Y is stronger for respondents than the relationship between X and Y for nonrespondents, the regression coefficient will be overestimated. Conversely, if the relationship between X and Y is stronger for nonrespondents than respondents, the regression coefficient will be underestimated.

Studies of the extent to which differences between respondents and nonrespondents pose a threat to the validity of survey research are equivocal, although the preponderance of evidence suggests that these differences are relatively minor for many surveys. Moore and Tarnai (2002) reviewed two studies that used multi-wave follow-up procedures. From one wave to the next, they found that there were significant differences between respondents and nonrespondents on key survey variables. In contrast, Curtin, Presser,

and Singer (2000), Keeter, Miller, Kohut, Groves, and Presser (2000), and Merkle and Edelman (2002) found very few meaningful differences between respondents and nonrespondents in surveys of the general population. Based on their review of research using public opinion surveys, Groves, Presser, and Dipko (2004) concluded that respondents and nonrespondents do not differ significantly with respect to survey variables.

Studies of respondents and nonrespondents in higher education surveys have reached similar conclusions. In a study of three samples of college freshmen with substantially different response rates, Hutchison, Tollefson, and Wigington (1987) did not find significant differences in responses to survey questions. Similarly, Kuh (2001) reported that a follow-up telephone survey of nonrespondents to the National Survey of Student Engagement (NSSE) found only minor differences in responses to survey variables. He also noted that the observed differences may have been an artifact of the telephone survey eliciting more positive responses (due to social demand) than the original paper-and-pencil survey.

Nonresponse bias can also occur when response rates differ across subgroups, and the subgroups differ in their responses to survey variables. For example, if females are more involved in campus activities and more satisfied with their college experiences *and* if the response rate for females is greater than the response rate for males, survey results will overestimate levels of involvement and satisfaction. Several studies of nonresponse in surveys of the general population have found that sociodemographic characteristics are related to survey participation. Specifically, age, gender, and socioeconomic status have been linked to the likelihood of participating in surveys (Goyder, Warriner, & Miller, 2002; Groves, Cialdini, & Couper, 1992; Groves & Couper, 1998). Similarly, studies of nonresponse in higher education surveys have found differences in response rates associated with gender, ethnicity, and academic ability (Dey 1997; Porter & Umbach, 2006; Porter & Whitcomb, 2005).

Thomsen (1973) and Kalton (1983a) describe a general situation in which researchers are interested in making inferences about a population mean (\bar{Y}) based on an epsem sample. The population contains H classes with N_h elements in class h . The elements within each class can be subdivided into respondents and nonrespondents such that $N_h = N_{rh} + N_{mh}$. Assuming that respondents always respond and nonrespondents never respond, the expected response rate for a class is N_{rh}/N_h , and the expected nonresponse rate for that class is

N_{mh}/N_h . The population mean for respondents (\bar{Y}_r) is $\sum_h \sum_i Y_{rhi}/N_{rh}$, and the population mean for nonrespondents (\bar{Y}_m) is $\sum_h \sum_i Y_{mhi}/N_{mh}$. When the sample mean (\bar{y}_r) is used to estimate \bar{Y} , bias is defined as

$$B(\bar{y}_r) = \sum_h \left[\frac{N_h}{N} \bar{Y}_{rh} \left(\frac{N_{rh}}{N_h} - \frac{N_r}{N} \right) / \frac{N_r}{N} \right] + \sum_h \left[\frac{N_h}{N} \frac{N_{mh}}{N_h} (\bar{Y}_{rh} - \bar{Y}_{mh}) \right] \quad (11)$$

Equation [11] partitions bias into two components. In the first component, bias is a result of variations in response rates across subgroups (i.e., classes). In the second component, bias is a result of differences in the population means for respondents and nonrespondents. The distinction between these two sources of bias is extremely important for the discussion of adjustment methods that follows because adjustments for nonresponse can *never* compensate for bias that is attributable to differences in the underlying population means for respondents and nonrespondents. Adjustments for nonresponse can compensate for bias only when there are differences in the response rates of subgroups, those subgroups differ significantly on survey variables, and there are not meaningful differences between respondents and nonrespondents on the survey variables.

The extent to which differences in the response rates of subgroups affect the results of correlational studies is a matter of some debate. Dey (1997) found that differences in response rates had substantial effects on means, but almost no effect on regression results. In contrast, DuMochel and Duncan (1983) found that differences in response rates may affect regression results, particularly when important explanatory variables are omitted from the regression model. They recommend that adjustments for nonresponse be used in those instances.

ADJUSTING FOR NONRESPONSE

Two general approaches are used to adjust for nonresponse in survey research. The first method, *imputation*, provides data values for missing responses, whereas the second method, *weighting*, increases the weight given to respondents in various subgroups to compensate for differing response rates across subgroups. As a general rule, imputation is used to adjust for item nonresponse and weighting is used to adjust for survey nonresponse. The exception to this rule is the use of hot-deck imputation to adjust for survey nonresponse. In hot-deck imputation, data from a survey respondent is copied to represent data from a

nonrespondent who has characteristics that are similar to those of the respondent. The assumption underlying this approach is that individuals who share similar characteristics will have similar responses to survey items. The challenge lies in identifying respondents and nonrespondents who are similar. When imputation is used to adjust for item nonresponse, researchers have information about sociodemographic characteristics and responses to other survey items. When hot-deck imputation is used to adjust for survey nonresponse, the only data available are likely to be sociodemographic characteristics from the sampling frame. If the data about sociodemographic characteristics are limited to a few indicators, legitimate questions about the comparability of respondents and nonrespondents can arise. Conversely, if many indicators are available, or if response rates are extremely low, a small number of respondents may be used to represent a large number of nonrespondents. In the case of a 25% response rate for example, each respondent would represent three nonrespondents. In addition, hot-deck imputation increases statistical power by increasing sample size. It can also increase the variance (i.e., decrease the precision) of the estimator (Chapman, 1976). Although none of these issues are unique to hot-deck imputation, they are highly visible because data are actually copied from respondents to represent nonrespondents.

Weighting adjustments for survey nonresponse fall into two general categories: case weighting and response-propensity weighting. When case weighting is used to adjust for nonresponse, cases are grouped into classes (e.g., strata) based on auxiliary information about survey respondents and the survey sample and/or population (Bethlehem, 2002). The decision about what classes to use is not trivial. As Oh and Scheuren (1983) observed, the tendency to select weighting classes based on convenience, rather than appropriateness, frequently leads to a failure to adjust adequately for nonresponse bias. Appropriate classes in this instance are weighting classes that are formed from variables that are highly correlated with the survey variables of interest and the response (i.e., respond/not respond) variable (Chapman, 1976; Kalton, 1983a). In the campus survey example described previously, gender (i.e., being female) was positively correlated with involvement in campus activities and satisfaction with college. Females were also more likely to respond to the survey. If a goal of the survey is to make inferences about involvement and satisfaction campus wide, it would be prudent to include gender in a weighting scheme to adjust for nonresponse. Problems can arise, however, when the goal of the study is to make inferences about a variety of survey items and the correlations between survey items and classes vary. In this situation, a clear

choice of classification variables will be difficult. To address this issue, Kalton (1983a) recommended identifying a core set of survey items in advance and using those items to guide the selection of classification variables and weighting classes.

The number of classes used in weighting adjustments is also an important consideration. Ideally, all auxiliary variables that are related to survey and response variables should be used to form weighting classes. Furthermore, weighting assumes that selection and response probabilities are constant within classes, so it is important to classify as narrowly as possible in order that the assumption of constant probabilities can be met (Gelman & Carlin, 2002). However, elaborate classification schemes based on the cross-classification of several auxiliary variables substantially increases the likelihood that some classes will contain no respondents. If there are no respondents in a class, weights cannot be calculated. Small cell sizes (i.e., having relatively few respondents in a class) can also create serious problems. If the number of respondents in a class is small, weights are likely to be unstable and vary substantially from one class to another. The net effect of weighting will be to increase the variance of the weighted estimator relative to the unweighted estimator (Groves & Couper, 1998; Kalton, 1983a; Thomsen, 1973; Vartivarian, 2004). In other words, the weighted estimator will be unbiased, but less precise, than the unweighted estimator. Kalton (1983a) indicated that 20–25 respondents per class are needed to ensure stable weights. Based on a review of the literature, Tremblay (1986) identified three characteristics of weighting classes that are needed to assure precise estimators: (1) the weighting classes should be as homogeneous as possible (i.e., have low intraclass variance); (2) the weighting classes should have high interclass variance; and (3) the weighting classes should have good response rates.

Once questions about weighting classes have been resolved, survey researchers must identify the specific case-weighting method to be employed. Three approaches are available: population weighting, sample weighting, and raking ratio estimation, or raking. The choice of weighting method usually depends on what data are available to the researchers.

POPULATION WEIGHTING

When population weighting adjustments are used, the respondent sample is weighted so that the weighted sample distribution is the same as the distribution of the population across classes. Population

weighting adjustments require that survey researchers have data about the distribution of the population and the distribution of respondents across weighting classes. Data about the distribution of nonrespondents across weighting classes is not required. The population weighting adjustment for the estimator of \bar{Y} based on an epsem sample is

$$\bar{y} = \sum_h \frac{N_h}{N} \bar{y}_{rh} \quad (12)$$

where N_h/N is the proportion of the population in weighting cell h and \bar{y}_{rh} is the sample mean for respondents in cell h .

Population weighting adjustments are frequently applied to the scores of individual respondents (i.e., case weights) in order to “weight up” the respondent sample to the population. Weighting up the respondent sample based on data about the population allows researchers to compensate for problems of noncoverage arising out of sampling-frame deficiencies, as well as compensating for survey nonresponse (Kalton, 1983a). The formula for weighting respondents’ scores is

$$\bar{y} = \frac{1}{N} \sum_h \sum_i \frac{N_h}{n_{rh}} y_{rhi} \quad (13)$$

Where N is the number of elements in the population, N_h is the number of elements in population for cell h , n_{rh} is the number of respondents in cell h , and y_{rhi} is the score of the i th respondent in cell h . In complex samples, respondents’ scores may already have been weighted to reflect design characteristics. In those instances, n_{rh} will be the sum of the design weights.

In some cases, weighting a sample up to the population size is undesirable (see Warwick & Lininger, 1975). For example, the National Survey of Student Engagement uses a population-weighting adjustment in its institutional reports that corresponds to the number of students at each institution that responded to the survey (National Survey of Student Engagement, 2005). The appropriate formula, derived from Little (1993), is

$$\bar{y} = \frac{1}{n_r} \sum_h \sum_i n_r \frac{N_h/N}{n_{rh}} y_{rhi} \quad (14)$$

At first glance, the weights for population-weighting adjustments (equation [12]) appear to be identical to the weights used in stratified sampling designs and poststratification (equation [2]). In fact, many

discussions of adjusting for nonresponse refer to population weighting as poststratification. Kalton (1983a) and Kalton and Kasprzyk (1986) identified several important differences between poststratification and population weighting. Specifically, poststratification is intended to compensate for minor sampling fluctuations and is analogous to fine tuning. In contrast, population weighting may make major adjustments to varying response rates across classes. Furthermore, a poststratified mean (\bar{y}_h) is an unbiased estimator of the population mean for a stratum (\bar{Y}_h), whereas the population-weighted mean (\bar{y}_h^*) is an unbiased estimator of the population mean for *respondents* in a class (\bar{Y}_{rh}). Finally, poststratification generally results in modest improvements (i.e., decreases) in the standard errors of estimators. Population weighting frequently results in higher standard errors than those found for unweighted estimators. This loss of precision can be substantial when class means are nearly equal and/or response rates for the classes vary significantly (Kalton, 1983a).

SAMPLE WEIGHTING

In some instances, data about the population may not be available, but researchers will have access to data about the characteristics of respondents and nonrespondents. In those instances sample-weighting procedures would be an appropriate method of adjusting for nonresponse. Sample weighting adjustments weight responses within classes so that the profile of respondents across classes is equivalent to the profile of the entire survey sample. Sample weighting requires that researchers have data about the profiles of respondents and nonrespondents, but it does not require that researchers have data about the population. Because population data are not available, sample weighting cannot compensate for problems of noncoverage (Kalton, 1983a).

The general formula for sample weighting of class means is identical to the formula for population weighting (equation [12]), except for the calculation of weights. Sample weights are the proportion of the sample in a given class (n_h/n), rather than the proportion of the population in that class (N_h/N). If design weights have been applied to the sample, n_h will be the sum of the weights in class h . The appropriate formula for sample weighting of survey elements (i.e., case weighting) is

$$\bar{y} = \frac{1}{n} \sum_h \sum_i \frac{n_h}{n_{rh}} y_{rhi} \quad (15)$$

It should be noted that n_h/n_{rh} is the inverse of the cell response rate (n_{rh}/n_h). It is also important to realize that the size of the weighted sample will be the total sample size (n). As with population weighting, it may be important for the size of the weighted sample to correspond to the number of respondents. In that case, the appropriate weighting formula would be

$$\bar{y} = \frac{1}{n_r} \sum_h \sum_i n_r \frac{n_h/n}{n_{rh}} y_{rhi} \quad (16)$$

Sample-weighting adjustments are analogous to two-phase sampling, just as population weighting is analogous to poststratification (Kalton, 1983a). The total sample across all weighting classes can be viewed as the first-phase sample. Respondents within the various weighting classes represent the second-phase sample. One important difference between sample weighting and two-phase sampling designs is that the second-phase elements are selected at random in a two-phase sample, but the respondents in sample weighting are self selected. As a result, \bar{y}_{rh} is an unbiased estimator of \bar{Y}_h in a two-phase sample. In sample weighting, \bar{y}_{rh} is an unbiased estimator of \bar{Y}_{rh} . The respondent mean for a weighting class (\bar{y}_{rh}) will be an unbiased estimator of the population mean for the weighting class (\bar{Y}_h) only if $\bar{Y}_{rh} = \bar{Y}_{mh}$ (i.e., there is no difference between the population means of respondents and nonrespondents in the weighting class).

Kalton (1983a) demonstrated that the formula for calculating the variance of the sampling distribution in a two-phase design (equation [7]) is appropriate for calculating the variance of an estimator produced by sample weighting if the number of respondents in all weighting classes is reasonably large (e.g., $n_{rh} \geq 20$). Sample weighting increases the variance and standard errors of estimators, resulting in unbiased but less precise estimators (Kalton & Kasprzyk, 1986). The loss of precision can be substantial when weighting classes only contain a few elements.

Vartivarian (2004) noted that sample-weighting adjustments are frequently used to compensate for nonresponse in complex, unequal-probability samples. In these studies, the sampling (i.e., nonresponse) weights generally are the inverse of the weighted response rates for the cells. The weighted response rate is, in turn, the sum of the design weights for respondents in a cell divided by the design weights for respondents and nonrespondents (i.e., the sample) in that cell. Vartivarian (2004) demonstrated that the traditional method of calculating sample-weighting adjustments leads to a loss of precision in the

estimator. Alternatively, she proposed using sample-weighting adjustments that are the inverse of the *unweighted* response rates for cells, but forming the weighting cells by classifying on the variables used to adjust for nonresponse and the design variables used to adjust for unequal-probability sampling. Vartivarian (2004) demonstrated that the method she proposed can produce estimators that are more precise than unweighted or traditionally weighted estimators. She concluded:

Nonresponse weighting does *not* necessarily result in increased variance; indeed the situations where nonresponse weighting is most effective in reducing bias are precisely the situations where the weighting tend to reduce, not increase, variance [emphasis the author's] (Vartivarian, 2004, p. 12).

A potential problem with Vartivarian's method is that the large number of cells will lead to some cells having few or no respondents. To address this issue, she proposed a method of coarsening adjustment cells. This method makes use of both response-propensity models, to be discussed later in this chapter, and predictive mean stratification (Little, 1986). A discussion of the specifics of Vartivarian's (2004) approach is beyond the scope of this chapter, except to note that the approach appears to provide a very robust adjustment for bias and a precise estimator.

RAKING RATIO ESTIMATION

In some instances, survey researchers may have information about the profile of a population or sample over individual classification variables, but not the combination of classification variables. For example, a survey researcher may know the proportions of the population that are female and male, as well as the proportions of the population that are full-time and part-time students, but not know the proportions of the population that are female full-time students, male full-time students, and so forth. Raking ratio estimation (or raking) can be used to create estimates of cell profiles based on the marginal distributions of the classification variables (Kalton, 1983a). Raking can be applied to either population or sample weighting adjustments. It is also useful in reducing the variances for estimators when there is a large number of weighting classes due to the cross-tabulation of several classification variables. Estimation of class profiles based on the distributions of individual classification variables corresponds to iterative proportional fitting in contingency-table analysis (Kalton & Kasprzyk, 1986). Raking

weights can be calculated using the Deming-Stephan (Deming, 1943; Deming & Stephan, 1940) iterative proportional fitting algorithm (see Kalton, 1983a).

Like population and sample weighting, the efficacy of raking depends on differences between the population means of respondents and nonrespondents. That is, $\bar{Y}_r = \bar{Y}_m$ must hold true for raking to be effective in compensating for bias. In addition, the effectiveness of raking depends on the closeness of the raking model's proportions for classes to the true population or sample proportions for the classes. If the proportions produced by the raking model do not accurately reflect the true population or sample proportions, raking will not reduce, and may increase, bias.

RESPONSE-PROPENSITY WEIGHTING

The second general category of adjustments for nonresponse, response-propensity weighting, makes use of data about the likelihood that elements (e.g., students or faculty) will respond to a survey. One of the earliest methods of response-propensity weighting was developed by Politz and Simmons (1949a, 1949b, 1950) to reduce the need for multiple follow-up contacts in face-to-face and telephone surveys. In describing the procedure, Politz and Simmons (1949a) explained that each individual in the survey sample was contacted once. In addition to the regular survey questions, respondents were asked how many days during the six-day window of the survey they were, or would be, at home at a specified time (e.g., 6:00PM–9:00PM). Based on answers to this question, response probabilities ranging from 1/6 to 6/6 were calculated. Respondents were grouped into six classes corresponding to their response probabilities, and survey variables were weighted by the inverse of the response probabilities.

Obviously, a key to the utility of the Politz and Simmons weighting scheme is the accuracy of the self-reported response probabilities, and the authors recommended that researchers develop and use methods (e.g., call backs) to check the accuracy of the reports (Politz & Simmons, 1949a). In addition to inaccurate self reports, the presence of respondents who are never at home represents a source of bias in the Politz and Simmons method. To the extent that people who are never at home is a relatively small proportion of the population, and the responses of the never-at-home group are similar to the responses of the population, nonresponse bias will be reduced by the Politz and Simmons method (Politz & Simmons, 1949b). However, the presence

of a never-at-home group will always add some bias to the estimators. In addition, the decreases in bias will be at least partly offset by modest increases in sampling variances and standard errors for the estimators (Politz & Simmons, 1950).

The Drew and Fuller approach for nonresponse adjustments makes use of weighting classes derived from sociodemographic characteristics, rather than forming the classes based on self-reported response probabilities (Drew & Fuller, 1980, 1981). This method is based on the assumption that everyone in a population- or sample-based class has the same response probability, and this probability is constant over multiple waves of a survey (Drew & Fuller, 1980). If a multi-wave survey is administered and response rates for classes are calculated at each wave of the survey, response probabilities can be estimated using a multinomial distribution (Drew & Fuller, 1981). The appropriateness of the Drew and Fuller method of adjusting for nonresponse depends on whether the assumption of stable response probabilities within classes and across waves of a survey is defensible. As with other nonresponse adjustments, weighting will increase the sample variances and standard errors of the estimators.

Chapman (1976) proposed using multiple regression analysis to estimate response probabilities and make weighting adjustments. Using Chapman's method, a response variable (i.e., 1 = response, 0 = no response) is regressed on a set of variables that are available for respondents and nonrespondents. Predicted response probabilities are calculated for each weighting class, and the inverse of the predicted response probability is used as the weight for a given class. Kalton and Kasprzyk (1986) noted that the utility of Chapman's approach depends on the predictive accuracy of the regression model. They suggested that this method would be most appropriate in weighting second and subsequent waves of a panel study where extensive information is available about respondents and nonrespondents.

In his article, Chapman (1976) also described the regression-based adjustment procedures used by Astin and Molm (1972). In their study, Astin and Molm (1972) regressed a survey response measure on a variety of measures of students' background characteristics. The adjustment weights developed in the study were the inverse of the regression coefficients. Astin and Molm's (1972) approach was also used by Dey (1997) in his study of the efficacy of using weighting to overcome nonresponse bias. In a critique of Astin and Molm's weighting procedure, Chapman noted that the regression model used by Astin and Molm explained only 6% of the variance in the

response/nonresponse variable. Chapman (1976) concluded that “there is some doubt regarding the use of this procedure (p. 249).” At a minimum, Chapman’s comment serves to underscore the fact that the utility of regression-based response-propensity models depends on the ability of the models to account for the probability that individuals will respond to a survey.

Gelman and Carlin (2002) argued that one of the reasons for the poor predictive power of regression-based response-propensity models is that they tend to be atheoretical and arbitrary. Both Goyder (1987) and Groves (1989) have recommended developing response-propensity models that are based on an explicit theory of nonresponse. Groves and Couper (1998) argued that theory-based response-propensity models should begin by discarding the notion that nonresponse is a fixed property. That is, elements in a population are either respondents who always respond or nonrespondents who never respond. The alternative, stochastic view holds that every element in the population has a non-zero probability of responding to a survey that is influenced by behavioral factors (e.g., multiple contacts, incentives, and personal contact), individual characteristics (e.g., age, gender, and socioeconomic status), and characteristics of the situation (e.g., topic salience, time demands, and being the target of multiple surveys) (Goyder, 1987). Stochastic response-propensity models could also be significantly strengthened by including terms representing different types of nonresponse (Groves & Couper, 1998). For example, nonresponse could be attributable to an incomplete sampling frame, a lack of contact information, or refusal to participate in the survey. If the means for different types of nonresponse differ, different proportions of nonresponse types will lead to differences in nonresponse bias. In their study of a stochastic response-propensity model that included different types of nonresponse, Groves and Couper (1998) found that the stochastic model had relatively minor implications for means, differences between means, and regression coefficients because the elements in a survey were still classified either as respondents or nonrespondents. However, the stochastic model had lower variances and standard errors than did traditional response-propensity models.

SUMMARY AND CONCLUSIONS

Given the pervasiveness of survey research in studies of faculty, college students, and education programs, it is critical that surveys provide information that is accurate and appropriate for answering

the questions being asked and advancing our understanding of higher education. The admittedly cursory overview of survey research presented in this chapter is intended to underscore the dangers posed by low response rates and to suggest options for dealing with problems related to low response rates. The dangers associated with low response rates are two fold. First, survey nonresponse is likely to produce results that are biased and do not accurately represent the population about which inferences are to be made. Second, even when the results are unbiased, they will be imprecise. Although Type II errors may be the most likely outcome of a lack of precision in survey estimates, a combination of bias and loss of precision can lead to either Type I or Type II errors.

Obviously, the best way to avoid the pitfalls in survey research is to keep nonresponse to a minimum. However, even with the variety of tools available to encourage high rates of survey participation, substantial numbers of individuals fail to respond to higher education surveys and the problem of nonresponse appears to be growing. Given the apparent inevitability of survey nonresponse, it is essential that higher education researchers understand the strengths and limitations of the methods that can be used to adjust for nonresponse and correctly employ these methods in their own studies.

The theory and research reviewed in this chapter leads to four general conclusions about survey research and adjustments for nonresponse. The first conclusion flows from the proposition that making inferences about a population based on data from a survey sample requires probability sampling. This rule is fundamental to statistical inference, and there are no exceptions to the rule. The National Center for Education Statistics (NCES) conducts a wide variety of surveys designed to provide information about higher education in the United States. To ensure that the inferences made in these studies are appropriate, NCES has established standards that require the use of probability samples in their surveys (National Center for Education Statistics, 2002b).

A variety of other organizations conduct national surveys of college students and faculty. These research projects include the Cooperative Institutional Research Program (CIRP) surveys of faculty and students (Astin, 1993; Lindholm, Szélenyi, Hurtado, & Korn, 2005; Pryor et al., 2005), the National Study of Student Learning (Pascarella et al., 1996), and the National Survey of Student Engagement (Kuh, 2001; Kuh et al., 2001). All of these surveys rely on convenience samples of volunteer institutions. To be sure, all of these research

programs have used probability sampling within institutions, and all employ weighting strategies to make their samples represent the populations of faculty and students within institutions and/or the populations of faculty and students nationally. Although the sampling designs used in these surveys allow inferences to be made about the institutions participating in the studies, no statistical basis exists for making inferences about higher education generally. To be fair, many of the studies using these data acknowledge the limitations of the inferences that can be drawn from the data. However, the limitations of these surveys lead to an important principle regarding adjusting for nonresponse in higher education survey research: *No amount of weighting to make a convenience sample resemble a population provides a statistical basis for making inferences about the population based on that sample.*

The second conclusion to emerge from theory and research on survey nonresponse is that adjustment for nonresponse can compensate for the problems caused by nonresponse in some instances, but not others. As previously noted, two problems are associated with nonresponse. First, nonresponse is likely to lead to biased estimators of population parameters. Furthermore, the assumption of unbiased estimators forms the basis for statistical inference. Bias in this situation refers to the fact that the mean of an infinitely large number of sample means will not be equal to the population mean. There are two ways in which estimators, such as sample means, can be biased. First, nonrespondents may differ in important ways from respondents on survey variables. As noted earlier in the chapter, students who do not respond to a survey may be less involved and less satisfied than students who do respond to the survey. If the survey includes questions about involvement and satisfaction, sample means for the question will be biased, overestimating levels of involvement and satisfaction in the population of students attending the institution. The second way in which estimators can be biased is that different subgroups within the population may have different response rates, and the subgroups may also differ in important ways on survey variables. Returning to the campus survey example, full-time students are generally more likely to respond to surveys than part-time students. Full-time students also are more likely than part-time students to be involved in campus activities. A sample mean based on respondents who are disproportionately full-time students will be biased and overestimate levels of involvement in the population. Equation [11] shows that these two sources of bias are independent of one another. Moreover, weighting adjustments can

compensate for the second source of bias, but not the first. It is also important to understand that adjustments for the second source of bias are likely to be imperfect because researchers will not be able to account for all of the differences in response rates across classes.

The second problem associated with nonresponse is a loss of precision in the estimators resulting from the fact that the respondent sample is smaller than the total sample. Weighting adjustments can address this issue if the number of respondents is weighted up to the original sample size. (Some would argue that weighting up to the size of the population over adjusts for the loss of precision due to nonresponse.) Weighting that maintains the number of respondents in the sample will not affect the loss of precision due to nonresponse.

Although the loss of precision is a concern, problems arising from biased estimators are the most serious consequence of nonresponse. Theory and research on weighting adjustments gives rise to a second important principle of adjusting for nonresponse: *No system of weighting will compensate for nonresponse when there are differences between respondents and nonrespondents on the variables about which inferences are to be made.*

Both Kalton (1983a) and Oh and Scheuren (1983) have been skeptical of the ability of weighting adjustments to compensate for nonresponse bias. Kalton (1983a) noted that it is dangerous to assume that there are not systematic differences between respondents and nonrespondents. Oh and Scheuren (1983) concurred and also noted that it is impossible to identify and measure all of the characteristics that are related to nonresponse. Regarding the efficacy of weighting to adjust for nonresponse, Oh and Scheuren (1983) concluded:

There is really no totally satisfactory substitute for complete or nearly complete response. The models employed in adjusting for missing data, no matter how cleverly structured, virtually never hold exactly in practice; hence, the more nonresponse present, the greater the sensitivity of one's results to the mechanism assumed in carrying out the adjustments. (p. 144)

Oh and Scheuren's (1983) comment that the results of weighting adjustments are influenced by the method being employed gives rise to a third conclusion related to the effects of weighting on bias and precision. All of the weighting methods discussed in this chapter can compensate for the biasing effects of differences in response rates across weighting classes, and population weights can even compensate for coverage problems due to gaps in the sampling frame. With the possible

exception of the alternative sample-weighting approach proposed by Vartivarian (2004), the reductions in nonresponse bias achieved by weighting adjustments are at least partly offset by a loss of precision due to increased sampling variances and correspondingly larger standard errors. The loss of precision may be relatively small, as claimed for theory-based response-propensity models, or it may be large, such as when there is substantial variation in response rates across weighting classes. Even the gains associated with Vartivarian's (2004) approach can be eliminated when weighting classes contain few respondents.

My review of the literature on weighting adjustments for survey nonresponse revealed that there has been surprisingly little empirical research on the loss of precision associated with different types of weighting adjustments. Researchers interested in compensating for nonresponse bias through the use of weighting adjustments must be mindful of the tradeoff between bias and precision. This potential tradeoff leads to a third principle related to adjusting for nonresponse: *Before undertaking weighting adjustments, researchers should carefully evaluate the likely benefits to be achieved by reduced bias and the costs associated with decreased precision.*

The fourth and final conclusion to emerge from a review of the literature on survey nonresponse is a straightforward extension of a basic principle of sampling design. In the discussion of complex sampling designs earlier in this chapter, I noted that the estimators derived from stratified samples, cluster or multi-wave samples, and samples produced by more elaborate designs differ from the estimators produced by simple random samples. Stratified samples are likely to produce estimators that are more precise than the estimators produced by simple random samples. Conversely, the estimators produced by cluster or multi-wave samples and the estimators produced by complex samples are frequently less precise than the estimators for simple random samples. In some instances, these design effects can be substantial. Differences in variance estimates are particularly significant when inferential statistics are used in the analysis of survey data because the default analysis methods in statistical packages such as SAS and SPSS presume simple random sampling and calculate the standard errors used in test of statistical significance based on the assumption of random sampling. Both Type I and Type II errors can be the result of violating this assumption. Not surprisingly, the statistical standards developed by the National Center for Education Statistics (2002b) require the use of statistical packages capable of calculating standard errors that are appropriate for the sampling design.

The same problems are faced when analyzing survey data from samples that have been weighted to adjust for nonresponse. Standard errors may be less than the standard errors for the unweighted sample, or they may be greater than the standard errors for the unweighted sample. Moreover, the calculation of standard errors can be extremely complex when one set of weights is used to represent characteristics of the sampling design, and a second set of weights is used to compensate for survey nonresponse. One thing is clear; the standard errors for a weighted sample are unlikely to be the same as the standard errors for a simple random sample. This gives rise to a fourth principle of nonresponse adjustment: *Researchers who rely on weighting adjustments to compensate for survey nonresponse should follow NCES standards for the analysis of complex samples and utilize variance estimates and standard errors that are appropriate for the survey sample design and weighting adjustments.*

Although is important for survey researchers to understand that sampling designs and adjustments for nonresponse are derived from the mathematics of statistical inference, they should also realize that not all decisions can or should be based on mathematical or statistical criteria. As Thomas and Heck (2001) observed, the choice among the various design- and model-based approaches for estimating standard errors should be guided by the research questions to be answered, not statistical criteria. Similarly, Goyder (1987) and Groves (1989) argued that adjustments for nonresponse should be guided by a theory of nonresponse, not statistics. Adherence to principles of sound research design and statistical inference are necessary, but not sufficient, conditions for effective survey research. Principles of design and inference must always be guided by theory and the research questions to be answered.

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9. NEOLIBERAL POLICIES AND COMMUNITY COLLEGE FACULTY WORK¹

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TENSIONS IN HIGHER EDUCATION

During the late twentieth and early twenty-first centuries community colleges became globalized institutions (Levin, 2001a). As such, community colleges reflect and (advertently or inadvertently) embrace neoliberal political and economic philosophies and adopt the business practices of the New Economy (Carnoy, 2000). Both neoliberalism and the New Economy focus on serving the interests of government and business, and not necessarily those of the public or individual citizens (Slaughter & Rhoades, 2004). By aligning themselves with these interests, community colleges direct their behaviors not necessarily to the needs and desires of their students and local communities, but rather to the demands and expectations of business and industry, governments, and multinational corporations. These institutions have positioned themselves as critical elements in workforce and economic development, yet at the same time they continue to educate a broad spectrum of students, including substantial numbers of students in developmental and remedial courses (Levin, 2001a). To some extent there are tensions between the economic marketplace orientation of community colleges and their educative function (Marginson &

The names of individuals and their institutions in this text have not been identified in order to grant these individuals and institutions anonymity as agreed to in the research protocol for field work.

¹The foundation of this work is presented in Levin, J. S., Kater, S., & Wagoner, R., *Community College Faculty: At Work in the New Economy* (New York: Palgrave Macmillan, 2006). As well, the contribution of Veronica Diaz and John Cheslock informed the discussion here on instructional technology.

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Considine, 2000; Slaughter & Leslie, 1997). This condition for the community college can be viewed within a larger context of higher education generally.

The U.S. educational terrain has shifted from a state of equilibrium with social democratic principles on one side of the equation and individualism on the other to a condition where personal social mobility and a consumer-based approach to education have prevailed (Labaree, 1997b). For higher education institutions, neoliberal ideology with its orientation to a globally competitive economic marketplace has become ascendant, even achieving status as the dominant operating system that both guides and organizes institutions to the extent that colleges and universities reflect a corporate not an academic culture, with economic interests and behaviors as paramount. The discourse on commercialization, entrepreneurialism, and academic capitalism is well-established, particularly for research universities (Bok, 2003; Clark, 1998; Marginson & Considine, 2000; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2000, 2004), but the linking of these to corporatism in the organization and management of higher education institutions, and to community colleges, is less well enunciated (Pusser, Slaughter, & Thomas, in press). Corporatism, especially elucidated through the example of the community college, is a valuable framework for viewing and understanding both the nexus of globalization and neoliberal ideology as it plays out in higher education.

This discussion is situated in the community college context and focuses upon community college faculty as a labor force in what is variously called the “new economy,” “new capitalism,” and the “new global economy” (Carnoy, 2000; Carnoy, Castells, Cohen, & Cardoso, 1993; Sennett, 1998) because of several characteristics of the institution and its faculty. First, the community college is clearly an instrument or vehicle of both state and federal government economic and social policy and thus tied to economic markets and behaviors that are global in their interactions (Cohen, 2001; Levin, 2001b; Mazzeo, Rab, & Eachus, 2003) and to the redress of inequalities promulgated by social policy. Federal economic policy, for example, reflected in the North American Free Trade Agreement, and state policy that legislates access to public services, suggests on the one hand the utility and on the other hand the enforcement role of the community college for government policy. Thus, community colleges retrain workers laid off in the manufacturing industry as a result of plant closures and industry re-location to another country; and the institution in some states requires undocumented immigrants to pay out-of-state tuition, which can be as much as five

times the amount as in-state tuition. Second, the community college is a productive force: its products are both workers and consumers for local economies; the institution produces both private and public goods. Both the work and the consumption of these products—students—have implications for a globally competitive economy. For example, the training of a workforce in an aircraft mechanics associate's degree program at a community college that is aligned with the Boeing Corporation is clearly connected to the global economy and sustains Boeing's global position. Third, the community college's student demographics—the result of an open-access philosophy and a mission that incorporates social mobility for the underserved—include a broad spectrum of society, particularly a population that is not connected to four-year colleges and universities (Roueche & Roueche, 1999). Part of this population reflects the social welfare/social agency identity of the community college: those who are the underserved, the neglected, and the disadvantaged in U. S. society, arguably a consequence of both old and new capitalism (Freeman, 2005; Grubb, Badway, & Bell, 2003; Jacobs & Winslow, 2003; Levin, forthcoming). Fourth and finally, the major workforce in the institution—the faculty—are more a labor force than professionals, managed by collective agreements and state legislation that limit their autonomy and role in governance and by administrators who are increasingly intrusive in the faculty domain of instruction (Levin, Kater, & Wagoner, 2006; Rhoades, 1998). State legislation often omits community college faculty from an authoritative governance or decision-making role and cedes that role to either the governing board and president/chancellor or governing board alone.² In California, for example, where the highly touted participatory governance role for faculty has been claimed arising from Assembly Bill 1725 in 1988, faculty have only an advisory role in institutional decision making, and authority is vested in boards and chief executive officers (Kater & Levin, 2005). Thus, decisions, customarily assumed as the domain of faculty, as professionals, such as the use of distance education as an instructional mode of delivery, are vested in management, and faculty can only take issue, formally, through collective bargaining if they are unionized and if managerial action violates the terms of the collective agreement. In such a context of managerial authority, the dynamics of higher education in the new economy are readily apparent, given the proximity of the community college to the economic marketplace and to government.

² Where faculty are board members their role is as non-voting members, excepting some Canadian jurisdictions.

While government buffers the community college from global shocks such as the collapse of national economies, there is little distance between local populations and the institution, as well as decreasing distance between the college and business and industry. Moreover, there is barely a crack in the wall between government and the community college (Cohen, 2001; Levin, 2001b). The connection then between the institution and the responses of government and business and industry to the new economy should not be a surprise although this is rarely acknowledged in explaining organizational behaviors.

The discussion that follows relies upon investigations that, as a whole, employ mixed methods drawing upon both qualitative and quantitative research traditions. Both the methods of inquiry, as well as the data that inform this discussion, rely upon longitudinal studies and previous research, involving field work, analysis of large data sets—both quantitative and qualitative—and document analysis (Levin, 2001a; Levin et al., 2006). The data sets include community colleges in both the U.S. and Canada: institutional, state/provincial document data as well as national policy document data from 1989 to 2004, interviews conducted by multiple researchers from 1997 to 2004, on-site observations from 1997 to 2004, and national quantitative and statistical data sets. Specifically relevant for this discussion were the 1993 and 1999 National Study of Postsecondary Faculty (NSOPF 93 and NSOPF 99) and the 1995–1996 and 1998–1999 and Spring 2003 Higher Education Contract Analysis System (HECAS) CD-ROMs made available by the National Education Association. Quantitative methods are used to examine both part-time faculty and faculty use of technology and rely upon the National Study of Postsecondary Faculty (NSOPF) of 1993 and 1999 (Levin et al., 2006). Data on governance come from document analysis and interview data from public community colleges across the United States and Canada. Through document analysis of collective bargaining agreements, cross-sectional data indexing across the data set is used to evaluate faculty participation in governance (Levin et al., 2006).

Qualitative methods and case study methods contribute to the discovery of new phenomena; reflect the need for a more in-depth understanding of naturalistic settings; underscore the importance of understanding context; and reveal the complexity of implementing organizational and technological change (Eisenhardt, 1989; Le Compte & Preissle, 1993; Marshall & Rossman, 1999; Mason, 1996; Maxwell, 2005). Extensive interviews of over 400 institutional members and prolonged on-site observations over nearly a decade,

as well as institutional and government documents, comprise the qualitative data sources (Levin, 2001a; Levin et al., 2006). Finally, data and data analysis are supplemented by an on-going investigation of students and organizational behaviors in thirteen community colleges in nine states (Levin, forthcoming).

The concepts that frame these empirical investigations—globalization, neoliberalism, and corporatism—although interconnected, can be and are treated separately. The implications for education, and specifically for higher education, through these frames, are both broad and diverse. In the institution known as the community college, these concepts have particular saliency and provide a heuristic for explaining institutional change.

GLOBALIZATION

The scholarly literature on globalization, while divided in its orientation toward economics, information, culture, and politics, is not as naïve as popular discussions which understand globalization as a unitary condition. Indeed, scholarly discussions frame globalization as both condition and process (Robertson, 1992). Furthermore, scholarship indicates that the process of globalization results in heterogeneity as much as homogeneity (Guillén, 2001). Globalization is understood as connecting activities and relationships across constructs of time and space, as well as physical distances, and while Roland Robertson (Robertson, 1992) conceptualizes globalization as “the compression of the world and the intensification of consciousness of the world as a whole,” such a connection is viewed popularly as connoting equality or sameness (Friedman, 1999; Friedman, 2005). Although global flows of ideas, images, products, people, and transactions suggest a ‘global village,’ the conditions and the outcomes are not necessarily common as there are disjunctures in this movement, including differences in culture and economics (Appadurai, 1990). Disparities in social values and economic conditions cannot be ignored: thus rich and poor within a single country or the contrasting wealth and poverty of nations, as well as belief systems of groups—clans, tribes, sects, ethnic populations, religious organizations, and nations as a whole—do not disappear under the globalization process. Indeed, there is intensification of tensions and conflicts during global transactions as identities and ways of life are threatened (Held, McGrew, Goldblatt, & Perraton, 1999).

Networked electronic technology speeds up social and economic transactions, and the current phase of globalization—over the past twenty to twenty-five years—is, if not structured, then at least propelled by electronic technology and networked systems (Castells, 2000). This speeding up of both transactions and interactions constitutes hyperactivity in real time and the norm within cyber time, and thus two planes of existence (real and cyber) are operational, even expected, for those who live in a postindustrial society. This of course leads to differing expectations for human interactions, including responses to both requests and demands such as reactions to communication and experiences and decisions for future action. But for those who live in other societies—developing countries and low socio-economic spheres within postindustrial societies—there is a single plane of existence and it is hardly a global society.

In the language of globalization, there are “periphery” and “core,” “mainstream” and “marginal,” and “winners” and “losers” as the dividing concepts that advance in their salience as neoliberal ideology gains ascendancy globally, particularly through the practices of governments. Indeed, government and government policy have become principal vehicles for the globalization process, one oriented to global economic competition. As instruments of government, higher education institutions have become neoliberal institutions, emphasizing economic markets and consumers (Levin, 2001a; J. Levin, 2005; Slaughter & Rhoades, 2000).

NEOLIBERALISM

Essentially an economic ideology, neoliberalism has roots in Adam Smith’s eighteenth century treatise, *Wealth of Nations* (Clarke, 2005). Some argue that neoliberalism is inseparable from imperialism and globalization (Saad-Filho & Johnston, 2005). Arguably since 1980, neoliberalism has dominated social and economic policy in the U.S. and in other developed industrial societies, including countries of the European Union (Palley, 2005). The discourse of neoliberalism includes the valorization of individual economic worth, through production, and a free market. However, while ‘the good for all’ is extolled as an outcome virtue—such as rising standards of living or consumption in Smith’s terms—neoliberalism is tied to capitalism and profit is the goal of that system (Clarke, 2005). Thus, we might call neoliberalism economic hyper-capitalism.

Neoliberalism could be described as the ideological complement to the mechanics of globalization. Noam Chomsky (1999), for example, argues that neoliberals justify the development of international financial institutions for the domination of vulnerable nations and societies through the dissemination of such norms as the liberalization of trade, market price-setting, and privatization. Because they control much of the international economy, dictate policy development, and influence public opinion, large corporations are the architects of the neoliberal project. Michael Apple (2001) summarizes the ideological commitments and ideal behaviors of neoliberalism. These include, among others, the expansion of open, economic markets; the reduction of government responsibility for social needs; the reinforcement of a competitive structure for economic behaviors; and, the lowering of social expectations for economic security. He concludes that neoliberal policies are framed as market solutions that serve to reproduce traditional hierarchies of race and class.

Within the context of neoliberalism, the economic marketplace is deified and thus institutions are valued by their relationship to the marketplace. Neoliberal critics have a different message: the valorization of the economic marketplace with relatively unfettered competition induces inequality (DeMartino, 2000); social and educational mobility for some ultimately excludes others (Sennett, 2002); the collective good is suppressed; and, individual advancement, often justified under the guise of merit, is vaunted (Campbell & Pedersen, 2001; DeMartino, 2000). Such norms have spilled over to education with serious and likely long-range effects. Schools are viewed as corporations (Giroux, 2002), with private interests replacing the public good (Puiggrós, 1999; Stromquist, 2002). For higher education, the charge of critics of neoliberalism is that learners are defined as or indeed reduced to economic entities and curriculum is surrendered to economic markets (Ayers, 2005; Marginson & Considine, 2000; Slaughter & Rhoades, 2004).³

³ There are other understandings of neoliberalism that suggest that the individual is enticed by the prospect of economic "liberation" or "empowerment" and that the bases of neoliberal projects transcend economic ideology. Such a perspective was conveyed to me by Benjamin Baez in response to one of my papers (Baez, 2006). Simon Marginson (Marginson, 2006) takes issue with such an understanding and suggests that neoliberalism in action limits individual freedom: in neoliberalism freedom has the quality of freedom as control not freedom as power. Thus, individual agency is curtailed.

CORPORATISM

Arguably, corporations have replaced national governing authorities in numerous spheres of social and economic life (Barnet & Cavanagh, 1994). Because they can control communications, economic transactions, and the distribution of material objects, corporations dominate global, national, and local activities. Corporations are increasingly unaccountable to public authorities. More abstractly, Saul (1995) defines corporatism as an ideology in which rationality is central and essential. Critical of the postmodern acceptance of corporatism, Saul argues that it undermines the legitimacy of democratic citizenship. In other words, in corporatism legitimacy is found in the private group, rather than in the individual agent. Casey (1995) also studies group-versus-individual behavior, discussing corporatism as the methods through which workers and managers deal with rapid technological changes within the work organization. Thus, corporatism represents a movement away from individual agency and toward the incorporation of decision-making processes within an economic entity.

The workforce in colleges and universities is increasingly framed by educational managers, government, and such private sector interests as corporate employees even though higher education historically existed in a separate sphere from business and industry. Scholars note these differences based upon cultural and social values found in academe (Bok, 2003; Gould, 2003; Slaughter & Rhoades, 2004). In this sense, universities and colleges have transformed, conceptually though perhaps not in practice, from earlier functions, even if they are not, using Readings' term, "ruined" (Readings, 1997). Community colleges, too, may have followed this path (Levin, 2002).

Corporate culture has expanded from the world of business and industry to higher education, from the structures of authority—the concept of executive and executive decision making—to the monolithic image that the institution projects, including the ubiquitous website. Indeed, the deliberate design of homogenous organizational behaviors facilitated and enhanced by advanced automation and informational technologies is a seminal characteristic of corporate cultures in our age (Casey, 1995). Within the design of the corporate culture at the community college, faculty are compelled to participate beyond their own domain of teaching in the official work of the corporation, including changes to the social outcomes of their work. For example, in their participation in and implementation of quality improvement

systems, faculty are partners in the re-definition of students as customers or consumers and themselves as a team or collective and no longer autonomous professionals. Not only do these behaviors aid in the advancement of corporatism but they also mitigate against a counter culture that might rise in response to hegemony, what Casey refers to as the “corporate colonization of the self” (Casey, 1995). Ironically, while the discourse of this corporate culture in the community college emphasizes diversity, critical thinking, and creativity—usually brought together within the concept of ‘the learning college’ (Levin et al., 2006)—this is a simulated world, a bounded system that is a fabrication where relationships and meaning are constructed under the corporate rubric (Casey, 1995). Team work, an underlying assumption of process for the learning college, relies upon surface experiences—the ties that bind, so to speak—and does not threaten the power structure of the corporation (Sennett, 1998). The semblance of a cohesive unit combined with familial relationships appears similar to the 1960s and early 1970s for community colleges as new faculty and administrators worked together in a pre-unionized institution and a relatively small environment, where most of the employees were full-time and considerably younger on average than they are in the 2000s (Cohen & Brawer, 2003; Levin, 2001a). By the 2000s, however, both management systems and advanced technology framed employee participation and the core of faculty work—teaching—as aiding in the institution’s productivity. More students—the lifeblood of community college financing—led to large instructional loads and an increase in part-time faculty (Levin, 2001a; J. Levin, 2005; Levin et al., 2006; J. S. Levin, 2005). These behaviors sound a good deal like those that have taken place over the past two decades in the private sector as noted by Vicki Smith (Smith, 2001). “Employee involvement programs, organizational arrangements that removed managers from the circuit of control, and egalitarian rhetoric created a decentralized and postbureaucratic apparatus that tightened its hold on workers and increasingly implicated them in the efficiency and profit goals of management” (p. 7). For higher education, generally, Gary Rhoades (Rhoades, 1998) argues that managers have extended their management of instruction primarily through faculty’s use of new instructional technologies and delivery modes: “Technology expands managers’ flexibility not by enhancing their control over faculty in traditional curricula, but by enabling them to develop new curricular areas and hire new faculty outside the purview of traditional contractual and academic/faculty constraints” (p. 193).

HIGHER EDUCATION INSTITUTIONS AT THE NEXUS OF NEOLIBERAL IDEOLOGY AND ECONOMIC GLOBALIZATION

Sheila Slaughter and Larry Leslie (1997) have detailed the development of the research university in four countries—U.S., Canada, the United Kingdom, and Australia—to its role as research and development site for national economic prosperity. In achieving this status, the research university has altered its organizational behaviors to emulate those in the for-profit business and industrial sector. University professors have become academic capitalists, developing products and moving them to market so that profit or prestige, or both, is attained. Slaughter and Gary Rhoades (2004) take the alteration of the research university in two other directions: first in expanding the institutional changes to include universities and colleges, generally; and second in broadening the behaviors to include administrators, students, and external constituents. Beyond “academic capitalism,” there are now regimes: one of academic capitalists, including producers, managers, technical support, consumers, and sponsors. They suggest that present day higher education institutions are found at the nexus of neoliberal ideology and globalization of the economy.

THE COMMUNITY COLLEGE: *NEW WORLD COLLEGE*

A substantial body of scholarly literature, as well as a considerable number of ruminations by practitioners, has framed a common understanding of the community college over the past three decades. Since 1981, with Patricia Cross’s examination of the community college mission, followed by the 1985 edited work from William Deegan and Dale Tillery, and particularly Cross’s contribution within that edited work, scholars began to mold the concept of a modern, comprehensive community college. While the community college discourse prior to the 1980s did reflect an institution with multi-purposes and a variety of students, it nonetheless was conceived of as an alternative educational institution, framed by curriculum and instruction, as Arthur Cohen observed in 1969 (Cohen, 1969):

It is viewed variously as democracy’s college, as an inexpensive, close-to-home alternative to the lower division of a prestigious university; as a place to await marriage, a job, or the draft; and as a high school with ashtrays. For many of its enrollees, it is a stepping

stone to the higher learning; for most, it is the last formal, graded, public education in which they will be involved. The community college is—or attempts to be—all things to all people, trying valiantly to serve simultaneously as custodian trainer, stimulant, behavior-shaper, counselor, advisor, and caretaker to both young and old. (p. xvi)

This “all things to all people” label was maintained through the following decades, even to the end of the twentieth century as Norton Grubb notes in 1999 with respect to instruction, as do others when they argue about student access and outcomes (Brint, 2003; Grubb, 1999; Rhoads & Valadez, 1996; Shaw, Rhoads, & Valadez, 1999a; Vaughan, 2000). But with advancing post-industrialism and competition, as well as leaders’ efforts to increase institutional legitimacy, the smorgasbord approach and function began to abate (Griffith & Connor, 1994; McGrath & Spear, 1991; Taber, 1995).

Through the 1980s, the work of scholars, such as Arthur Cohen and Florence Brawer, Richard Richardson, Steven Brint and Jerome Karabel, and John Roueche and George Baker, as well as John Dennison in Canada, developed into a discourse that tied the institution to a more conceptually sound articulation of its purposes and identity (Brint & Karabel, 1989; Cohen & Brawer, 1982; Dennison & Gallagher, 1986; Dennison & Levin, 1989; Roueche & Baker, 1987; Roueche, Baker, & Rose, 1989). This discourse became mainstream thinking about the comprehensive community college, even among national leaders and institutional practitioners such as Dale Parnell and George Vaughan. Indeed, the comprehensive community college was an understood and accepted entity for critics and boosters alike. Historian John Frye (1994) speaks about the various and conflicting perspectives of university professors, national leaders, and local practitioners; but they share a common discourse whether they are critics or boosters. The comprehensive community college—the center of the discourse about the institution—was an articulation based upon curriculum. Several scholars categorized this curriculum (Patricia Cross, Arthur Cohen and Florence Brawer, John Dennison and Paul Gallagher, Dale Tillery and William Deegan); several critiqued its outcomes (Kevin Dougherty, Steven Brint and Jerome Karabel, Richard Richardson and Louis Bender, and Lois Weis); and several argued to strengthen the resolve of those who championed its underlying values, such as access, and yet sought improvements in organizational performance (John Roueche and George Baker, John Roueche and Suanne Roueche). Later works following along the lines of this discourse of the comprehensive community college

include Robert Rhoads and James Valadez's *Democracy, Multiculturalism and the Community College* and W. Norton Grubb's *Honored but Invisible*. Both extend the discourse through critical examination of curriculum and instruction, first of students and second of faculty as units of analysis. The so-called critics of the institution, such as Weis (1985), for example, took the theoretical position that student opportunities and outcomes were the fundamental purposes of community colleges—either community colleges provided opportunities for social mobility or they reproduced structural social inequality.

The comprehensive community college was not only conceptualized as curricula, programs, and instruction but also viewed as bounded by traditional notions of education and training, encapsulated in a closed and rational system. There was an absence of external connections in this system, such as the political economy, and in the face of post-industrialism and globalization, the conceptualization of a closed system became outmoded (Levin, 2001a). While the scholarly and practitioner literature was addressing the comprehensive community college, the institution and government policy makers were enamored with a political economy resembling, if not identical to, neoliberal ideological tenets. The institution followed a different discourse than the comprehensive community college discourse, one reflected in the term “fast capitalism,” applied by James Gee and his associates to educational change (Gee, Hull, & Lankshear, 1996). In fast capitalism, the goal is organizational transformation in the private sector, promoted by management consultants such as Peter Senge, Peter Drucker, and Tom Peters. Through organizational transformation, it was assumed that institutions could cope and thrive in a new economy. Alternate forms of operational thinking, such as Quality Management and Organizational Learning, along with ways of rethinking management and teaching in higher educational institutions, evident in the works of Margaret Wheatley and Parker Palmer (Palmer, 1998; Wheatley, 1992), found their way into the mainstream of community colleges. One salient example of this new ethos is the “learning paradigm” (Barr & Tagg, 1995) promoted to replace more traditional forms of curriculum and instruction with student-centered teaching and learning strategies loosely based upon cognitive science (Gee et al., 1996).

Almost overnight, the community college became known in national discussions as “the learning college” (Tagg, 2003). The implications for the status and role of faculty are significant as one function of a professional—expert—is replaced by another—facilitator—in this paradigm (Gee et al., 1996). Indeed, the corporatization of the

community college comes about in part because organizational members become colonized under the rubric of the all-embracing “learning college,” a condition parallel to Casey’s “colonization of the self” (Casey, 1995) in the corporate world.

Out of this combination of “fast capitalism” (or changing organizational behaviors to align the institution with the private sector) and new thinking about organizational and individual learning rises *new world college*—an amalgam of for-profit institutions such as the University of Phoenix, corporate training programs such as Motorola University, open and distance education providers, four-year state colleges, research universities, junior colleges, technical colleges, and the comprehensive community college. On-line instruction, corporate training, flexible scheduling (including fast-track programs and credentials) and the provision of baccalaureate degree programs (both with a university partner and stand-alone community college baccalaureate degree credentialing) are no longer aberrant practices but mainstream characteristics of the institution (Bailey & Morest, 2004; Levin, 2004). Indeed, some colleges highlight their research endeavors and others are accomplished in the acquisition of research and training grants, including grants from the National Science Foundation. These were not characteristics of the community college during the 1960s, nor were these the mainstream of institutional focus in the 1980s.

Additionally, social services functions and community service continue to form components of the institution, and programs such as remedial education and English as a second language remain as substantial offerings at many colleges (Cohen & Brawer, 2003). These functions and activities, along with the traditional curriculum of university transfer and occupational and vocational education, clearly suggest that the comprehensive community college, in form at least, has accompanied this alteration. Perhaps the maintenance of traditional curriculum and its structure justifies those scholarly examinations of the institution that assume traditional forms of curriculum—such as academic and vocational—are the defining characteristics of the community college. Although the many parts, including vestiges of the junior college of the 1930s and the comprehensive community college of the 1970s, suggest a complicated, perhaps fragmented institution, to a large extent *new world college* is an integrated and coherent whole. The community college has altered to become *new world college*, not simply because it has added more components but because the ideology supporting, driving, and sustaining the institution—neoliberalism—has incorporated the political economy in the mission, purposes, and behaviors of the institution.

The term *new world college* is intended both to differentiate an institutional type from its predecessor—the community college—and to provide connotations that will characterize the institution. The connotations include an allusion to the use of “brave new world,” both in the work of Shakespeare and Aldous Huxley—the former as reflection of an advanced paradise and the latter as a condition where progress has eviscerated valued qualities of human life. Furthermore, the use of *new world* is intended to invoke the new economy, with its reliance upon advanced technologies (Carnoy, 2000).

The development of *new world college* can be explained in large part from the traditional narrative of the development of community colleges in the twentieth century. Yet the discourse on *new world college* is one that focuses on external constituencies, not local students and the communities from which they come. While access, and particularly access for new student populations, dominated scholarly discussions of the community college in the 1980s (McCartan, 1983; Richardson, Fisk, & Okun, 1983), seeds of impending change emerged in the late 1980s and 1990s. In 1989, Fred Pincus recognized the progression of economic imperatives and revenue generation for community college, and Kevin Dougherty and Marianne Bakia (2000) detailed the pull of contract training for community colleges in the 1990s. In reviewing developments in Canadian community colleges since 1985, John Dennison (1995) noted that, by 1995, colleges were faced with “fiscal restraint, new clienteles, a workforce vulnerable to technological change and economic restructuring, and a clear government expectation that public institutions will emphasize greater productivity” (p. 96). Thus, community colleges in Canada were coerced into entrepreneurial behaviors “in ways never anticipated at the time of their establishment [in the 1960s and 1970s]” (p. 13). The shift away from a focus on access for all and comprehensiveness is probably a result of viewing the institution as part of a larger economic and social system, where interest groups are influenced by forces outside of education (Frye, 1994). Indeed, the recognition of a postindustrial society by a handful of scholars began to alter the discourse to address “‘new learning paradigms,’ the impact of information technology, and a shift in ...rhetoric to a ‘community economic development’ model” for the community college (Meier, 2004). Additionally and often ignored in the scholarly literature, the productivity-efficiency imperative—stemming from limited resources, especially from governments—increasingly took center stage in institutional organization and behaviors (Levin, 2001a, 2002). Thus, revised approaches to curriculum and instruction

(e.g., the learning paradigm, outcomes-based learning), electronic communications, economic development, and fiscal behaviors, such as efficiency measures as well as fundraising, began to preoccupy institutional members in the late 1990s and early 2000s.

This stretching of functions and focus for the institution—from educational change to operational alteration—is euphemistically termed “innovation” and the community college has developed a reputation over the past two decades as the innovator among educational institutions (Cohen & Brawer, 2003; Owen & Demb, 2004). Nowhere is innovation more evident than in the introduction and implementation of new technologies. The result is transformation of work through technology and managerial change in and around network enterprises (Castells, 2000). Identifying with businesses, the community college is an eager participant in conducting its business electronically. The rise of distance education, on-line learning, and computer-based management systems such as Banner and web-based information dissemination mark the community college as a progressive enterprise, altering to keep up with business and consumers (Levin, 2001a). Indeed, community colleges are arguably the exemplar of educational institutions that cater to consumers, from the low-cost price structure for their services to their goals of fitting curriculum to the demands of the labor market, thereby satisfying two classes of consumers—students and employers (J. Levin, 2005).

At the beginning of the twenty-first century community colleges have not only multiple and possibly conflicting missions (Bailey & Morest, 2004; Dougherty, 1994; Dougherty & Bakia, 1998; Labaree, 1997a; Levin, 2000a, 2004; Rhoads & Valadez, 1996; Shaw, Rhoads, & Valadez, 1999b) but also new alliances and a new identity. The alliances are with economic entities such as business and industry and political affiliations with neoliberal proponents such as those elements of government and business that foster economic development and competition (Dougherty & Bakia, 2000; Dougherty & Bakia, 1998; Grubb, Badway, Bell, Bragg, & Russman, 1997; Jacobs & Winslow, 2003; Johnson, 1995; Shaw & Rab, 2003).

An examination of the institutions’ self-characterizations as well as those of the state and the national organizations of community colleges reveals the emphasis upon neo-liberal values. Such self-characterizations do not necessarily reflect actions but rather serve as both structures for action and the formal articulation and thus legitimate claim for specific actions. The vision statement for the national organization of the American Association of Community

Colleges (AACC) announces the legitimacy claim of community colleges nationally for a central role in the nation's economy and its further development:

AACC will be a bold leader in creating a nation where all have access to the learning needed to participate productively in their communities and in the economy. Through AACC's leadership, community colleges will increasingly be recognized as the gateway to the American dream—the learning resource needed to sustain America's economic viability and productivity. (*American Association of Community Colleges*, 2005)

The economic orientation is central here: the assumption is that one learns to earn and that the American economy requires these learners. Another national organization—The League for Innovation in the Community College—characterizes itself as an innovative and dynamic organization: “The League is the leading community college organization in the application of information technology to improve teaching and learning, student services, and institutional management” (*The League for Innovation in the Community College*, 2006). There are a considerable number of connections between the League and AACC and between the League and private sector business, including advanced technology corporations.

On a system level, within Texas, for example, the Houston Community College System, with five separate colleges and a total student enrollment of over 53,000 students, notes in its mission statement in 2005:

The Houston Community College System is an open-admission, public institution of higher education offering opportunities for academic advancement, workforce training, career development, and lifelong learning that prepare individuals in our diverse communities for life and work in a global and technological society. (*Houston Community College*, 2005)

Worker preparation is aimed at the new economy, a “global and technological society.”

On the one hand, legislation and statutes at the state level for community colleges continue to refer to these institutions as public, comprehensive community colleges with a primary focus upon education in its broadest sense. On the other hand, less legal language stemming from institutions and district systems as well as from associations

such as AACC opt for a focus upon economic matters, in addition to language that indicates that teaching of students is part of the mix.

Numerous colleges' mission statements reflect a corporate identity consistent with neoliberalism and economic markets. In a recent examination, David Ayers (2005) analyzed a sample of 144 community colleges with current membership in the American Association of Community Colleges, the national organization for community colleges. He then retrieved mission statements from the internet sites of each institution in the sample and subjected them to critical discourse analysis. Ayers found that the discursive practice associated with neoliberalism within the community college mission "(a) subordinates workers/learners to employers, thereby constituting identities of servitude, and (b) displaces the community and faculty in planning educational programs, placing instead representatives of business and industry as the chief designers of curricula" (p. 545).

In Canada, where community colleges have flourished since the 1960s, the mission statements of colleges across the country reflect a neo-liberal orientation as well. Seneca College, a large suburban institution in Toronto, Ontario, reflects in its mission statement the custom of economic development and job training practices of Ontario colleges:

The mission of Seneca College of Applied Arts & Technology is to contribute to Canadian society by being a transformational leader in providing students with career-related education and training. (*Seneca College*, 2006)

The Canadian flavoring here is the reference to "society," consistent with Canada's social democratic traditions and emphasis upon the social contract (Lipset, 1989). Yet, it is business and industry and the private citizen that benefit. Lethbridge College in Alberta, located in a city of close to 78, 000 people, claims both innovation in learning and a workforce development orientation:

Lethbridge Community College's (LCC) mission and vision are grounded in workforce development. This primary purpose is accomplished through a focus that combines the highest quality career training with strong partnerships in the community. (*Lethbridge Community College*, 2006)

Camosun College in Victoria, British Columbia, the province's capital, has a student population of 7,800 credit students and 10,000 non-credit students. Although Camosun is a college with a history that

includes a substantial focus upon university transfer programs, the college's mission, nonetheless, contains reference both to economic development and to social benefits:

Camosun College is a comprehensive educational institution providing our community with access to the knowledge and skills relevant to the future economic and social development of the region. (*Camosun College*, 2006)

This is not to suggest, however, that all community colleges have evolved to a position of serving a neoliberal ideology. Indeed, numerous community colleges continue to cling to the open access, comprehensive, student-centered focus, as exemplified by Dutchess Community College in Poughkeepsie, New York:

The mission of Dutchess Community College is to provide open access to affordable, quality post-secondary education to citizens of Dutchess County and others. As a comprehensive community college, DCC offers college transfer and occupational/technical degree programs, certificate programs, lifelong learning opportunities, and service to the community. The College provides educational experiences that enable qualified students to expand their academic capabilities and further develop thinking and decision making skills. By providing a full collegiate experience, the College seeks to ensure that all students achieve their individual potential. (*Dutchess Community College*, 2005)

Dutchess's mission statement is not unlike countless other community colleges throughout the United States; there is no emphasis on economic or workforce development. Indeed, Dutchess's programs, its sponsored activities, such as a lecture series, even its "award winning" campus landscaping, are reflective of a junior college, where the goals of the college are set on preparing students primarily for academic work at four-year colleges and universities or for employment. There is no language here about preparing a globally competitive workforce or for supporting the economic development needs of the state. While a similar orientation can be noted at Pasadena City College in California, their mission statement does add an economic goal;

The mission of Pasadena City College is successful student learning. The College provides high-quality, academically rigorous instruction in a comprehensive transfer and vocational curriculum,

as well as learning activities designed to improve the economic condition and quality of life of the diverse communities within the College service area. (*Pasadena City College*, 2005)

However, none of its stated mission activities or actions directly suggest actions that will address economic conditions. Instead, the language indicates courses and programs that “reflect academic excellence and professional integrity” and “foster a creative learning environment that is technologically challenging and intellectually and culturally stimulating.” All actions are underscored by “we serve our students.” (*Pasadena City College*, 2005)

Similarly in Canada, the focus upon the more comprehensive mission of the community college is also evident. At Medicine Hat College in the city of Medicine Hat, Alberta, a city of about 55,000 people located about 150 miles southeast of Calgary, the college’s articulated mission reflects an orientation not unlike those of the colleges in the 1970s:

Medicine Hat College is a learner-centered leader in the provision of quality education, training, and services to its community. (*Medicine Hat College*, 2006)

Dawson College, an English-speaking college in the major metropolitan city of Montreal, Quebec, articulates a model mission for the comprehensive community college:

[T]he Mission of Dawson College is to provide a sound education in English to the broadest possible student population; to value the ethnic and cultural diversity of our College and to celebrate this diversity within the context of an English education; to maintain standards of academic excellence essential to our students’ future success and to provide the appropriate programs, services and technology to ensure that any student admitted has the opportunity to develop the skills necessary to achieve these standards; to continue to develop innovative and flexible educational approaches to serve the needs of our students; to affirm that the College, as a community, requires the participation and representation of all its members—students, staff and faculty—in its governance; to encourage the personal and social development of Dawson students through activities outside the classroom; to develop the role of the College as a community resource and as a centre for life-long learning. (*Dawson College*, 2006)

Aside from the emphasis upon English in a French speaking jurisdiction, the characterization here of Dawson College fits the

comprehensive community college of the 1970s and early 1980s in the U.S. as well as in Canadian jurisdictions where the model of the junior college of the U.S. was adopted (Dennison & Gallagher, 1986; Dennison & Levin, 1989).

Thus, from these examples, there is considerable contrast between those institutions that articulate a decidedly economic market orientation—one that serves the needs of business and industry—and those that champion the maintenance of the traditional comprehensive mission, with emphasis on education, in their self-characterizations. The discourse of the comprehensive community college, with its mission of access, its comprehensive curriculum (academic, vocational, development/remedial and community education), its student development focus, and its democratic governance structures (Cohen & Brawer, 2003; Levin & Dennison, 1989)—for example, in some jurisdictions there continue to be elected trustees—continues into the twenty-first century. Added to that discourse is a reinterpretation of mission and institutional features, subsuming these within the larger framework aligned with neoliberalism and corporatism. College mission statements that refer to student development, citizenry, and community as primary are either image-making devices or anachronistic as reflections of action.

The first part of the new discourse on community colleges, then, gives emphasis to external interests and the influence these wield on community colleges. Given this responsiveness to outside agencies, community colleges function as service providers with their faculty as public service professionals. As one of many service organizations in the neoliberal, New Economy, and global market nexus, community colleges seek to sell their products (curriculum and programs) to as many customers as possible. By meeting the needs of government or business, community colleges have opportunity for sales—recruitment of students in support of generating revenues from governments and of placing students in businesses. Government and business are the most important markets overall for community colleges. Similar to any diversified corporation in the twenty-first century, community colleges continually seek to reach new markets and sources of revenue (J. Levin, 2005). With each new market, new service professionals must be found to meet the market's needs.

In *new world college* faculty are more than teachers—they are consultants, salespeople, account representatives, troubleshooters—the human connection between the organization and markets. As such, community college faculty work encompasses much more than

teaching. Faculty are expected to engage in managerial work; they are the “floor models” for new technological products as well as the early educational adopters of information technology; and they interact with external interests ranging from contract training, to business partnerships, and to granting agencies. They train workers for industry; they participate in ventures with business; and they write proposals for grants and contracts. In short, they are expected to be more entrepreneurial in their practices, and their entrepreneurial behaviors are focused on economic efficiency, not necessarily educational quality. Within the framework of neoliberalism, they are what one business faculty member stated in her pronouncement on faculty as a labor force. “We are volume oriented worker bees and classified as government workers: this is the crystallization of bureaucracy” (Business faculty, Alberta College, 1998).

From the perspective of the first part of this discourse, faculty are viewed more as instruments than as autonomous professionals. They are clearly in that class of “managed professionals” referenced by Gary Rhoades in his examination of unionized faculty in the United States (Rhoades, 1998). In some cases, such as department chairs, faculty are both “managed professionals” and “managerial professionals,” subject to both close corporate controls and to reinforcing those controls over other faculty (Edwards, 2006). Indeed, community college faculty are a highly managed and stratified workforce within the field of academic labor. To the extent that community college faculty align themselves with the views and values of a corporate organization, they have become colonized, with behaviors as extensions of the corporate ethos.

Community college faculty resemble, or indeed are, New Economy workers. That is, they have become aligned with a globalized economy that values flexible, specialized production, particularly knowledge production tied to new technologies, and “multifaceted, pan-occupational team players,” who contribute to reduced costs, increased profits, or produce measurable outcomes, and expand markets (Casey, 1995). This perspective carries with it the assumption that community colleges are now different institutions from what they have been in the past. The concepts of neoliberalism, globalization, post-industrialism, new capitalism, and the New Economy suggest that advanced production relies upon new technologies and the work ethic of a labor force that is shaped by both a managerial class and corporate values, along with global competition. This further defines community colleges as organizations that function in a contemporary political economy.

FACULTY WORK: CORPORATE LABOR

Both the ideology of neoliberalism and the process of economic globalization are key contributors to the work and identity of community college faculty. Over the past two decades, the community college has prized and pursued entrepreneurial activities (Grubb et al., 1997; Levin, 2002). In numerous cases, community colleges have developed an entrepreneurial culture where economic goals, such as productivity, efficiency, and revenue generation, have moved to occupy a central place in the institutional mission (Pusser, Gansneder, Gallaway, & Pope, 2005). Accompanying and perhaps abetting this shift to an orientation of economic competition are structural and labor alterations, which include substantial increases in the use of instructional technology, the re-conceptualizing and reshaping of institutional governance, and the formation of a new major permanent workforce—part-time and other temporary faculty. Community college faculty—particularly full-time faculty—are both recipients and promulgators of these actions (Levin, Kater, Roe, & Wagoner, 2003).

As recipients, faculty are affected in both work and workload. They participate in managerial work; yet they are peripheral to substantial decision making. They are beneficiaries of technology, both hardware and software, as state funding favors new technologies and managers allocate these resources to faculty. Moreover, they are objects of managerial expectations for increased usage of new technologies and increased workloads; and they are models for students' expectations as the users and demonstrators of new technologies. With the institutionalization of a part-time labor force, a class of faculty with limited pay, roles, and responsibilities as well as second class status, full-time faculty workload increases.

As promulgators, faculty advance the neoliberal project of an economic and utilitarian orientation to college operations. They are avid adopters of instructional technologies and integrators of these technologies into the curriculum (Roe, 2003). They are participants in the policy development and implementation strategies of information and instructional technology programs. Through collective bargaining and even system-wide planning, they are party to the productivity and efficiency policies and regulations of their college; they are compliant with the management. Full-time faculty also take on an overload of teaching as part-time faculty and perpetuate the part-time role. In the context of the new economy, faculty work and faculty identity can be viewed as not only highly managed but also corporatized

(Rhoades, 1998). As a California community college president noted in 2004, there are tensions within the institution over these practices:

[S]everal faculty in our Business department and our Accounting department ...were early adopters of distance learning, and have gone in a very original direction. They're the ones who've gotten grants; they've been highlighted, and there's a level of jealousy and resentment on the part of some faculty ...[N]onetheless, there's this kind of divide. They've published books, and so there have been accusations about them making all this money, and they're charging their students extra money because they're assigning their own textbooks. That's actually been an issue in three departments where some faculty have been saying they shouldn't be doing this. (California community college president, 2004)

Community college faculty are a major labor force in the United States and constitute one-third of all postsecondary education faculty (Statistics, 2001). As a labor force of 270,000, they epitomize professional work in the New Economy and the post-bureaucratic organization: they are predominantly temporary or part time; the majority bargain collectively for a restricted compensation package; they are not only influenced but also structured in their work by new technologies; and they are agents of a corporate ideology that arguably makes them instruments and not autonomous professionals.

INSTRUCTIONAL TECHNOLOGY

In line with production processes and revenue generation, the broader sociopolitical context is an important influence on the use of instructional technology within community colleges. While technology has modified the instructional options available to community colleges over the past two decades, the rapid rate of technological progress has also reshaped the broader economy in several ways that have affected community colleges. Rapid reductions in transportation and communication costs result in companies becoming much more geographically mobile, pressuring federal and state governments to reduce government spending to attract employers. Concurrently, institutions of higher education face greater student demand because the gap in economic returns to education has grown substantially. The gap in the payoff to education is part of a general trend toward greater income inequality, which some economists partially attribute to rapid technological change (Autor, Katz, & Krueger, 1998). In addition to

increasing the general return to education, the fast pace of technological change rapidly alters the skills required to compete in the workforce. Consequently, more students seek to take courses periodically for specific training, behaviors especially important for community colleges that often provide these services. Together, these trends point to the pressures from the New Economy that have forced community colleges to educate more students without increased resources from the government.

Manuel Castells (2000) identifies the New Economy as informational in that the productivity and competitiveness of units or agents in this economy depend upon their capacity to generate, process, and apply knowledge-based information efficiently. Because higher education institutions are viewed as premier knowledge-based producers, and disseminators of knowledge in the case of community colleges, the new economic context provides these institutions with considerable pressures and challenges (J. Levin, 2005; Slaughter & Rhoades, 2004). Increased global competitiveness and an increasing focus on productivity are altering community colleges in important ways (Levin, 2001a, 2002; J. Levin, 2005). Castells (Castells, 2000) notes that the “generalization of knowledge-based production and management to the whole realm of economic processes on a global scale requires fundamental social, cultural, and institutional transformations” (p. 100).

Consistent with the trend of stagnant government funding along with greater student demand, community colleges are asked to serve more students without the provision of additional resources. At the same time, the mission of the community college has shifted from student and community betterment to a workforce development model that seeks to serve the “global economy” (Levin, 2000a). In such an environment, increased emphasis on productivity and efficiency and further restructuring, marketization, and commodification are expected. Among numerous institutional changes, such as colleges’ participation in contract training partnerships with local and foreign businesses and governments, rising tuition and fees, increased reliance upon donations from the private sector, a new focus on occupational programs (that is, allied health, business technology, and manufacturing), and a greater reliance on part-time faculty, there is an ascendant role for information technologies and emphasis upon new delivery methods for instruction (Levin, 2001a).

The use of information technology in both instruction and in administration is spreading rapidly in public community colleges and suggests that this growth reflects pressures from the greater economy.

Cristie Roe (Roe, 2002) outlines three factors that impact the selection and implementation of information technology within community colleges. The first involves government policies that provide incentives for community colleges to generate revenue, become more efficient, and meet the needs of business and industry for skilled labor. With respect to the provision of a skilled workforce, community colleges are under pressure to produce graduates who are employable, especially in the numerous jobs recently created that require mid-level management or technical skills (Autor et al., 1998). Indeed, governments directly promoted the use of information technologies in teaching and learning because their leaders make a number of assumptions about students and the needs of the economy, such as the view that new populations have different styles of learning than students in the past; that there are fewer resources available for higher education institutions and thus these institutions must realize greater efficiencies; and that the marketplace—business and industry—require technologically savvy workers (Levin, 2001a).

The second factor driving the use of information technology identified by Roe (2002) are the demands by community college constituents who want training in specific areas and flexibility in time, location, and pedagogical methods. These demands are both for greater use of technology within the classroom as well as increased course offerings through distance education, and they are especially important when considered in combination with two additional trends. First, community colleges increasingly make instructional decisions based on the preferences of their “consumers” (J. Levin, 2005). Second, the number of individuals who want additional education is rising steadily. As discussed earlier, the growing financial return on education as well as the imperative for updating one’s skills to meet the changing requirements of the labor market should increase the number of students who seek college admissions. In addition, demographic trends in many states (especially those in the southeast and southwest) result in a significant increase in the number of high-school graduates (Hebel, 2004). Given the limited availability of space at four-year institutions, considerable pressure will be placed on community colleges to accommodate these additional students.

The final factor driving the use of technology identified by Roe (Roe, 2002) is the response by community colleges to the expanding demands of their socioeconomic environments. Of special interest is the movement within community colleges to a more managerial or business-like culture, and the focus of community colleges on

the needs of business and industry rather than the local community (Levin, 2001a). Within that context, the promise of a new instructional approach that can increase efficiency and improve workforce development is and will continue to be attractive.

GOVERNANCE

The changing face of management and governance is one of the major implications of a workforce in higher education that is structured by global economic competition. As community colleges continue to respond to local economic needs and employer demands, relying more heavily on workplace efficiencies such as the increasing use of part-time labor, they have the potential to turn themselves into businesses to the detriment of their social and educational missions. An environment of high productivity, dynamic change, and competition has become the norm. Community college faculty are not only working inside the classroom but, at many institutions, they are also participating with the management in institutional governance. Although governance is viewed as a mechanism for higher education's constituents to engage in institutional decision making, this participation and particularly that of faculty may be furthering the interests of the management in increasing the productivity of the institution's workforce (Hines, 2000).

In the past decade, there has been a resurgence of interest in governance primarily as the result of the effects of corporatization and globalization in higher education (Levin, 2001a; Slaughter & Rhoades, 2004; Tierney, 2004). Corporate or bureaucratic authority threatens the professional and collegial authority of higher education faculty. Community college faculty are not immune to such pressures as commercialization, productivity and efficiency initiatives, and accountability measures generated from within their institutions and externally by government and accrediting bodies. Labor relations within community colleges are undergoing alteration in response to global forces (Levin, 2001a). As already noted, community colleges increasingly direct their operations toward the economic marketplace in order to acquire fiscal resources or to generate student numbers, which lead to government resources (J. Levin, 2005). Institutional shifts in strategic and operational planning that change from a focus on expanding educational and training opportunities for the local community to achieving economic goals motivated by values of efficiency and productivity have affected the governance of community

colleges. "The academic world is collapsing in on itself [in the form of] job training for a consumer society" notes a faculty member in 2004 at community college in California, an institution that weathered ongoing budget cuts during the 1990s and early 2000s. Management, in an effort to improve productivity and efficiency, attempted to increase employee participation in governance. Participation in governance entails sharing in the workload of managers—a behavior consistent with community colleges' integration into the global economy. This shift from labor and management competition to increased cooperation among stakeholders in governance through collective bargaining has been evident in recent years (Gilmour, 1991; Hines, 2000; Levin, 2000b).

While there is some evidence to indicate that community college faculty are not only legally permitted to participate in institutional governance but also required to participate, there is also evidence that this participation, with only a few exceptions, does not constitute authority in decision making.⁴ Faculty professional rights are structured by government legislation which vests institutional authority in government, governing boards, and chief executive officers. Governance, including shared governance in community colleges, is the prerogative of management.

Recently, professional work in higher education institutions has been described as controlled by managerialism with increased emphasis on professional management, formal planning, accountability, centralized resource allocation, and directive leadership (Deem, 1998; Hardy, 1996; Rhoades, 1998). Rosemary Deem (1998) uses the term "new managerialism" to refer to management practices and values commonly associated with the private sector. In higher education, new managerialism focuses planning and operations on market-oriented behaviors, with an emphasis on entrepreneurialism (Levin, 2001a; Marginson & Considine, 2000; Slaughter & Leslie, 1997). Institutional behaviors are increasingly oriented to generating revenues and reducing costs, economizing behaviors which are becoming customary in community colleges (J. Levin, 2005).

An organizational emphasis on productivity and efficiency and an orientation to the economic marketplace impact both faculty work and faculty values. One of the characteristics of professionals is their exercise of control over their working conditions. Autonomy in defining work and how it is to be accomplished is a signal characteristic

⁴ The one exception in North America can be found in the legal framework of governance in the province of British Columbia for public colleges, generally referred to as community colleges (Dennison, 2000; Levin, 2001a).

of professionals (Brint, 1994). Organizational patterns of new managerialism, with emphasis on productivity and efficiency, threaten faculty autonomy. The current environment of high productivity, dynamic change, and competition has become the norm for community colleges (Levin, 2001a). Catherine Casey (1995) suggests that an environment of increasing workloads, rapid change, and competition comprise an adaptive strategy for organizations and their employees in an era of postindustrial production.

New managerialism and its effects on shared governance in community colleges are grounded in neoliberal ideology and alter the formal governance roles of faculty. Traditionally in the collective bargaining process, management and faculty have exchanged monetary rewards for productivity (teaching). Neoliberalism enacted through new managerialism has created a new pattern of exchange—participation in governance for productivity. In conjunction with pressures for economy and efficiency during a period of declining resources, management may be willing to share operational decision making with faculty in return for faculty productivity, a form of commodification of cooperation. Traditionally faculty have accepted the condition of higher productivity with the reward of higher salaries—“the faculty ...has been willing to trade that high level of productivity for better salaries” notes a part-time faculty member (2004) at a community college in California. But the promise of salary and benefit increases is waning under new economic imperatives. Faculty, at least through their collective bargaining agreements, are accepting an increasing role in managing the institution in lieu of resource rewards. Faculty are asked to take on managerial roles through participation in governance—over and above their normal teaching loads. “There are increasing expectations for faculty to participate in governance,” observed a faculty member (2004) at a Canadian college. Through collective bargaining, faculty have collaborated with management in increasing their workload by participating in governance through their work on committees such as faculty hiring committees, budget committees, and long-range planning committees. Yet, participation does not equate with decision making in that the faculty role in community colleges is at best advisory (Kater & Levin, 2005; Levin, 2000b). While faculty unions may have assumed that they were extending the rights of faculty, they may have agreed simply to participate in a neoliberal regime. Thus, the concept of shared governance in the community college may not constitute advancement in joint decision making but instead an increase in faculty work and responsibility for the management of the institution.

PART-TIME FACULTY

From the perspective of managerialism, part-time faculty are clearly at a lower stratum of professional labor when compared to full-time faculty in the New Economy (Deem, 1998; Hardy, 1996; Rhoades, 1998). Although a lower stratum of professional labor, part-timers have also become crucial to the strategic plans of modern organizations. The use of part-time employees in recurrent tasks that have traditionally been fulfilled by permanent employees is promoted in current management principles. Smith (2001) sees this stance as a “paradigmatic shift” in the way that managers view the employment of part-time employees. This paradigm shift is evident in the increased, and now institutionalized, use of part-time faculty in community colleges. Senior administrators at community colleges are willing to accept the continuing exploitation of part-time faculty—even though they may not view their institution’s behaviors as exploitation—if it allows them to achieve those goals they deem essential for their colleges (Wagoner, Metcalfe, & Olaore, 2005). This exploitative use of part-timers enables colleges to increase efficiency and productivity while simultaneously increasing the authority and control of managers.

This drive toward efficiency and control exhibited by managers has affected the individual perceptions of part-time faculty. Emily Abel (1984) and Kathleen Barker (1998) have documented an important shift in the locus of control and motivation for part-time faculty. Abel argues that until the early 1980s motivation and control for part-time faculty was mostly intrinsic and based upon a belief in meritocracy. Barker noted that motives had become considerably more extrinsic by the mid-1990s. She found that part-timers were acutely aware of the new business efficiency model and its exploitation of part-time faculty. As a result, part-timers no longer blamed themselves for lacking a full-time position, but instead blamed the unjust system, a strong indication that the nature of part-time work in community colleges has changed and with it the perceptions and responses of part-timers as well. Barker (Barker, 1998) rejects the idealism of Gappa and Leslie (Gappa & Leslie, 1993), who argue that part-time and full-time faculty can form one faculty in the guise of a collegium. Barker recognizes the unequal outcomes of a competitive system, where individual economic gain is at stake.

The contradiction of workplace transformation in higher education is that it institutionalizes privilege for one set of citizens (tenured and tenure track faculty) at a cost to others. The failure of

inclusion within academe, or the success of exclusive membership, is revealed when a system of layered citizenship is constructed, made coherent, and legitimated (p. 199).

This is precisely the problem with proposed solutions to solve the part-time problem offered by Gappa and Leslie, as well as by John Roueche, Suanne Roueche, and Mark Milliron (Roueche, Roueche, & Milliron, 1995): best practices will not be implemented because they are not feasible economically. Arguably, part-time faculty conditions are more dire than in the past (California Community Colleges, 2002). The essence of the new economic use of part-timers depends on their increased exploitation, and unless there is a major crisis within community colleges resulting from the high level of reliance on part-time labor, behaviors are unlikely to change. That is, as long as community colleges are tied to economic development and private interests, and they employ the business models preferred by those interests, they will continue to view part-timers as a central means to control production costs. Furthermore, state policy that permits or even advocates the use of part time faculty exacerbates the problem.

Managerialism and the New Economy business practices it fosters have led to a contradictory labor market where temporary employees exist side by side with permanent employees. Both groups serve similar functions (Smith, 2001). Part-time employees are then forced to negotiate this potentially exploitative market on their own; those with rare skills and abilities may be valued commodities in numerous markets, while those with common skills will find themselves on the wrong side of a labor market chasm (Carnoy, 2000; Castells, 2000; Smith, 2001).

Both part-time faculty themselves and college administrators express these contradictions. Some part-time faculty speak freely about feeling exploited and marginalized, while others indicate satisfaction with their positions. The theme of exploitation frequently centers on salary. Part-timers who are dependent primarily upon the community college for their salaries are more adamant in their complaints. That is, those part-time faculty members without nonacademic employment or employment opportunity tend to be most troubled by their academic salaries. Part-timers who do not rely on their part-time salaries for economic survival express less negativity.

Employment ties to the private sector are correlated with satisfactory financial situations for part-time faculty members because those ties also add nonacademic motivations for teaching at community colleges, resulting in more satisfaction. Part-time faculty with strong

ties to business and industry tend not to portray themselves as alienated at campuses because they teach for reasons that have little to do with an academic career. For these part-timers teaching is a means to advancing their nonacademic careers. As one part-time technology instructor notes: "[in my business] teaching is a feather in my cap" (Faculty, California community college, 2004). Because these faculty members receive increased standing in their nonacademic careers by teaching at community colleges and do not focus on attaining full-time faculty status, they are not preoccupied with a lack of full integration into the campus community.

Community college administrators also present a weighted contradiction. While they express enthusiasm about the quality of some part-time faculty members and the advanced skills these part-timers bring to college programs, administrators are nearly unanimous in their view that the level of efficiency and control they need to manage their institutions could only come with the use of a large percentage of part-time faculty. Community college administrators indicate that they could not afford to run programs without the cost savings of part-time faculty. For many of these administrators their stated obligation is to their local community. One college dean (2004) indicates that "the mission is to serve the community ... We couldn't be at every place for the whole community without adjunct faculty."

Several administrators go further than stating that part-timers allow them to serve their communities, indicating that colleges are not obligated to part-time faculty. One dean (2004) is direct: "We can expand with adjuncts, or we can reduce what we are doing with adjuncts; and we don't hurt the programs; we don't hurt the full-time faculty." Here, the paradigmatic shift from full-time labor to part-time labor has become entrenched in the perceptions of community college administrators (Smith, 2001). This dean also highlights that full-time positions are both privileged and protected by the tenuous status of part-timers. From this perspective, then, part-time positions are important only for the flexibility they offer institutions, not as means for part-time faculty to earn a living wage or receive reasonable employment benefits.

Arguably, the economic savings made possible by part-time faculty have a negative impact on instruction at community colleges. Data from the National Study of Postsecondary Faculty of 1993 and 1999 (National Center for Educational Statistics, 2002) on the availability of professional development opportunities illuminate the lack of resources dedicated to part-time faculty in community colleges (Wagoner, 2004).

In both years, professional development opportunities were available to full-time faculty at a rate at least twice that of part-time faculty. The data also indicate that, on average, support increased for full-timers and decreased for part-timers from 1993 to 1999. This disparity is particularly important because community colleges are acclaimed as teaching institutions where quality of instruction is viewed as sacrosanct (Cohen & Brawer, 2003). To deny the opportunity for professional development to such a large percentage of faculty could have a negative effect on the quality of instruction at community colleges. What is particularly ironic with this finding is that during the same period scholars expounded on the importance of increased professional support for part-time faculty. The decision to exclude part-time faculty in professional development activities must be based on a desire to conserve resources, rather than improve the quality of instruction. Economic behaviors of community colleges, however, are not confined to the use of part-time faculty.

VALUES

In community colleges, the predominant expression of faculty values is at odds with the economic behaviors of the institution. Although faculty are the agents of many of these behaviors—for example, they develop and teach the curriculum that serves both government priorities and business interests—they articulate their opposition to the serving of these interests by their college. As agents of the institution, faculty are compromised. As institutional participants, faculty consent to the choices and reasoning, and indeed domination, of administrators, governments, and private businesses—those who have power over the meaning of work in the community college (Deetz & Mumby, 1995). Faculty's work as educators—teaching, the development of curriculum, counseling and advising of students, and committee service—is configured or framed within an economic and competitive context, even though their values may be based upon other principles and other goals, such as personal and cognitive development of students or the social advancement of their society. Faculty frame this tension as a conflict between education and training, between traditional institutional goals, such as student-centered, and economic interests, such as business and industry-centered, and as a tension between centralized, hierarchical decision making and decentralized, democratic or shared decision making. Yet, these tensions do not result in a condition of overt cultural conflict between faculty and

faculty, faculty and administration, or faculty and external influencers including government and business. In this sense, faculty, with the exception of the faculty unions, could be considered to be situated at the periphery of both institutional decision making and institutional influence on matters of institutional action related to purpose, even though faculty work—curriculum and teaching—is the core of institutional action.

Although faculty claim that they are central to both institutional functioning and institutional purpose, and they certainly participate in the administration of work at the community college, their aspirations for the institution are unrealized because the institution's economic goals—including training for a competitive global economy—and policies, as well as accountability measures from governments, are pursued as priorities. The press for greater productivity and efficiency by governments and other external influences, such as business and industry, coupled with a managerial model of institutional decision making has called into question the professional identity of faculty and skewed their work as educators.

One college in research conducted during 2004 serves as an example of the changed and changing context for faculty and the resultant pressures and forces acting upon their professional identity (Levin et al., 2006). For Suburban Valley Community (pseudonym) in California, student access was a paramount value, with the concept of diversity—such as student identity, difference in the content of curriculum, and institutional social and cultural events—as the emblematic characteristic of discourse. Coupled with these values were the self-proclaimed behaviors of organizational members' performance: fast-paced, high intensity, and innovative. Such behaviors led to faculty expectations of activities that are beyond the norm of expectations for community college faculty:

People are now coming into a highly competitive environment, in terms of that skill set, and so we do have many more faculty with doctorates than you might find at community colleges, [with] the kind of publication record that our faculty might have...Many of our faculty hold offices in professional organizations...We're very proud of that, and I think it has upped the ante in terms of what we're looking for from the faculty. That has provided pressures with our collective bargaining agreement as well (College president, 2004).

These pressures, along with the budget problems of the day, which reportedly led to increased workload for faculty as classes were cut and

instructors took on more students in their classes, suggest that time was the preeminent commodity for faculty:

I would say that as an instructor there is so much time required for both teaching classes and doing these extra-curricular activities and professional development, and just an atmosphere of sharing in a collegial way the aspects of teaching and learning. I think that's what everyone wants. At least that is what I hear from a lot of my faculty, that we don't take a step back from all this busy stuff to better ourselves as individuals or just exchange information that is useful in the classroom. There is just not enough time for that. ...Part of it is the culture here and that this is a busy place. There are a lot of things going on; people just don't stop (Academic Dean, 2004).

A consequence of the pressures of a high performance culture was, on the one hand, a loss of personal relationships within the institution:

People now have far-ranging interests and we're much more diverse, so you don't have that same type of collegiality that we had before. I hear this from a lot of the old-timers. I'm not quite sure what they're saying all the time. Sometimes I think they say that a lot of these other people are just not like me, that it's hard to get close to them. Others are saying it's just harder for them to get involved with other people because there are so many demands on their time (Academic Dean, 2004).

On the other hand, what was lost in an environment of productivity and competition was what some view as the integrity of higher education, a critique apt for all of higher education, not just community colleges:

Now, you have Business schools operating separately, Law operating separately, and Medicine operating separately, and within the Humanities and Social Sciences all the specialization shows up as a cluster, a constellation of institutes. They no longer have contact with the core of general education. So, the student comes in and the programs that offer the degrees say, "We're not getting prepared students." Well, most of everything is being farmed off to temporary, contingent faculty who aren't part of the system, can't do the kind of collegial governance work that is needed to develop an integrated structure, and it's all basically becoming remedial...The community college is the goal, the ideal, the image of a democratized higher education that would provide the humanized possibility for citizens in a highly technical,

democratic society, but that is being co-opted by job training. Even if it's in the area of Humanities and Social Sciences, it's still being forced to be preparatory work to some line of career development or direction. The focus disappears from the educational experience (Part-time faculty, 2004).

Furthermore, faculty use of electronic technology and the growth of distance education at the college comprised additions to not only faculty workload but also performance pressures. Yet, full-time faculty continued to teach overloads, similar to their behaviors of the mid-1990s, sustaining these workload pressures, not because of love of teaching but because of the costs of living in this high performing area of California (Levin, 2001a). Overall, however, faculty values at Suburban Valley Community College are consistent with traditional community college purposes—teaching students (Cohen & Brawer, 2003):

Although I think we do a pretty good job of it, I think we need to keep reminding ourselves that the bottom line of everything we do here is student outcome. Sometimes we get focused on “the budget” or “the hire” or “the computer” and we may or may not consider why we are buying that computer or doing that hire (Chair of Faculty Senate, 2004).

I've always believed in community colleges because I think the focus is on teaching. You're catching a lot of students and getting them in those first two years thinking right and disciplined, and then they move on to universities. I don't think there's a better program going than the 2+2 program. I wouldn't want to be anywhere but a community college (Science faculty, 2004).

Budget shortfalls—reductions from state government and increased costs for instruction and other operations—were evident in 2004 at Suburban Valley Community College. Pressures on faculty productivity—and this played out as increasing class sizes—further expanded faculty work. Faculty responses indicate that college faculty are highly industrious and focus upon achievement as manifest in faculty concern with educational quality and student learning.

Notwithstanding the expressions of faculty devotion to students and to student learning—whether in the form of student-centered learning environments or outcomes-based learning—the role of faculty as autonomous professional is compromised in *new world college*. Budget problems pressure faculty to accept more students in classes,

in spite of pedagogical objections; funding limitations are justifications for the hiring of more and more part-time, contingent faculty, so that the college mission of access can be fulfilled; and competition for resources makes colleges dependent upon resource providers including the state, business and industry, and students so that curriculum and instruction are tailored, modified, and arguably corrupted to satisfy the “customers” as well as the political and economic agendas of external influencers.

FACULTY WORK: PROFESSIONAL IDENTITY AND THE FAILURE OF NEOLIBERAL POLICIES

Unless faculty can extricate themselves and their identity from *new world college* or change institutional actions and the underlying corporate culture, this new environment of employee compliance with institutional purposes of a high productivity and market-oriented institution may constitute a more lasting norm for the community college. This condition begs the question about community college faculty as professionals. Furthermore, the parallels with the university and university faculty are obvious. In a neoliberal university (Slaughter & Rhoades, 2000), it is unclear whether faculty are autonomous professionals or professionals at all given that they are employees of a corporate institution that not only serves economic interests but also models business practice (Slaughter & Rhoades, 2000). Institutional policies of both community colleges and universities that emphasize productivity and accountability (for example, faculty evaluation, post-tenure review, and program review that are managerially directed) are blunt instruments that homogenize behaviors to make faculty manageable.

Faculty identity in the community college, in *new world college* particularly, is tied to institutional identity and the behaviors of the institution that reflect upon faculty work. One group of faculty at a Canadian college in British Columbia agreed with a colleague who noted, “We are raising money rather than teaching” (Faculty, 1997). At a Washington State college, a humanities faculty member expressed a similar sentiment. “There is pressure to create competitive delivery modes...This is a movement toward the commercialization of education” (Faculty, 1997). The president of the faculty union at a California college reiterates the view of the college as a revenue-generating enterprise. “The mission of the college is to pass students to generate money” (Faculty, 1999). He continues: “Elitism

is creeping in with the use of the internet. The quality of teaching is [being lost]. Teaching gets lip service from administrators. Money is going to technology not to faculty support. The computer is seen as a tutor" (Faculty, 1999) The image, here, is of an institution whose behaviors are not so much motivated by the traditional mission rhetoric of the open-door college but by resources and resource dependency. Thus recruitment of students, retention of students from one semester to another, the use of technology and innovative approaches to instruction, and indeed services for students are all behaviors aligned with resource acquisition or the efficient use of resources.

Neoliberal policies that encourage privatization of a public service, policies that frame students as economic entities, as consumers and commodities, policies that valorize self-help and self-interest, and policies that rely upon economic rationales for educational decisions are antithetical to the ideals of the public community college. These policies involving new managerial practices, valorization of both economic competition and private sector behaviors, increasing programmatic orientation to the requirements of business and industry, and attention to specific kinds of outcomes, including a narrow and economically rationalized view of learning behaviors, have not yielded results or ends that further the mission of community colleges.

The wisdom in continuing such projects is also in question. The community colleges are both productive and efficient in the eyes of state and provincial governments because they enroll large student populations, many of whom have few or no alternatives in training or education, and their costs are low as a school. There is little or no evidence to suggest effectiveness as a consequence of this productivity and efficiency. Moreover, the student outcomes within the neoliberal project are suspect. Student transfer rates from community college to university have not improved over the past several decades (Cohen & Brawer, 1982, 2003). Even if community colleges have become more productive in serving more students with relatively fewer resources or through increasing offerings in distance education, to what end? Is teaching, then, in the community college better in the present than in the past with the rise of new managerialism? Not according to an extensive investigation which finds little to recommend in institutional instructional performance in the late 1990s (Grubb, 1999). Are all students better served than in the past in accessing programs and further education as a consequence of a more entrepreneurial and market-oriented approach promoted by governments and institutional leaders? Not according to several examinations of under-served

students (Grubb et al., 2003; Herideen, 1998; Jacobs & Winslow, 2003; J. Levin, 2005; Levin, forthcoming; Mazzeo et al., 2003; Shaw & Rab, 2003).

Little has been achieved beyond the disheartening change to organizational regimes and cultures, what Rosemary Deem (Deem, 1998) sees as “the adoption by public sector organizations of organizational forms, technologies, management practices and values more commonly found in the private business sector” (p. 47) and the alteration of the “values of public sector employees to more closely resemble those found in the private ‘for profit’ sector” (p. 50). The abandonment of neoliberal policies for higher education is a better course. Yet as this action is far from assured, the course followed by *new world college* is one that must be monitored and explained.

The neoliberal project at community colleges has not, however, engulfed the entire institution. Faculty work by and large continues to address the educational needs of students, and institutional staff minister to students’ personal and social problems. Individual action is often unfettered by corporate demands for accountability, efficiency, and productivity. Furthermore, the rhetoric and coerciveness that surround corporate policy and practice can be evaded by the skillful employee. The treatment of disadvantaged students by administrators, faculty and staff is a case in point (Levin, forthcoming). A basic education instructor at a rural North Carolina community college reflects on the plight of some of these students:

When I get up in the morning and I have my class to look forward to and I’m happy and I’m upbeat and I come to work, sometimes I think about if I were in their shoes, that in some of their shoes, I probably would not even bother. They don’t have that much really look forward to, or, you know, they don’t have that much encouragement. (Faculty, 2003)

Yet, this instructor is focused upon the immediacy of his students and what he can accomplish with them and for them. Although he teaches pre-college composition, he is also teaching students by understanding their lives and by accommodating them in his instructional world:

There are a lot of little things that we have to [consider]. Sometimes I think at the end of the day that I’ve been walking. Because I’m an active teacher, I don’t sit at a desk and give commands. Because I’m all over the classroom and at any one time I know what just about everybody’s doing. But sometimes I feel like I’ve been walking around eggs and eggshells all day. You have to with all of their

backgrounds and all the diverse experiences they've had: you have to be very acute. If a student comes in and they're sitting there and they're not participating and you just have a feeling, you just have to know to leave them alone that day because you don't know what's happened in their environment that's causing them to be that way. Or, if they forgot to take their Ritalin or just what happened: it can be tense at times. (Faculty, 2003)

Although faculty serve as instruments of neoliberal policies, they can and do lessen their connections when they view and treat students not as economic or even institutional entities but as individuals with agency and as members of a democratic society. In numerous cases, community college students are the disadvantaged of this society, and thus faculty work at its best ministers to the misfortunes of those students. Such actions transcend neoliberal policy.

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10. SIGNALS AND STRATEGIES IN HIRING FACULTY OF COLOR

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Since the early 1960s, we have witnessed a national phenomenon as colleges and universities have undertaken a mission to increase the representation of people of color¹ on their faculties. Despite more than four decades of equal opportunity, affirmative action, and, most recently, diversity policies—men and women of color still represent only a small percentage of those in faculty positions. In reality, faculty hiring is the area in which diversity policies have been least successful. The overall pattern of representation of faculty of color is a result of individual hiring decisions. Therefore, to understand how the racial-ethnic composition of university faculties is produced (and reproduced) we focus on the individual hire (Konrad & Pfeffer, 1991).

This chapter proposes a model of signaling that explains the exchange of information between applicant and organization in the faculty hiring process. We begin by highlighting changes in the representation of faculty of color by type of institutions from 1994 to 2004.

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¹The terms “woman or man of color,” “students of color” and “faculty of color” refers to persons of African American, American Indian, Asian Pacific American, and Latino origin. In doing so, we understand that “people of color” do not constitute a monolithic group and recognize that whites are also members of a distinct racial category. And certainly by using the individual racial and ethnic categories we do not intend to imply that all persons so “designated” experience anything in a uniform way. Rather these categories are used in order to present existing data distinguishing between these groups, identify some common themes, and make overall statements about the varying experiences of the identified groups (Turner & Myers, 2000, p. 9).

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We then examine research on workplace race and gender composition relevant to understanding the hiring and diversifying of faculty. We rely heavily on research beyond higher education because of the limited amount of research on hiring faculty from underrepresented groups. We then propose a model of faculty hiring drawing upon job-market signaling² from economics (Spence, 1973, 2002), management, sociology, higher education, and present exemplary practices. Although we focus on race and ethnicity and the consequences of organizational structures and behaviors as a way of understanding how institutional and human actions may impede or further equality, we recognize that among all racial-ethnic groups within higher education there are more male than female faculty members (Beutel & Nelson, 2006) and we consider gender when it intersects with race and ethnicity and when studies consider both race/ethnicity and women.³ The reality for women of color is that their status and lives in academe are often invisible, hidden within studies that either examine the experiences of women faculty or faculty of color (Turner, 2002b).

This chapter is limited to an examination of external hiring processes in predominately white institutions (PWIs), those colleges and universities that historically have discriminated against people of color (and in many cases continue to do so). Although similar strategies may be used for external or internal hires, external contingencies, such as location and national labor market, are less likely to have a bearing on internal hiring. Most hiring is for full-time faculty positions, and our perspective is from outside the university (i.e., an external labor market). Further, we focus on tenure-track positions and full-time continuing appointments at four-year colleges and universities, because (1) these are the types of positions and institutions that are most likely to engage in full-scale searches and efforts to recruit;

² Signaling theories have been used in the study of educational transitions. In their book, *From High School to College*, Kirst and Venezia viewed “admissions and placement-related standards and policies promulgated by states and postsecondary education institutions...as policies that communicate signals, meaning, and expected behavior to...parents, students, and secondary school personnel (p. 19).”

³ Many strategies to increase racial and ethnic diversity are transferable to increase the hiring of other underrepresented groups, for example, white women, a group that continues to be seriously represented in many disciplines and fields and at the senior faculty ranks (Keohane et al., 2003; Lawler, 2006). We focus principally on the hiring of men and women of color because organizations are likely to be segregated to a greater extent by ethnicity and race than by gender (Konrad & Pfeffer, 1991). That is, people of color and white people are found in different organizations, such as predominately Black institutions and predominately white institutions whereas, men and women are found in the same organizations but in different disciplines and fields such as men in engineering and women in nursing.

and 2) these institutions have the expectation that the appointment will result in a long-term employee commitment. Moreover, full-time faculty, although declining as a proportion of the professoriate (Curtis, 2005; Gappa, 2002), continue to be the majority of individuals who shape research agendas, decide upon the curriculum, advise students, participate in faculty governance, and hire part-time faculty members.

CURRENT STATUS OF FACULTY OF COLOR

Despite four decades of legal and institutional initiatives to reduce inequalities among faculty, the demographic make up of higher education faculty in the United States, especially at preeminent universities, remains largely white and largely male (Myers & Turner, 2001; Trower & Chait, 2002). Although access to higher education for underrepresented students of color has improved, men and even more so, women faculty of color are still a small part of the professoriate. For example, in 2003 White professors accounted for 80% of all full-time faculty members in higher education. Moreover, when disaggregated by rank, 87%, 82%, and 74% of all full, associate, and assistant professors, respectively, were White. These numbers represent a moderate increase in the overall representation of full-time faculty of color in the academy since the mid-1980s. According to a 2005 report from the American Council on Education (ACE), faculty of color have experienced steady growth during the past two decades, more than doubling their numbers to over 82,000 and increasing their share of total faculty positions from about 9% to 14.4% (ACE report, 2005). Among full professors, faculty of color representation more than doubled in the past 20 years, rising from about 7,600 to nearly 17,000 (ACE report, 2005). However, Trower and Chait (2002) argue that most of the growth in faculty of color participation can be attributed to the increase of Asian-American faculty. For instance, the number of full-time faculty of color at the nation's colleges and universities increased steadily, from 65,000 positions in 1993 to more than 90,000 in 2001 (ACE report, 2005). However, among people of color, Asian Americans experienced the largest numerical increase in faculty positions, increasing by 12,800 positions between 1993 and 2001, a 51% gain (ACE report, 2005). Moreover, a closer examination of the data indicates that between 1989 and 2003 African-American faculty showed little change in overall representation (see Table 10.1). Trower and Chait (2002) suggest that if one considers the number of African-American faculty who teach at historically Black colleges and universities (HBCUs), the figures are even worse.

Table 10.1: U.S. Faculty by Race and Rank (in percent): 1989, 1995, 1997, 2003

	Faculty of Color				White Faculty			
	1989	1995	1997	2003	1989	1995	1997	2003
Professor	8	10.1	11	11.3	92	89.5	89	87
Associate Professor	10	12.1	13	15.9	90	87.8	87	82
Assistant Professor	14	16.5	17	18.9	86	83.5	83	74.5
Source: Almanac, 2005; ACE Report, 2005								

So why have higher education institutions not made significant progress in improving faculty diversity? Higher education institutions attribute the slow progress to a range of factors, including a limited pipeline, competitive hiring market, discrimination, and lack of qualified candidates (Smith, Turner, Osei-Kofi, & Richards, 2004). We propose an alternative hypothesis, suggesting that the lack of progress in hiring faculty of color can be explained by a misalignment and imbalance of national, institutional, and individual signals. In theory, there are a range of signals transmitted by the national context (labor market and legal context), the institutional context (organizational norms, history, reputation, and recruitment practices), and candidate characteristics (race, gender, graduate degree affiliation, research focus, and methodology expertise). In the next section, we examine these various signals and their potential impact on the hiring of diverse faculty.

MACROVARIABLES THAT INFLUENCE FACULTY HIRING

The recruitment of faculty, in general, and faculty of color, specifically, is influenced by macrovariables and microvariables. According to Dunnette and Hough (1991), recruitment practices, processes, and outcomes are influenced by a range of indices such as: (1) environmental factors (i.e., the labor market and legal environment); (2) organizational characteristics (including size, selectivity, and location); and (3) institutional norms (i.e., policies and practices). Following this line of reasoning, one explanation for the slow progress in diversifying the professoriate might be the inability of higher education institutions to modify their recruiting behaviors in response to changes in the national and institutional context. In this section, we highlight two macrovariables, the national recruitment context of the academic labor market and its myths and the legal landscape, which appear to affect faculty hiring in general, and faculty of color hiring in particular.

NATIONAL CONTEXT – THE ACADEMIC LABOR MARKET

According to Youn and Gamson (1994), “American higher education has moved from a period of major growth to one of steady decline, comprehensive institutions as well as other colleges and universities have been affected by substantial shifts in academic labor markets” (p. 189). Whether real or perceived, signals emerge in the form of myths and fears that shape how both the employer and the candidate view the prospect of hiring candidates of color. For example, one major labor market signal affecting the hiring of faculty of color is the shrinking number of faculty positions. Bramen (2000) argues that the question should not be who is taking all the jobs, but where have all the jobs gone? In the last thirty years, the number of available tenured-track faculty positions has continuously decreased. According to Curtis (2005), an important trend occurring in faculty hiring is that although the total number of faculty have grown since 1995 from 931,706 to 1,173,556, an increase of 26 percent, during that time the number of full-time faculty with tenure actually *decreased* by more than 2,000. Apparently, the number of faculty teaching part-time increased by 43 percent between 1995 and 2003, and part-time appointments now account for 46% of all faculty members. This increase in part-time faculty has reduced the number of available tenured-track faculty positions and consequently slowed the growth of available tenured-track faculty lines. As a result, the number of full-time faculty on the tenure track increased by only 17%, whereas the number of full-time faculty not on the tenure track increased by 41% (Curtis, 2005).

ACADEMIC LABOR MARKET MYTHS

In theory, scarce positions belong to the most qualified (White) candidates. The decrease in the number of available positions has made the competition for faculty appointments that much harder. Coupled with other indices, the hiring of tenure-track faculty in general, and diverse faculty in particular is more competitive in a labor market with less available positions. This shift in the market potentially sends a signal that tenured-track lines are valuable assets that need to be reserved for the “most qualified candidate”—which may often be code for the “best fit”—and not sacrificed on diverse faculty who search committee members may perceive as less qualified because of a range of factors that we discuss later in this chapter. It also

sends the message that faculty candidates should be geographically mobile while searching for positions; thus, further contributing to a nation wide labor market by discipline and field (Kulis, Shaw, & Chong, 2000).

Another labor market signal affecting the successful hiring of faculty is the perception that there are not enough qualified candidates of color in the pipeline and that the candidates who are available will be highly sought after and harder to recruit. However, according to Springer (2002) “research shows that perceptions about strong competition for a few qualified minority candidates, and the lack of minority candidates available for positions, are not supported in fact” (p. 14). There is a growing pool of candidates of color who have earned their doctorate. In addition to the labor market signal that there may be a limited number of candidates of color, there is also the perception that these new diverse faculty candidates are concentrated in a select number of academic fields. However, research suggests that even in fields with a relatively ample supply of minority scholars, such as education and psychology, the proportion of Black and Latino/a faculty holding positions at PWIs barely approximates the percentages of non-whites who hold doctorates or professional degrees in those fields (Springer, 2002, p. 35).

Leaky or Faulty Pipeline

A second labor market signal derived from a myth relates to the notion that the hiring of diverse faculty is adversely affected by a leaky pipeline. According to Trower and Chait (2002) “the lack of success invites another hypothesis: that the pipeline is not the basic problem. In fact, even if the pipeline were awash with women and minorities, a fundamental challenge would remain: the pipeline empties...[students] forgo graduate school altogether, others withdraw midstream, and still others—doctorate in hand—opt for alternative careers” (p. 34). They argue that from the beginning of graduate school new generations of academics are socialized by senior scholars to adapt to the dominant norms of the academy (p. 36). Consequently, although earning doctorates in ever-increasing numbers, many women and persons of color are forgoing academic careers altogether or leaving the academy prior to the tenure decision because both groups experience social isolation, a chilly environment, bias, and hostility (Trower & Chait, 2002; Turner & Myers, 2000).

Candidates of Color Cost too Much

In addition to the limited or leaky pipeline signal, a third labor market signal derived from myths is that the cost associated with hiring diverse faculty can be too high. According to Smith et al. (2004), some higher education institutions believe they are not rich enough, not in an attractive enough location, or prestigious enough to attract the few diverse candidates who may be in high demand (El-Khawas, 1990; Harvey & Scott-Jones, 1985; Wilson, 1995). However, they found that this was not the case. In fact, candidates of color reported that they did not find themselves in “bidding wars” (Bronstein, Rothblum, & Solomon, 1993; Carter & O’Brien, 1993; Collins, 1990; Collins & Johnson, 1990; Cross, 1994; De la Luz Reyes & Halcon, 1991; Delgado, Stefancic, & Lindsley, 2000). In a study, examining the faculty search experiences of scholars who recently earned doctorates with funding from three prestigious fellowship programs, Smith, Wolf, and Busenberg (1996) found that the scholars of color were not highly sought after, and that the bidding wars were vastly overstated.

LEGAL LANDSCAPE AND DIVERSITY

The second macrovariable affecting the context in which the hiring of diverse faculty occurs is the legal landscape. Recent attacks on affirmative action in *Grutter* and *Gratz*,⁴ coupled with passage of anti-affirmative action legislation in several states, have signaled to PWIs that it is no longer acceptable to use race as a factor in faculty hiring decisions. For example, Myers and Turner (1995) argued that “representation of faculty of color within the academy is both affected by and affects the threat to white male dominance (p. 88).... we find that affirmative action retrenchment efforts have had a negative effect of the representation of African-American faculty” (p. 88). Myers and Turner found that between 1992 and 1996, 16 states introduced anti-affirmative action legislation (p. 81). Between 1997 and 1998 alone, 17 states introduced affirmative action retrenchment legislation (p. 81). All told, 23 states introduced anti-affirmative action legislation between

⁴ In *Gratz v. Bollinger* (2003), a case of contested undergraduate admissions at the University of Michigan, the courts struck down the use of affirmative action measures that gave underrepresented applicants a certain number of points for their minority status in the university’s numeric based admissions process. However, in *Grutter v. Bollinger* (2003), the U.S. Supreme Court upheld affirmative action policies that made race consideration an advantage in University of Michigan law school admissions (Danowitz Sagaria & Agans, 2006).

1992 and 1998 (p. 81). Although there has been a significant attack on affirmative action, the Supreme Court's recent decisions in *Gratz v. Bollinger* and *Grutter v. Bollinger* did not directly address affirmative action in hiring (Springer, 2002). According to Springer (2002), many elements of the decisions lend support to the faculty diversity legal debate, and some lessons can be drawn from these decisions that are applicable in other contexts (p. 5). Specifically, the court's ruling in *Grutter*: (1) lends support to the argument for the educational importance of a diverse faculty; (2) endorsed the concept of deference to educators to make educational decisions; (3) reinforced strict scrutiny as a framework for the use of race in that particular context; (4) did not limit the use of race to remedial arguments, and (5) cited favorably prior decisions involving remedial race conscious hiring (Springer, 2002). Preliminary results of a national study on diversification in the academy post-*Grutter* (Wong & Turner, 2005) indicate that campus representatives are interpreting the *Grutter* ruling as having no bearing on faculty hires and/or supporting the legality of the use of race as one of a myriad of factors that can be considered in faculty hires. Approximately 20 research universities are participating in this study. Within each university, interviews and/or focus groups are held with general counsel, affirmative action officers, provosts, and women of color faculty of all ranks. The interviews focus on examining past, current, and anticipated hiring policies and practices relevant to diversity. As the implications are unclear, institutional signals related to the *Grutter* decision are varied and idiosyncratic in nature (Wong & Turner, 2005). Yet, the reality is that diversity is not legally binding and evidence is mounting that suggests the legal landscape is having an adverse effect on the hiring of racially diverse faculty. No faculty hiring program has been litigated in the post *Gratz* and *Grutter* arena and past efforts have had various successes at surviving legal challenge.

In addition to the macrovariables of the national recruitment context and legal landscape, microvariables at the organizational level such as racial-ethnic composition, affirmative action and diversity plans, and recruitment practices also transmit signals which potentially interfere with the hiring of diverse faculty. As Table 10.2 shows, the number of graduate students of color earning doctoral degrees has increased steadily from 1989 to 2004. However, the representation of faculty of color in the academy has not kept pace (see Table 10.1). In theory, the racial composition of a university that uses race neutral recruitment methods should be roughly proportional to

Table 10.2: Characteristics of Recipients of Earned Doctorates in the United States by Race/Ethnicity

Race/Ethnicity	1989	1994	1999	2004
Total (known race/ethnicity)	23,028	26,901	27,527	25,811
Asian	626	937	1,404	1,449
Black	822	1,099	1,630	1,869
Hispanic	582	884	1,184	1,177
American Indian	94	143	214	129
White	20,892	23,796	23,093	20,745
Other	12	42	102	442
Source: Hoffer et al., 2005				

that of qualified employees in the labor pool (Reskin, McBrier, & Kmec, 1999). However, when organizations inappropriately use race to approximate a person's skills, potential value, and employment costs, they are more likely to practice statistical discrimination which contributes to the underrepresentation of faculty of color entering from the qualified labor pool (Reskin et al., 1999). Therefore, it follows that all else being equal across U.S. universities, the representation of new assistant professors should closely correspond with the distribution of doctoral recipients by race as reported in Table 10.2. However, this lack of correspondence represents an imbalance between the value of an applicant to an organization and likewise the value of the organization to the applicant though the misalignment of signals. We now shift our focus to the variables that are perceived as signals as exchanged between employer and candidate.

THE MODEL

Colleges and universities have always been concerned with attracting and hiring the right kind of faculty members, and candidates have always been concerned with getting the right kind of job for their qualifications and interests. Yet, higher education institutions have limited or imperfect knowledge about an individual's future value to the organization and candidates have limited and imperfect knowledge about what the work experiences and conditions will be like in a particular university. To describe why universities hire a particular candidate and candidates accept a particular job, we propose a model that is abstracted from the reality of hiring experiences and focuses

on structural and behavioral features of organizations and markets along with perceptions, characteristics, and behaviors of individuals. We assume that hiring is a rational investment process with high uncertainty and a matter of interpreting signaling. Stated differently, faced with an investment decision under uncertainty, hiring officials and candidates are faced with interpreting signals. Thus, signaling takes place in each search with an interaction between the signals from the candidate and employer. Equilibrium occurs at the nexus of the exchange between candidate and employer when a job is offered and accepted. This balance is also influenced by macrovariables such as conditions of the labor market and legal landscape, as well as microvariables such as personal considerations and geography (i.e., location).

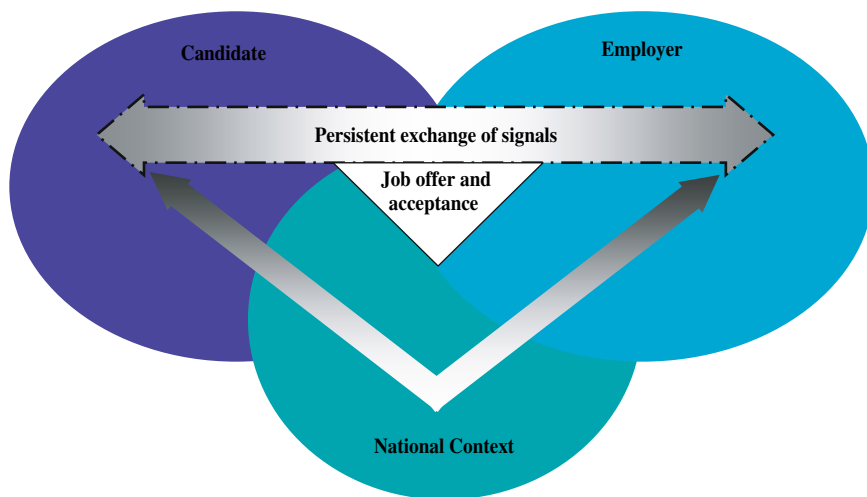
The academic labor market, like most job markets, has gaps in information (Spence, 2002). In the persistent exchange of information in the hiring process, signals are communicated and perceived by both employer and applicant in order for each to gain more complete and perfect knowledge of future value or productivity. Information gaps can exist not only between applicant and organization, but also the organization and labor market. According to Spence (1973), signaling costs can include the psychosocial as well as the direct monetary ones. However, in the absence of perfect information, applicants may interpret recruitment characteristics as signals or cues concerning unknown organizational attributes (Rynes, 1991). This suggests that when candidates are not able to assess organizational attributes like institutional culture and climate, their interaction in the recruitment process takes on greater importance. Hiring, as a marketing interaction represents an investment decision. Thus, the value of an applicant to an organization and likewise the value of the organization to the applicant is perceived through the communication between the two. Equilibrium of projected return on investment by both the applicant and employer, then, represents an ideal hiring scenario.

By identifying factors that facilitate or inhibit faculty hiring in general, the issue of diversifying faculty through recruitment, attraction, and hiring can be understood as part of the normative process of signaling and equilibrium whereby race-ethnicity is one of many characteristics that can serve as a signal rather than an additive dimension of hiring. According to Spence (1973, p. 358), "signals are alterable and potentially subject to manipulation by the applicant" and individuals are assumed to select signals to maximize the difference of

their value in the labor market and the signaling costs such as obtaining a position in an prestigious university or earning a degree in an elite university.

We propose organizational signals as observable characteristics such as job vacancy characteristics and salary which a university can alter and manipulate. Indices are personal attributes such as race-ethnicity, gender and age, religion, and sexuality which are unalterable or associated with or protected by equality or nondiscrimination legislation, but some can at times be made more or less visible. For example, organizational indices are attributes such as location and mission. The model considers organizational and candidate attraction, screening or selection. Thus, we differ from organizational perspectives which focus on organizational needs to hire and employ a productive workforce (Rynes, 1991) by considering the employer's side of hiring process including factors that may influence the applicant's motivation to pursue and accept a position. Following Rynes and Barber's (1990) work in management, we make an important distinction not found in the higher education literature between attraction and recruitment. Recruitment is a means of attracting applicants, but there are also other means to increase attraction such as modifying employment inducements (Rynes & Barber, 1990) like salary and teaching load.

Figure 10.1: Signals in the Faculty Hiring Process.



SIGNALS EXCHANGED BETWEEN ORGANIZATION AND CANDIDATE

INSTITUTIONAL CHARACTERISTICS AND NORMS

According to Wilson (1987), the prospective faculty member has two types of career decisions to make: the choice of discipline and the choice of academic setting. In searching for potential employers, prospective candidates look for information that will help them assess whether or not a potential employer is a good match for them. In this process, a range of organizational attributes are examined. For example, Turban, Forret, and Hendrickson (1998) found that organizational reputation positively influenced both applicant perceptions of the job and organizational attributes. Specifically, the results of their study confirmed the importance of applicant perceptions of job and organizational attributes for influencing applicant attraction. In theory, candidates take into consideration organizational attributes like size, informal prestige and status hierarchies, location, and institutional culture and norms to determine how attractive a particular position is and the costs and benefits of working with a particular organization.

LOCATION

Although there is assumed to be a national labor market, macro level influences create signals regarding the closeness or sense of community that scholars of color may have in a particular geographical area. Drawing upon the Kulis et al. (2000) study of Black scientists and engineers employed as full-time or part-time faculty members in 15 fields, Black scholars may desire to be close to or return to a community of origin. "When Black faculty in the 1989 Survey of Doctoral Recipients were sorted by region and by the absolute and proportional size of the Black population, it is clear that Black scientists are more likely to be found in the Southeast and Mid-Atlantic States and in cities or counties with sizable Black populations" (p. 205). This pattern is directly related to hiring practices in other sectors. For example, a business' proximity to Black population concentrations affects the likelihood of Blacks applying for jobs in that business and the business' likelihood of hiring them (Holzer, 1996). Consequently, a faculty member may apply and accept positions in response to signals from locations where there is a sizable Black community in the vicinity of a higher education institutions such as the southeast where there

is a regional and urban concentration of Black people. Likewise, the signal of having a community of origin explains the higher concentration of Latino scholars in universities in the southwest. The concept of community of origin can lend support for the use of grow your own programs to increase faculty of color representation in academe.

The signaling of acceptance, cultural identity and familiarity, and availability of services of the local community may reduce the consequence of tokenism which many faculty of color experience in their department and university. Drawing upon Kanter's (1977) concepts of tokenism and proportional representation, an individual who is the single representative or one of but a few representatives of a minority group may experience extreme work pressures and stress as a result of the majority group having unrealistic expectations, seeing the individual as the other or different, and critically scrutinizing his or her work performance. Kanter argued that belonging to a numerical minority (less than 15%) increases a group's visibility, thereby subjecting it to stereotyping of the majority. These perceptual distortions can adversely affect numeric minority member's performance. The larger the minority's numerical representation then the more likely the majority is to perceive them realistically and to relate with them without emphasizing group differences. As Kulis et al. (2000) note, when African Americans are tokens in predominately white settings, as in the case in many departments in PWIs, assumptions of incompetence of minority group members can adversely affect performance and may lead to career choices to avoid those situations. This corroborates the research findings of Jackson, Thoits and Taylor (1995), which concludes that racial rarity, as measured by the proportion of Blacks or women with whom African American leaders (such as mayors and chief executive officers) worked was related to token stress (loss of Black identity, multiple demands of being Black, a sense of isolation, and having to show greater competence) (pp. 550–551).

It is important to note that the aforementioned observations are far more complex when we consider the situations of those who belong to multiple minority groups. For example, in her article on faculty women of color, Turner (2002b) makes the following observations: Information on the experiences of faculty women of color can be invisible, buried within studies that report results under categories such as "faculty of color" or "women." Faculty women of color fit both categories, experience multiple marginality and their stories are often masked within these contexts. Her study implies that in order to address the

conflicting and anxiety provoking situations, such as those described in studies by Kanter (1977) and Jackson et al. (1995), academic administrators and policy makers must acknowledge and come to understand the racial and gender composition of their departments and the effects such composition may have on the success or failure of faculty women of color and as a consequence, possibly on the effects on departmental ability to attract diverse applicants.

In fact, as one traces the representation of women of color through the academic ranks (see Table 10.3), their numbers all but disappear at the full professor level. Regardless of their rank, women of color must overcome a myriad of barriers in order to succeed as faculty members. (Aleman, 1995; Hune, 1998; James & Farmer, 1993; Ladson-Billings, 1997; Rains, 1999; Turner, 2002a; Turner & Myers, 2000).

ORGANIZATIONAL SIGNALS

Diversity Climate

Race and ethnicity affect the extent to which job candidates attend to information about an organization's climate for diversity. People of color and women, place greater importance on diverse representation in the workplace than do members of the majority population (Ng & Burke, 2005; Thomas & Wise, 1999). Thomas and Wise's (1999) study of MBA's found that the diversity climate was second in importance only to job

Table 10.3: U.S. Full-Time Faculty Women by Race/Ethnicity and Rank: Fall 2003

	Assistant	Rank Associate	Full
White	52,754	41,816	34,363
American Indian	340	242	154
Asian	5,049	2,540	1,611
Black	5,188	3,341	1,916
Hispanic	2,509	1,523	957
Total Women	69,500	50,203	39,366
Total Faculty	153,064	132,961	166,415
Source: Almanac, 2005, p. 26			

characteristics for people of color and women in seeking professional employment. McKay and Avery (2006) contend that a higher education institution-diversity climate shaped as “applicants” develop impressions of whether an organization adheres to fair personnel practices and the degree to which minorities are socially integrated into a workplace. With these studies in mind, we expect candidates of color and women to be especially attentive to organizational conditions that signal a college or university’s diversity climate.

Numerically Significant Faculty, Administrators, and Student Constituencies of Color

The social characteristics of administrators influence human resource policies by establishing criteria for recruitment and hiring of faculty and for approval of search committees’ recommendations for hiring. They also allocate resources and monitor policy implementation and processes in the institution (Kenen & Kenen, 1978). In writing about the discriminatory organizational context for Black scientists, Kulis, Chong, and Shaw (1999) note,

“They [Black administrators] may be especially sensitive to discriminatory criteria and more vigilant in curbing their use in recruitment, hiring, or promotion. More indirectly, Black administrators can help transform organizational culture such that racial bias is minimized among decision makers. The role of administrators in reducing racial inequities in postsecondary institutions has special significance because African-Americans are somewhat better represented among college administrators than among faculty” (p. 122).

A higher education institution’s demographic composition tends to reproduce itself through its hiring practices. Using College and University Personnel Association data, Konrad and Pfeffer’s (1991) research on the hiring of women administrators in 821 institutions of higher education provides compelling evidence that newly hired administrators are typically the same race-ethnicity and sex as their predecessors, regardless of the representation in the labor pool.

The current racial-ethnic and sex composition of a university is an important manifestation of its social structure and social action. To a prospective faculty member, the composition signals attitudes and behaviors—the likelihood of contact across the institution with persons from their own and other races-ethnicities and sex (Reskin

et al., 1999) and that the candidate will be treated fairly. Because the hiring unit and the tenure accruing unit are likely to be the department, the race-ethnicity and gender composition at this level is especially important. Aguirre's (2000) critical race theory story telling of hiring practices shows how departments' actions, aligned with affirmative action policies and positions, actually can undermine the hiring of people of color by their behavior and hinder their efforts to recruit minorities.

In contrast, a department's public identification or association with academic fields or specializations related to diversity can send a positive signal. The Smith et al. (2004) study found that among 51 job searches (of approximately 700) where job descriptions indicated departmental diversity, such as ethnic studies programs or a departmental subfield reflecting diversity such as race relations or African-American literature, 47% of the positions were filled by scholars of color. This departmental or specialty designation helps an institution signal to prospective candidates an area of possible employment, but it also may signal to candidates that there may be a greater likelihood of supportive colleagues and a departmental value for what they can contribute to programmatic needs; therefore, it may attract more applicants from diverse backgrounds.

Availability of Mentoring and Networking Relationships

Another reason why the racial and ethnic composition of the institution may matter to prospective candidates of color is that the more diverse the population, the greater the probability of establishing mentoring and networking relationships with individuals who may understand the unique experiences of faculty of color. For example, in a study of women of color faculty, Mahtani (2004) found that almost all of her study participants emphasized the importance of mentoring and networking as a prime source of support. Similarly, in another study by Tillman (2002), the majority of junior Black faculty in her study expressed a need to interact with other Black faculty who shared their feelings and experiences. Tillman (2002) observed that although Black faculty appreciated their relationships with their White mentors and other Whites in their institution, in most cases these relationships did not provide the emotional, cultural, and personal support Black faculty desired.

In the absence of a diverse faculty, PWIs that have formal and informal mentoring relationships where junior faculty of color are matched with White tenured faculty mentors may be more

attractive to prospective candidates of color. Tillman (2002) reports that an increasing number of universities have implemented mentoring programs specifically designed to address the career and personal needs of faculty of color. PWIs that promote the availability of faculty mentoring programs signal to prospective candidates of color that the institution is committed to investing in their success. Mentoring and networking relationships are especially important to faculty of color who are likely to find themselves isolated as the only one of few faculty of color in their department (Blackwell, 1996; Hagedorn & Laden, 2000; Turner & Myers, 2000). For example, Boice (1992) found that faculty of color who participated in formal mentoring programs benefited from the opportunity to analyze their accomplishments and to clarify the university's expectations for new faculty. According to Tillman (2002), the lack of success for some Black faculty can be attributed to professional and social isolation and lack of scholarly productivity. The ability to establish mentoring and networking relationships with other faculty of color who can relate to the range of psychosocial and cultural isolation is vital. Tillman (2002) notes that mentors who are cognizant of the range of psychosocial demands faculty of color face in the academy can provide junior faculty of color with a sense of competence, identity, and work-role effectiveness by (1) serving as an appropriate role model regarding attitudes, values, and behaviors; (2) conveying unconditional positive regard for the mentee; and (3) by encouraging the mentee to talk openly about anxieties and concerns and giving the faculty member support that facilitates socialization and helps in coping with job stress and work demands of the new faculty role.

Institutions of higher education with relatively higher proportions of students of color may be more aggressive in recruiting and rewarding faculty of color because administrators perceive the need to have a diverse faculty in order to be more racially and ethnically sensitive and to serve as role models to students of color. Kulis et al. (1999) conclude from their study on the influence of race in recruiting Black scholars that "the consistently positive associations between the presence of Black faculty, Black administrators, and Black students, even in non-TBIs, may be tapping a global institutional climate with many facets...This climate may generate pressure to recruit Black faculty and make the institution a more attractive career destination for them" (p. 140). Institutions with diverse student bodies also provide prospective candidates of color with the opportunity to collaborate with and serve as mentors to undergraduate and graduate students of

color who may share similar social, political, cultural, and educational interests.

Antonio (2003) urges campuses undertaking initiatives to attract and retain faculty of color to remember that faculty and student worlds are not separate, each influences the other. In fact, faculty interact with students almost daily, walk through a campus where students dominate the social landscape, and develop hundreds of relationships with students, both casual and close. Students may provide important signals to faculty of color considering whether to accept a position.

Affirmative Action and Diversity Plans

The existence of diversity plans and policies signals attention to and intention to change the conditions of the organization. Diversity and affirmative action plans represent formal policies usually created by the dominant group to change the action of the dominant group. They also give public visibility to the institution's diversity discourse and its promise to promote diversity. They may make a noticeable difference in the initial stage of an institution's effort to reduce discrimination and to act differently, but they may not change the diversity culture or the composition of administrators or faculty (Danowitz Sagaria & Van Horn, 2007; Mickelson & Oliver, 1991, p. 153). These plans can fall short of their goals of implementation when they are not setting the agenda of an institution or they are treated as a bureaucratic activity. From a critical-race theory perspective (Aguirre, 2000), the plans may be seen as organizational processes that continue to reflect the unequal power relations between the majority and minority. Thus, affirmative action and diversity plans may offer mixed evidence to candidates. They draw attention to intended future activities. However, if there is a lack of monitoring of the plans, silence about the outcomes of those plans, or evidence indicating that there has not been meaningful progress in meeting goals, then the signal communicated to faculty candidates may be that cultural change has not occurred, that a diversity climate is weak, that they may not experience fairness, or they may be treated as tokens.

Senior diversity officers who sit on the president's cabinet are charged with implementing policies and practices to promote campus diversity values and goals throughout the institution. These positions must have responsibilities beyond compliance to affirmative action laws if they are to have direct input into the development of campus-wide strategies embracing the educational value of diversity. Although some

may be skeptical of the ability of such positions to change campus climate, these institutional efforts may signal a major investment in the future of the campus, which includes the development of campus diversity as part of its strategy toward academic excellence.

JOB VACANCY SIGNALS

Job characteristics send the most important signal to candidates. They frame the nature of the work the candidate will be expected to perform. As Smith et al. (2004) observe, “carefully constructing a job description represents a potential intervention that links hiring to the academic program” (p. 137). Their study of approximately 700 searches at three large elite public research universities produced important data about the conditions under which faculty of color were likely to be hired. Although their focus was on the departmental and job variables that accounted for hiring patterns by race and ethnicity, their findings suggest important signals about the kind of jobs that candidates of color are likely to be offered and accept. According to a publication of the American Association of Colleges and Universities (AACU) (Turner, 2002a), job descriptions are developed and defined in traditional ways that lead to the hiring of a scholar who looks much like the senior faculty as well as the person who just vacated the position. This phenomenon toward replication in academe is described by Light (1994). The author contends that although there is a need to cast the net widely and in different arenas when recruiting faculty of color, search committees often consist of senior faculty entrenched in the maintenance of the status quo. Turner (in press) argues that success in minority faculty recruitment depends not only on valuing difference but what that difference can bring to the programmatic efforts of a department striving to meet the academic needs of students who will participate in an increasingly fluid, diverse, and global society. Important path breaking scholarly contributions by current faculty of color are described and documented in the work of Nelson & Pillett (1997) and Turner (2002b).

Job descriptions that communicate an institution’s mission as it relates to diversity provide prospective candidates with starting points from which they can assess the institutional climate for diversity. Unfortunately, when departments define fields and categories for searches in traditional ways, they often define diverse candidates out of the pool (Turner, 2002a). As an alternative, institutions should create job announcements that explicitly stress the importance of diversity

in higher education and emphasize the meaningful contribution that diverse candidates can offer their academic institutions (Turner, 2002a; Zamboanga & Bingman, 2001). For example, institutions can construct position descriptions that are aligned with the institution's commitment to faculty diversity by (1) making sure announcements strongly express the university's commitment to recruiting faculty of color; (2) developing a broad description of scholarship, experience, and disciplinary background; and (3) asking applicants to describe their experience with diversity issues, diverse students, and working in multicultural environments (Turner, 2002a). Creating position descriptions that express a commitment to diversity, define content broadly, and solicit a variety of backgrounds and experiences signals to prospective candidates that the position is open and inclusive rather than closed and restrictive.

PROSPECTS FOR PROMOTION AND TENURE

Another important organizational signal that candidates of color attempt to discern is the prospect for promotion and tenure. In a study of 32 African-American male junior faculty at PWIs, Williams and Williams (2006) found that the lack of knowledge of the unwritten rules of promotion and tenure emerged as a dominant theme in the data. Specifically, faculty members in the study repeatedly gave responses related to the institutional ambiguity associated with what is required for promotion and tenure. Moreover, Williams and Williams' found that the Black faculty in their study identified lack of respect for research and scholarship as a dominant theme and obstacle to successfully navigating the promotion and tenure process. This theme emerged in one of three forms: (1) research interests and topics outside the mainstream; (2) the use of nontraditional research techniques to better address research questions; and (3) publishing in outlets beyond "their" (or more traditional) top-tier journals (Williams & Williams, 2006).

The notion that prospective candidates of color may fear that they are susceptible to a triple threat where their skin color, research focus, and research methods are overly scrutinized is not surprising. Ards, Britnal and Woodard (1997) contend that race and gender, separately, are factors that determine whether or not a faculty member has tenure. Additionally, other research (e.g., Hagedorn & Laden, 2000; Turner & Myers, 2000) has shown that faculty of color often feel that their scholarly credentials are devalued or largely ignored by their majority colleagues and host institutions. Often viewed narrowly as "diversity

or ethnic specialists” because of their interest in researching racial or ethnic issues, faculty of color frequently face the risk of being stigmatized, dismissed, and not regarded as credible experts in their disciplines (Blackwell, 1996; De la Luz Reyes & Halcon, 1988; Garza, 1988). In theory, this constant invalidation of the academic legitimacy of faculty of color only serves to reinforce a sense of isolation, resulting in scholarship segregation and stagnation (Alger, 1998; Gregory, 1998). For example, in the 1999 National Study of Postsecondary Faculty (U.S. Department of Education, 1999), African Americans reported the smallest number of refereed publications and presentations per two-year period, 2.5 and 9.6, respectively.

Finally, a related issue concerning promotion and tenure is the extent to which the pressure to engage in service on the part of the faculty member and the institution will be recognized and rewarded. Some scholars report that faculty of color who provide a great deal of service to their institution and the community may be punished during the tenure process (Blackburn & Lawrence, 1995; Springer, 2002), which in turn creates a service conundrum for faculty members who want to give back to their community. For instance, Springer (2002) notes that the criteria for promotion and tenure sometimes have subtle discrimination built into it. In order to minimize biases, promotion and tenure review committees should have an understanding of the committee workload of faculty of color, outside service to the community, and the different types of race-related scholarship service (Alger, 1999).

Baez (2000) reminds us of the importance and relevance of such service to many faculty of color. It gives them much needed connection with communities of color within and outside of the academy as a whole, which can translate into supportive networks for the individual providing the service. The key is finding ways to validate it, and to prominently communicate that value; not to discourage faculty of color from engaging in it.

ASSESSMENT OF FIT: APPLICANTS OF COLOR AND THE VALUE OF THE INDIVIDUAL TO THE ORGANIZATION

The research related to faculty hiring suggests that although many higher education institutions conduct faculty searches with a clear commitment to diversity and the best of intentions, personal biases and flawed recruitment practices undermine the probability for

success. According to Ng & Burke (2005), once the “threshold of perceived ability is determined; the hiring process becomes closed and preferential rather than open and competitive” (p. 8). Personal preferences and connections supersede espoused commitments to diversity. For example, De la Luz Reyes and Halcon (1991) contend that credentials alone of diverse faculty are almost insignificant in the hiring process. They argue that personal and political preferences, prejudices and fears of White faculty, and the lack of action on the part of administrators play a greater role in the final decisions. Likewise, Danowitz Sagaria (2002), based on her study of administrative searches, describes the recruitment process as one where search committee members use valutive, personal, and debasement filters to determine a candidate’s fit for the position. She argues that these filters are often used to screen candidates of color out of consideration and are influenced by the search committee’s perception of the candidate’s fit (i.e., acceptability or suitability) for the department and potential peers. In her study, good fit was operationally defined as a philosophy compatible with those of search chairs and being able to work well with others (i.e., they wouldn’t rock the boat), and that the candidate would be accepted by others in the department. Candidates are screened through the valutive filter for professional behavior, leadership and decision-making style, and their fit and image within the department and university. The standards applied are often vague, value-laden, and class, culture, or ideologically based.

In theory, organizational representatives charged with the responsibility to evaluate and recommend a qualified candidate use personal filters to assess the candidate’s signals, such as personality, character traits, attitudes, habits, family composition, and sexual orientation. Danowitz Sagaria’s (2002) study demonstrates that organizational representatives are prone to use personal filters to determine if a candidate has the appropriate cultural capital: Will the search committees value and feel comfortable with their language, presentation, appearance, and style of social interaction? In such instances, a candidate’s qualifications become secondary and the determining factor is the candidate’s worthiness of membership in this exclusive club. In addition to personal filters, she argues that debasement filters grounded in racial misconceptions are used to discredit a candidate’s qualifications. For example, Danowitz Sagaria (2002) found that in some searches subtle forms of racism emerged where (1) search chairs doubted the seriousness or genuineness of candidate’s interest; (2) committee members devalued candidate’s experience

and competencies; and (3) chairs essentialized candidates' race and expected candidates to respond to race issues. These perceptual barriers or cognitive errors (Moody, 2000) serve to undermine institutional efforts to diversify their faculty.

VISIBILITY AND NETWORKS

Although the use of personal and debasements filters on the part of organizational representatives to undermine candidates' overall value and fit are grounded in assessments of physical, cultural, and personal characteristics of prospective faculty members, other signals related to candidates' "pedigree" are also used to restrict the pool. According to Ortiz (1998), as the field of candidates narrows, the selection process hinges on connections rather than achievement: letters of recommendation become pivotal documents that rely on the prestige of the writers. In some cases, the deciding factor for candidates of color is whether or not they have connections or affiliations considered prestigious by the members of the search committee (Ortiz, 1998). For example, Mickelson and Oliver (1991) found that potential faculty candidates are most often eliminated on the basis of their graduate school and that the highest rankings tend to go to candidates from the most elite doctoral-granting programs. Reliance on personal connections and institutional affiliation can inhibit the successful hiring of diverse faculty in cases where prospective faculty members may not possess the "pedigree" or professional visibility. According to Danowitz Sagaria (2002), professional invisibility is informed by search committee's members'—familiarity or lack of familiarity with candidates and/or their ability to get information about candidates from people that they know and trust. Formal reference checks and informal networks are used to determine if an individual is known and safe. Danowitz Sagaria (2002) found that search chairs were reluctant to accept information as factual and complete unless they knew the person(s) providing a reference.

RECRUITMENT AND INFORMATION CONVEYANCE

Thus far, we have outlined how signaling theory can be used to explain the obstacles institutions of higher education face in their efforts to hire diverse faculty. In this section, we use signaling theory to frame our review of the literature related to best practices for recruiting and hiring diverse faculty.

RESPONDING TO THE NATIONAL CONTEXT

We previously argued that the slow progress on the part of higher education to diversify their faculty may be attributed to the inability of organizations to modify their hiring practices in light of the signals that can interfere with the recruitment process. In an effort to respond to this, higher education institutions have begun to engage in pro-active activities to build the pool of available candidates. In a study conducted by Turner and Myers (2000), faculty of color participants describe the importance of grow your own programs by which campuses can consider their own graduates of color for faculty positions. Furthermore, such programs can be designed to attract into the professoriate those individuals in other fields with specific disciplinary talent who are geographically bound and/or accessible. However, even though some exceptions are made, such initiatives go against the tradition of academe which maintains that prestigious institutions cannot hire their own graduates. Some faculty of color participating in the grow your own programs described by Turner and Myers indicate that other faculty, hired from the external market, feel that those hired internally were let in through the back door and were not viewed as legitimate hires causing them to consider leaving their positions.

In addition to recruiting more diverse students into graduate schools, higher education institutions may consider:

1. Establishing post-doctoral positions to provide new scholars of color with opportunities to pursue research and scholarly activities before they are appointed to tenure track positions (Turner, 2002);
2. Recruiting more doctoral students at the dissertation stage by creating summer research/teaching fellowship programs, which may be designed to allow a faculty member of color to mentor diverse candidates prior to completing their degree;
3. Contact from a faculty member of color prior to arrival would allow prospective faculty of color to be introduced to the sociocultural climate of an academic department and the surrounding community first hand; establish connections with the research/teaching faculty in their subject areas; and provide them with added professional experience (Zamboanga & Bingman, 2001);
4. Hiring retired professionals of color as adjuncts or part-time faculty or using visiting scholar/distinguished lecture programs

- in areas where faculty of color are underrepresented (Phillips, 2002);
5. Turner (2002) suggests that higher education institutions can counter the persistence of segregated networks by establishing contacts with faculty of color on campus or at neighboring institutions and by developing and maintaining ties to relevant doctoral granting institutions and national associations known to graduate and foster the professional development of scholars of color.

SETTING THE FOUNDATION FOR SUCCESS

In addition to responding to labor market signals, higher education institutions need to anticipate the range of signals potential candidates will be looking for and design inclusive recruitment processes that provide them with the best chance for attracting and hiring diverse faculty. For example, the Project on the Future of Higher Education suggests that colleges and universities initiate institution-wide processes and practices that promote community and inclusion (rather than exclusion) and ensure that all tasks undertaken by faculty are equally honored and recognized, rather than emphasizing one to the exclusion of the other (Turner, 2002a). Given that prospective candidates look for information that will help them assess whether or not a potential employer is a good fit, colleges and universities should start by building a solid foundation from which organizational transformation can occur.

The literature on best practices for diversifying the faculty suggests that colleges begin by developing a campus environment/climate which promotes inclusion and excellence. A key component of this process is leadership. The AUCC reported that institutions which experienced success in hiring diverse faculty had senior level leadership who expressed steadfast commitment and took concrete actions to support departments in their efforts to diversify faculty. These senior officers viewed incorporating diversity as a core value and stressed the importance of commitment to diversity from all levels of the institution (Turner, 2002a).

According to Turner (2002a), with strong leadership from the top, higher education institutions can begin to align department and institutional commitments to faculty diversity by establishing measurable departmental goals and maintaining responsibility for diversifying the

faculty at many levels in an academic institution. Specific recommendations include:

1. Developing an aggressive recruitment strategy and strategic plan for recruiting faculty of color (Bennefield, 1999) that explicitly incorporates faculty diversity as a goal within an overall plan for preparing graduates to be culturally competent global citizens (Turner, 2002a);
2. Creating strong incentives to promote faculty diversity through the faculty reward structure by offering mentoring professional development and research opportunities;
3. Creating a welcoming environment supportive of faculty of color by conducting cultural audits to assess the campus climate and by infusing diversity initiatives throughout the campus (Turner, 2002a);
4. Engaging campus neighbors by helping business and civic leaders in the surrounding community to see how diversity at the university has benefits for the local community. Building a stronger relationship with the surrounding community will allow institutions to include local people in creating a welcoming environment for scholars of color (Bennefield, 1999).

Implementing college and university-wide efforts to build campus environments that are committed to diversity and excellence signals to prospective faculty candidates that the organization is committed to access and inclusion.

DEVELOP AN INCLUSIVE RECRUITMENT PROCESS

As colleges or universities prepare to fill a vacancy, there are several measures that they can take to enhance the chance of hiring a faculty member of color. Keeping in mind that signaling theory proposes prospective faculty members use their experience in the recruitment process as a means of assessing broader organizational culture and climate (Rynes, Bretz, & Gerhart, 1991), education, resources, and diversity become three important conditions for creating an inclusive hiring process.

It is important to remember that any information or interaction will provide signals (or cues) concerning organizational attributes (Rynes, 1991). Therefore, it is imperative that search committees take advantage of all resources at their disposal to place them in the best position for success. For instance, Turner (2002a) advises that the

composition of search committees consist of people with different points of view or by bringing in a fresh face to ensure that multiple perspectives and fresh ideas are brought to bear in evaluating candidates. Bringing together individuals with different perspectives will enhance the search committee's ability to develop strategies, and to identify and negotiate differences (Danowitz Sagaria, 2002). In addition to appointing a diverse search committee, search chairs may also find it helpful to tap the knowledge and wisdom of other search chairs that have been successful in hiring diverse faculty members (Danowitz Sagaria, 2002). Finally, affirmative action and diversity offices offer valuable resources to departments conducting searches, such as access to national data bases and places to advertise searches, and how to write job postings that communicate the universities commitment to diversity. According to Russell (2003), affirmative action or diversity officers can offer tailored recruitment assistance and customize searches to identify minority applicants.

Unfortunately, all prior planning and leveraging of resources can go for naught if candidates do not have a positive experience during the interview process. As discussed above, the interview process may be the determining factor in an institution's effort to hire a diverse faculty candidate. Accordingly, it is imperative that organizations educate those involved in searches in order to uncover biases at the organization and individual level and hold senior level administrators and departments accountable for the behavior of search committee members and the outcomes of searches (Danowitz Sagaria, 2002). According to Turner (2002a), organizations can strive to achieve this goal by developing protocols that ensure fairness and consistency in the search process. In addition, her work underscores the importance of ensuring accountability in the recruitment process, noting that university offices that monitor hiring activities must be active participants in dialogues on faculty diversity and not be regarded as the office that simply collects workforce data to be reported to a federal agency (Turner, 2002a). Success requires that higher education institutions move beyond compliance and embrace the educational value of racial, ethnic, and gender diversity in the professoriate.

Finally, presenting the candidate of choice with a competitive employment package is the institution's most direct way of signaling to a candidate that they are a valuable commodity. Secure resources to ensure success. Resources may include professional travel expenses, providing funds for moving, help in securing spousal employment, and supporting professional development and research activities

(Turner, 2002). Institutions should develop attractive compensation and benefits packages and include perquisites such as release time, research support, and flexible course scheduling (Zamboanga & Bingman, 2001) maintain a pool of funds to supplement offers to women and minority faculty and maintain a general pool of funds for departments for hiring minority faculty where underrepresented (Phillips, 2002).

In theory, an inclusive recruitment process will signal to candidates of color that:

- Their work and not only their skin color will be an asset to the institution. They will be appreciated and respected as intellectually competent.
- The institution is aware of the unique experiences/tensions diverse faculty face in the academy, which is expressed in how teaching, scholarship, and service are rewarded.
- The institution is invested in their development and success by ensuring that support and resources will be made available to them.
- The institution, department, and program is committed to diversity and excellence.
- The institution will pay attention to the climate and conditions they will be working under.
- There are colleagues available who can serve as potential allies and mentors—someone in the institution will “have their back” and look out for them.

When the recruitment process concludes, organizations should conduct follow-up interviews with candidates who were offered a position but turned it down to find out what they could have done to more effectively recruit and promote diverse candidates (Danowitz Sagaria, 2002). Moreover, organizations can generate and analyze data related to diversity of applicants and faculty hires over a three-year period for each department. These reports should provide an overview of faculty recruitment activities, hires, and faculty turnovers (Russell, 2003).

CONCLUSION

Higher education has taken important steps in hiring faculty of color, but giant leaps are needed to achieve the academic excellence that diversification of its campus faculty can bring. It is important to understand that faculty search committee processes largely reflect the

level of commitment to diversity in specific departments, on particular campuses, and in the broader higher education community. Indeed, the search committee processes remain crucial factors in fostering institutional commitment to racial and ethnic diversity in the professoriate (Turner, in press).

Such processes not only reflect the larger institutional commitment to diversity but also serve as important signals to current and future job applicants. Institutional core values are projected by such processes. In other words, the way searches are conducted conveys institutional values and signals the commitments and interests of the institution (Turner, 2002a). This extends far beyond a single search and is not confined to those candidates interviewed:

While the goal of the search is, of course, to attract outstanding individuals to our Ohio State family, there are broader implications of the search process as well. There are few activities in which we engage that have more powerful public impact than searches. Every search committee leaves in its wake literally hundreds of candidates whose impression of Ohio State will be based largely on the courtesy, timeliness, and professionalism of our communications. Furthermore, the way searches are conducted speaks volumes about our individual and institutional values.

(Office of Human Resources at Ohio State University, 1994).

RECOMMENDATIONS FOR FUTURE RESEARCH

Our analysis of the literature points to a need for future evaluation and research that explores issues portrayed here in greater breadth and depth. Further studies critically examining formal and informal hiring routines, as well as the signals associated with practices of faculty search committees, are needed. These studies should be conducted from the perspectives of those who create a search committee, the search committee members, and job applicants. Such studies can be contextual in nature, focusing on signaling processes reflected in a single campus search committee or on several search processes within multiple campus sites. Some questions that a researcher might endeavor to answer are the following:

- Are there institutional signals that can be used across campuses to encourage the application of potential faculty of color or must signals differ by institution?

- If signaling differences that are successful in attracting a diverse applicant pool are noted at the level of the search committee rather than at the institutional level, what are they?
- In interviewing or surveying applicants for specific campus searches, are there differences in signal interpretations by race, ethnic group, and/or gender of the applicant? What implications do these differences, if any, have for the ways in which search committee hiring processes are conducted or should be conducted?
- Are there differences by race and/or ethnic group affiliation in the ways in which search committee members view the signals sent by potential faculty of color who interview on campus?
- In the evaluations of applications, including applicant résumés, what signals competence or lack thereof for search committee members? Is there anything that can be done by the campus or the candidate to further ensure a good fit or match is found?
- Finally, what disciplinary differences exist, if any, that are specific to the field of inquiry and are successful in widening or successful in limiting the applicant pools? If so, what implications do these differences have for the search committee process?

We find that there are many neglected areas of research on faculty diversity. The majority of the studies conducted on the hiring of faculty of color tend to focus on faculty of color in general. However, there exists a great deal of diversity within each racial and ethnic group. Research is needed that examines the status of faculty women and men within the subcategories that comprise a racial and/or ethnic designation. For example, in the Survey of Earned Doctorates the Hispanic category is further broken down by subcategories including Puerto Rican, Mexican, and Other Hispanic. It may be useful to examine experiences for faculty of color within subcategories of the four racial/ethnic groups typically used in many of the studies analyzed for this chapter.

In quantitative pieces, typically the status of Native American faculty is left out due to their small numbers. So this group is largely omitted in the literature. This situation points to the need to conduct more qualitative studies of Native American faculty. Asian Pacific Americans (APAs) are generally omitted from studies of under representation of faculty of color for among other reasons, the myth that they are well represented. They may be at certain levels of higher

education and in certain fields but studies show (Turner & Myers, 2000; Hune, 1998) that their quality of life as an academic merits a closer look. Also, when the APA category is disaggregated some, for example Filipinos, are not well represented in the professoriate.

In addition, we underscore the need to further examine the status and experience of women of color in the professoriate. As noted previously, “unfortunately, the lives of faculty women of color are often invisible, hidden within studies that look at the experiences of women faculty and within studies that examine the lives of faculty of color...their stories are often masked within these contexts” (p. 75). Some of this experience by disciplinary affiliation is documented in the literature (Jordan, 2005), but more needs to be done to examine the lives of women of color, including all racial/ethnic groups.

Models related to the promotion of a welcoming campus climate for diversity exist and these can be examined using the signaling theory presented in this chapter. For example, Hurtado, Milem, Clayton-Pederson, and Allen (1999) presented a model of enacting diverse environments that can be examined with a signaling lens. In their research, Hurtado et al. highlight the institutional variables that create climates that foster racial and ethnic diversity. Specifically, their research documents components of the institutional context—including the historical legacy of inclusion/exclusion, structural diversity, psychological climate, and behavioral dimensions—that encourage favorable climates for racial and ethnic minorities. Because institutions do not operate in a vacuum, the impact of external influences on an institution, such as government policy and sociohistorical context, must also be considered. For example, if the historical legacy of an institution is one of exclusion based on race and/or ethnicity, potential job applicants may continue to perceive the institution in this way even if the institution has made efforts to counter such perceptions. This legacy can be countered by signals, presented in the campus web site, that reflect the current campus mission and an articulated commitment toward diversifying the faculty. In addition, information on audits and the actions taken provide positive signals. According to Hurtado et al. (1999), structural diversity includes demographic data on the racial/ethnic composition of their faculty, staff, and students. The psychosocial dimension of diversity climate including campus constituent’s perceptions of discrimination and racial/ethnic tensions on campus. The behavioral dimension of diversity includes cross-race-ethnic interactions on campus and in the classroom, including students and faculty. Hurtado et al.’s theory is that each of these elements affects

the campus climate relative to diversity and can be studied along with other such theoretical frameworks in light of the signaling hypothesis for hiring a diverse faculty.

In addition to the aforementioned future research agendas, it is apparent from this analysis that institutional practices that continue to simply follow current signaling procedures year after year will result in faculty hiring outcomes that will not yield diverse hires. Unless institutions employ active strategies to intervene and change usual practices, little progress will be made. In general, faculty of color can be described as existing in a secondary labor market for institutions of higher education. Moving them into the primary labor market by cultivating a welcoming environment for diversity and improving communication within this environment through formal and informal signals (between the hiring unit and the pool of potential applicants) will be critical to achieving racial and ethnic diversity in the professoriate.

Finally, we must not forget that any discussion of best practices for hiring faculty of color must begin and end with the pipeline. Historically, students of color have been underrepresented in higher education, especially in graduate programs (Weidman, Twale, & Stein, 2001). Although in recent years, the number of students of color earning graduate degrees has significantly increased from 2,360 in 1990 to 4,389 in 2000 (Parker, 2003), these students are still underrepresented compared to their White counterparts who complete Ph.D.s. Some scholars (Granados & Lopez, 1999; Watson et al., 2002) attribute the low retention and graduation rates to the range of challenges that graduate students of color encounter in predominantly white environments. For example, while the completion of graduate school poses challenges for most if not all students, graduate students of color, “confront different issues and challenges because of who they are and what they represent” (Granados & Lopez, 1999, p. 136). Specific challenges include: (a) being first generation college students (Vasquez, 1997), (b) culture shock (Granados & Lopez, 1999), (c) experiencing negative feelings such as isolation and alienation (Gay, 2004; Granados & Lopez, 1999; Herrera, 2003), and (d) marginalization (Gay, 2004, Granados & Lopez, 1999). Additionally, graduate students of color have noted the lack of: (a) faculty role models and mentors (Granados & Lopez, 1999; Robinson, 1996), (b) research support (Granados & Lopez, 1999), (c) social and professional networks (Granados & Lopez, 1999; Herrera, 2003; Robinson, 1996), and (d) faculty awareness of minority needs/concerns (Granados & Lopez, 1999; Robinson, 1996). When graduate schools fail to respond to these

challenges, they signal to the pipeline of future faculty of color that the academy may not be the right choice as a career option.

According to Tierney and Rhoads (1993), "it is in graduate school where students "begin to acquire the values, norms, attitudes, and beliefs associated with their discipline and with the profession at large" (1993; p. 23). Unfortunately, many graduate schools utilize overarching models of professional socialization that rest on largely dated and white-male-normed frameworks (Becker & Carper, 1956; Bensimon & Marshall, 2000; Daresh & Playko, 1995; Kerckhoff, 1976; Weidman et al., 2001). In theory, this failure to take into consideration the cultural background of students who do not fit the dominant white-male prototype can create dissonance for students of color who are expected to strip away those personal characteristics that are incompatible with the organizational ethos (Tierney & Rhoads, 1993). Consequently, graduate students of color, for whom maintaining a high racialized sense of self is important, may choose to pursue alternative career options other than that of the professoriate where there are less likely to experience dissonance. These various experiences have the potential to dissuade graduates students from considering faculty positions as future career opportunities.

In response to this dilemma, Gay (2004) and Ellis (1997) argue that the reform of graduate education must begin with an examination of the challenges that graduate students encounter, followed by the development of strategies to overcome these challenges. These scholars recognize that graduate students will not be able to flourish in an environment in which their aspirations, self-confidence, and self-esteem are continuously reduced by a lack of support, encouragement, and professional development opportunities (Duncan, 1976; Gay, 2004). It is of the utmost importance that future research explores how PWIs can effectively educate and train graduate students of color and at the same time signal to these future scholars that they constitute the quality of America's future workforce (Long, 2003).

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11. MARKETING SAMENESS: CONSUMERISM, COMMERCIALISM, AND THE STATUS QUO

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The contentious issues between corporatization and education continue to be explored at some length in both P-12 and higher education contexts (Aronowitz, 2000; Bok, 2003; Gabbard, 2006; Geiger, 2004; Giroux & Giroux, 2004; Kirp, 2003; Molnar, 2005; Newfield, 2003; Saltman 2000; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004; Washburn, 2005). Juxtaposing P-12 with higher education illustrates that a similar economic logic governs both, and higher education institutions no less than public schools are succumbing to a commercialism and marketization that thwarts criticality. This work uses multiple illustrations from P-12 schools. Doing so in a higher education journal may seem odd to some, but the illustrations from P-12 underscore two related points: (a) students in higher education came from status-quo-building P-12 schools; and (b) higher education is an extension of those P-12 schools. While the spheres have distinguishing characteristics, I believe bridging P-12 and higher education will help clarify the issues and effects of commercialism and marketing.

My primary purpose for this monograph is to raise questions about the degree to which “diversity” and “difference” are actually marketing tools to engender homogeneity in students and faculty in both P-12 and higher education. In the process of establishing, substantiating, and extending this point, I also: (1) indicate some of the historical roots of commercial intrusion into schools and universities; (2) explore key assumptions of neo-classical economics; and (3) suggest alternatives to the current status quo acceptance of homogeneity, certainty, intransitivity, neo-classical economic foundations, and consumer materialism.

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The three goals of this monograph are not disparate and distinct; instead they ebb and flow in interconnected ways.

Theodore Levitt's (1985) work, *The Globalization of Markets*, is central to the larger point of homogeneity. Levitt argues that corporations that intend to qualify their goods and services to meet local needs and interests will fail. Indeed, Levitt's argument is that to be a multinational corporation is to miss the point. Global corporations, like schools and universities, are successful when they homogenize varying wants and needs. Levitt argues,

The multinational corporation operates in a number of countries, and adjusts its products and practices to each—at high relative costs. The global corporation operates with resolute constancy—at low relative cost—as if the entire world...were a single entity; it sells the same things in the same way everywhere.... Ancient differences in national tastes or modes of doing business disappear (p. 72).

Schools and colleges are arguably no different. For all of the “unique” characteristics and traditions specified by varying institutions, including distinctions between comprehensive, private, public, liberal arts and research institutions, schools, colleges, and universities are far more alike than they are distinct. The terms that indicate “diversity” of institutions, I propose, actually mask homogenized organizational structures that ultimately situate students and faculty at the receiving end of hierarchical management schemes that advance and perpetuate the logic of globalization and the status quo. What might it mean for concepts and realities like “diversity” and “difference” to operate in a world in which they are subordinated to pre-ordained organizational and cultural expectations?

For the purpose of this chapter, “diversity” and “difference” include race, class, gender, and sexuality but also encompass and highlight various forms of heterogeneity in educational contexts, including dispositions to question, contest, and argue. “Diversity” and “difference,” then, are the antithesis of homogeneity and conformity and while both concepts receive wide usage in professional popular discourse, I claim that they actually mask contrived sameness. Beyond the American colonization of world markets and cultures, for example, what might educators do to help students and colleagues reject status quo, homogenized expectations – particularly when differences in tastes, styles, cliques, disciplines, departments, and so forth, may themselves already be niche markets representing sameness over difference?

In the aftermath of the National Research Council (NRC) report *Scientific Research in Education* (SRE) and the shift from the Office of Education Research and Improvement (OERI) to the Institute of Education Sciences (IES), diversity appears to be subsumed under sameness for both what counts as valid research and educational achievement. Myopic emphasis is placed on replication and generalizability, structurally denying intellectual diversity and, arguably, by extension the diversity of researchers in terms of race and gender. That is, given that the sciences are inordinately populated by white men, racist and sexist repercussions of homogeneity may be exacerbated (Beoku-Betts, 2004; Davis, 1996; Nerad, 1999; Tolley, 2002). What is behind the quest for certainty—a quest that undergirds the movement toward the scientification of educational research—that seems to buttress education research, policy, and practice? More generally, what does it mean for “diversity” and “difference” to mask sameness? This monograph takes up these questions and articulates a defense of difference that requires not only an awareness of the problems but ethical and activist responses to those problems (Bakan, 2004; Cohen, 2004; Herman & Chomsky, 2002; Lee, 2000; Said, 1993; Spring, 2003). To begin in earnest, I focus on the history of marketing and forge connections between business practices and schooling in both P-12 and higher education.

HISTORICAL CONSIDERATIONS OF MARKETING

The history of marketing is instructive insofar as it reveals that the issues we might ascribe to contemporary times are not so new. According to Lisbeth Cohen (2004), at least as far back as the 1940s corporations were influenced by the survey research of the psychological and behavioral sciences. Cohen discovered that in the *Journal of Retailing*, for example, article after article discussed the target audience as the same one, a “Mr. and Mrs. Consumer” (p. 295). Essentially considered the middle class—a larger segment of the population at the time—marketers targeted that population as shopping centers began appearing in the suburbs. The group was basically homogenous, however. In 1956, Wendell Smith offered a new idea. In an article in the *Journal of Marketing*, Smith came up with the idea of market segmentation. He argued that as companies recognized that “their *core* markets have already been developed...to the point where additional advertising and selling expenditures [are] yielding diminishing returns, attention to smaller or *fringe* market segments...are of crucial importance to the

aggregate” (Smith, 1956, p. 7). According to Cohen (2004), along with marketer Pierre Martineau, Smith advanced “a new axiom of marketing, whether applied to cigarettes or refrigerators: homogeneity of buyers within a segmented market, heterogeneity between segmented markets” (p. 295).

There was rapid growth in segmented marketing, and it evolved (or devolved?) into various strands or areas of focus. One area of focus that came from market segmentation was consumer motivation. Researchers focused less on “who” buys “what” and focused more on “why” consumers bought what they bought. The research consisted of

depth interviews, Rorschach inkblot tests, thematic apperception tests, and other techniques borrowed from psychology and psychoanalysis, [and] focused on how an individual’s psyche shaped the decision to buy: how a home freezer could appeal to an emotionally insecure consumer by providing the abundance of food often associated with a mother’s love or how a shiny new and more powerful car could reassure a man of his masculinity (Cohen, 2004, p. 295).

This is arguably no different from colleges and universities using viewbooks, recreation centers, and trendy dormitories to shape students’ decisions to “buy into” their campuses (Miller, 2005, pp. 149–159).

Cohen (2004) notes that by the 1970s, the psychological work in marketing led to the birth of the field “psychographics,” a neologism that merges psychological and demographic factors in determining market segments. “Psychographics” went beyond market segmentation in the 1980s and moved into: (a) “target marketing,” such as singling out children and minorities; (b) “life-style branding,” such as selling products by attracting consumers to a specific way of life rather than the product itself; and (c) categorizing consumers with statistical precision (“such as in sixty-two distinctive ‘clusters’ of buyers, given labels like ‘Blue Blood Estates,’ ‘Shotguns and Pickups,’ and ‘Hispanic Mix Residents’) for direct marketing, telemarketing, and Internet shopping solicitation”) (Cohen, 2004, p. 299).

I want to highlight, following Cohen (2004), how a market segment, simply by its existence, does not necessarily mean that marketers will initially target that segment. Feminism in the 1960s and 1970s challenged traditional gender roles. The irony is that neither mass marketing nor segmented marketing focused on those changes in society—that is, as Cohen shows, not until feminist action

was taken against CBS, *Ladies Home Journal*, and certain Madison Avenue agencies. The point is that feminist practices were co-opted for consumerist purposes. In challenging traditional gender roles, feminists soon became a new market “for everything from douches appropriate for ‘Women’s new freedom’ to a feminist television character named Maude” (Cohen, p. 316). “In typical fashion,” Cohen reminds us,

after pressure from women led Congress finally to prohibit sex discrimination in the credit market in 1974, the United States League of Savings Associations did an about-face and began looking at the women they long had scorned as ‘an untapped market,’ in the words of its spokesperson. Though marketers sometimes misjudged what would appeal to feminist consumers, the women’s liberation movement at least inspired them to try to turn feminist defiance into consumer compliance (p. 316).

Yet, feminists were not the first to have their work exploited by the market. From the 1930s through the 1950s, African American media and a growing number of marketing firms attempted “to convince mainstream advertisers to incorporate the ‘Negro Market’ into their selling campaigns, both for the symbolic recognition and the expected boon to their own coffers” (Cohen, 2004, p. 323). The effort was, in part, to develop a kind of “color blind” advertising—one that would go beyond racist stereotypes and rid media of caricatures like the bandanna-wearing Aunt Jemima and the wide-eyed, mop-headed “Topsy” child (Weems, 1998). The issue of color-blindness underscores one of the other ironies of segmented markets. In the quest for equality, African-American interests in “being the same” initially meant an assimilative agenda. This was co-opted by marketers, who in their quest for profits were interested only in segmentation, arguably a form of segregation, as D. Parke Gibson (1969) has argued.

Concerning the ironies of marketing sameness to diverse groups, Cohen (2004) is worth quoting at length here:

Market segmentation around race...has had a complicated impact on the economics of African American communities. In an irony that has been much lamented in recent years, the growing responsiveness of mainstream, usually white manufacturers, marketers, and retailers to black demands for recognition in the marketplace often contributed to the demise of separate black business districts, stores, and even products. Black makers of beauty aids, for example, long dominant in this market sector, virtually collapsed when mainstream cosmetic companies like Revlon, Avon, and

Clairol began aggressively pursuing African American consumers. With the concept of a segmented black market, often serviced by white companies, taking the place of a separate black economy, blacks may have received more recognition in the white world, but at the cost of investment in a black one. Between 1969 and 1984 the proportion of black income spent in black-owned businesses dropped by half, from 13.5 percent to just 7 percent; most shocking over this period, blacks' retail hair-care purchases from white-owned general-market firms shot up from essentially nothing to 70 percent of all sales (p. 327).

As ethnicity became the focus of marketers, more and more minority groups modeled themselves after African Americans in terms of their consumer power. Chicano and Indian subgroups were among the first groups to assert themselves, followed by immigrants from Asia and Latin America and second- and third-generation Americans of Irish, Italian, Polish, and Jewish decent. While identity politics may be caught up in this move, marketers were most interested in exploiting ethnic consumers whom they found "sufficiently idiosyncratic and hence segmentable" (Cohen, p. 329).

More importantly, the shift from mass marketing to segmented marketing did not affect subgroups in the same way. Segmentation may have highlighted and reinforced particular identities while also providing a form of consumer power to otherwise disenfranchised groups like teenagers, Latino/as, feminists, and African Americans. Cohen (2004) suggests that African Americans used the marketplace and consumption as a "battleground in the struggle for civil rights" (p. 331). In contrast, however, Cohen also notes:

the ambivalence of mainstream marketers toward embracing homosexuals as a market segment.... Advertisers have most commonly targeted the gay market through a dual marketing approach, what they call 'gay window dressing,' where the ad avoids explicit reference to homosexuality but sends clear signals to gay males and lesbians (p. 331).

Underscoring the foregoing histories and examples is the idea that none of it took place by happenstance. Part of a structured, engineered campaign on the part of a burgeoning advertising industry, the goal was "productive capital" (Lee, 2000, p. xix). In fact, as Stuart Ewen (1976) points out,

it became a central function of business to be able to define a social order which would feed and adhere to the demands of the productive process and at the same time absorb, neutralize, and contain the transitional impulses of a working class emerging from the unrequited drudgery of nineteenth-century industrialization (p. 51).

Such absorption, neutralization, and containment are consistent with homogenization insofar as they each represent restrictions on growth and individuality. Andrew Wernick (1991) pushes the point further by maintaining that

during the course of advanced capitalist development the globalization and intensification of commodity production have led to a crucial economic modification in which (a) with mass production and mass marketing the moments of distribution, circulation, and exchange have become as strategic as technical improvements in production for profitability and growth, and (b) through commodity imaging the circulation and production processes have come to overlap (p. 185).

Mass production and mass marketing, what might be called the “massification” of society and culture, are also features of homogenization (Scott, 1995). For massification, the implication is that the larger the group, the less important and influential the individual. While this implication follows, the point should also be extended to include systems and rules constructed to support a governing structure *for* the masses. Accordingly, merit schemes, hierarchical organizational charts, and other such economistic contrivances become useful tools for managing and manipulating the masses.

Along similar lines, Douglas Kellner (2000) notes that the effects and consequences of marketing “represents the triumph of the economy over politics and culture...and the hegemony of capital over all other domains of life” (p. 307). Henry Giroux (2004) contends that under market-driven globalization, “capital removes itself from any viable form of state regulation, power is uncoupled from matters of ethics and social responsibility, and market freedoms replace long-standing social contracts that once provided a safety net for the poor, the elderly, workers, and the middle class” (p. 59). Uncoupling power from ethics and social responsibility means divorcing individuals from transitive action and allowing consumer materialism to function *as* culture. The economy *qua* markets and marketing must also become disconnected, “uncoupled” from issues outside of neoclassical economic rationality.

One result of the divorce between ethics and social responsibility is the pervasiveness of consumer materialism in (or as) society.

CONSUMER MATERIALISM AND TRANSITIVITY

Consumer materialism is the sole or primary focus on goods and outputs. This logic is present when students want to know how little they have to do in order to “get” a passing grade, or when they wonder if they are going to get their “money’s worth” for a course. Consumer materialism circumvents process in favor of product. It is also the valuing of easy answers over difficult investigation. Linked to convenience, consumer materialism manifests itself in schools via, as one illustration, business partnerships, when the ends or goods (e.g., exclusive cola contracts, “free” pizza, trips to amusement parks, rewards for promoting “partner” logos, etc.) become the focus, and when that focus is not analyzed or investigated. Stated differently, consumer materialism commodifies existence by transforming inquiry, being, and thought into objectified and reductionistic particulars.

For both P-12 and higher education, it means, in part, that students see their roles as seeking “right” answers to questions instead of searching for meaning by questioning and contesting. Similarly, teachers see their roles as seeking preordained procedures that will allow the efficient transfer of information from them (or the adopted texts/curriculum) to their students. Accordingly, consumer materialism engenders passivity and homogeneity and renders mute any questioning or analyzing of the ideological, symbolic, and practical consequences of neoclassical economics and commercialism. The notion of passivity might best be seen in terms of transitivity, of which three levels (intransitivity, semi-transitivity, and critical transitivity) exist.

The three levels of transitivity come from Paulo Freire (1973). Intransitivity means “noncritical (in)action.” Ira Shor (1992) clarifies that intransitivity repudiates the power of individuals to change their existences when, for example, teachers claim “I can’t speak out about commercialism because my school might lose funding in the form of school-business partnerships...that’s the ‘real world’ and I can’t do anything about it” (p. 128). Semi-transitivity is characterized by individuals who see the world as changeable, but they also see that world in unrelated segments. Semi-transitivity, then, is two-dimensional and short term. Business groups may donate money, time, or materials, for example, but teachers do not ask whether businesses

are getting tax credits, free advertising, or other “perks.” Faculty in higher education may receive a grant for specialized research, but do not ask whether the funding agency will influence the process, findings, or application of the results of the study. In addition, faculty in colleges and universities may see “faculty governance” as a central responsibility, but despite service’s critical possibilities they may not realize that such “governance” also means surveilling colleagues, doing increased service and clerical work for administrators, and taking up large amounts of time on committees that might otherwise be spent on research or teaching.

While intransitivity and semi-transitivity are visible in schools and universities, Freire’s ultimate goal—critical transitivity—is rarely evidenced. Critical transitivity is demonstrated when individuals make, according to Shor (1992), “broad connections between individual experience and social issues.... In education, critically [transitive] teachers and students synthesize personal and social meanings with a specific theme, text, or issue” (p. 129). Students and teachers who critique commercialism, marketization, school-business partnerships, and the like, rather than seeking them out or simply participating in them without question, are demonstrating, in minor form, what critical transitivity entails.

My point of connecting consumer materialism and critical transitivity, and both to marketization and homogenization, is to use these concepts as object lessons. Centering critically transitive action within school and university contexts is vital to engaging both students and faculty in debates and arguments. These debates could focus on, for example, the motives for market hegemony in schools, the benefits and problems with neoclassical economics, and the limits and possibilities of commercialism. Are marketers and businesses altruistic in their “support” of schools and colleges? How much time and money is spent by P-12 school districts in “human hours” securing and maintaining school-business partnerships? How do contracts and grants influence intellectual property rights of faculty? If businesses paid non-reduced taxes (many businesses get tax reductions for locating in particular areas), would the dollar amount of their “contributions” to schools be greater or smaller than what they would have paid if they had not received a tax break in the first place? These are the kinds of questions that critical transitivity requires and are also questions that, by virtue of their being formed and asked, challenge consumer materialist assumptions regarding easy answers and convenient, simple conclusions.

Critical transitivity utilizes processes of investigation that do not accept the impervious realities that Maxine Greene (1988) calls the “givens” of an imposed “real world” (p. 22). Students and faculty would be better off questioning their own schooling and institutional structures, and how they maintain them, while they are subjected to them. Unfortunately, formal and sanctioned opportunities for questioning are limited by institutional demands on evaluating, grading, and preparing for future market-driven achievements. What one sees instead are students simply preparing for a job, or faculty simply seeking promotion, tenure or merit raises. The concern here is that homogenization inherently inhibits questioning and instead helps develop uncritical consumers rather than critically transitive citizens. This happens, in part, by institutionalizing homogeneity in the form of, say, governance structures or the “grant culture.” Often accepted uncritically by colleges and universities, grants illustrate institutional homogeneity and “givens” when they become “beyond question.” Unwilling or unable to raise questions (for fear of losing funding?), faculty often demonstrate for each other and their students what it means to accede to the “given” of commercialism and consumer materialism.

Similarly, for P-12 teachers, acceding to the given may take the form of uncritically participating in “Coke Day” or pizza-party-enticing reading programs, or even permitting their classrooms to become advertisement-riddled. One result might be that schools actively homogenize students with their commercial expectations. On this view, they harbor non-criticality and confer diplomas to students (and employ teachers and administrators) who are unable or unwilling to raise questions about motive, meaning, and the consequences—both positive and negative—of supporting market influences in schools. A cycle is established, then, where market expectations for schools beget schools that push products, provide free advertising, and “produce” future homogenized, if segmented, consumers who, in turn, favor and support neoclassical economic interests (explored in greater detail shortly) and corporate involvement in all levels of schooling.

SEGMENTING DIVERSITY AND DIVERSIFICATION

Granting the reality that marketing represents a structured, engineered campaign on the part of an ever-expanding advertising industry in the U.S., it also follows that global marketing efforts are engineered. Those efforts are largely driven by U.S. neoclassical economic interests.

The result, if U.S. history is any indication, is a kind of ironic homogenization by way of difference. That is, while marketers ultimately abandoned mass marketing in favor of segmented and targeted marketing, the bottom line was, well, *the bottom line*. The differences that existed in ethnic and cultural contexts are now reconceptualized primarily as opportunities to exploit them for profit, as the previous discussion on the exploitation of the work of feminists in the 1960s and 1970s illustrated. The reason the United States League of Savings Associations did an about-face and began looking at the women they long had scorned as “an untapped market” is because of a change in law that would have meant their competitors would have profited instead of them if they continued to deny women their worth.

Extending this point, we might wonder if the shifts between quantitative and qualitative methods in education research reflect the similar uses of “difference.” As Bill Readings (1996) explains (in the context of the culture wars), the variation between quantitative and qualitative, conservative and liberal, and so on, misses a broader point. Qualitative listings of “difference” (e.g., mixed-race lesbian from Kentucky or white male from Ukraine) indicate, for Readings, that each individual is merely “one victim of homogenization” and that “the effect of multiculturalism [‘diversity’] is necessarily to homogenize differences as equivalently deviant from a norm. This is why multiculturalism replaces national cultural policy for global economy” (p. 113). In place of individuals as “subjects,” Readings substitutes “singularities,” since singularities negotiate and do not (indeed, cannot) “achieve total self-consciousness” (p. 116). “To put this another way,” writes Readings,

the singularity is a *minimal node of specificity*, which is not structurally homogenized as a subject. This does not make the singular individual a kind of “free radical,” to use the language of physics. Singularities are homogenized in mass culture (which makes them into consumer subjects of the public sphere or civic society). In this regard, consumerism is a major index of the insufficiency of the notion of the subject, since traditional accountings for “the subject” cannot even explain why we like to shop, although we know it is a mode of self-victimization not a free and autonomous act (p. 116).

For minority “subjects,” in their various efforts at representing themselves as part of the whole, segmentation ostensibly meant gaining visibility as part of the push toward civil rights. But for the marketers,

segmentation has a very different utility. For the latter, segmentation yields, say, Black faces in ads that still promote generic, status quo values, including appearance over reality and consumption over all. There *are* still those “subjects” who understand this point and actively seek to resist it (particular people within Adbusters, for example), but millions of other “singularities,” often minorities, are being sold goods that arguably homogenize and stereotype them hegemonically. With minority entrepreneurs using segmented marketing to identify minority consumers to sell micro-homogenized goods, how can this ever represent actual “difference”? Similarly, gays and lesbians suffer the same fate at the hands of gay entrepreneurs. That is, the market is segmented for the purpose of identifying customers who are arguably sold goods that homogenize the segment itself. Diversity becomes bracketed, thus sequestered, segregated, and “subjected.”

For children and students, the homogenizing characteristic may be “cool;” for faculty, as I explain later, it is their institutional role (e.g., service, promotion and tenure, etc.) and, increasingly their “grants.” The irony here for children and students is that in the quest to be “cool,” what that means changes while the idea continues to exist. As Juliet Schor (2004) claims:

Part of the genius of cool is its versatility. Cool isn’t only about not being a dork. Cool takes on many incarnations. It can incorporate dork and jock, if necessary. It can be driven by neon or primary colors; it’s retro or futuristic, techno or natural. Today, Target is cool. Yesterday it was the Gap. Good-bye Barney. Hello Kitty. By the time you read these words, today’s cool will not be. But although cool is hard to pin down, in practice it centers on some recurring themes, and these themes are relentlessly pushed by marketers in the conception and design of products, packaging, marketing, and advertising. At every step, these principles apply (p. 47).

For university faculty, substitute the term “marketers” with universities, foundations, and the U.S. Department of Education. These organizations and institutions set the expectations and protocols, and faculty work hard to meet them in order to get tenure and obtain grants. In this way, faculty members seek to be “cool,” too. They participate in the very processes that govern their lives; they hegemonically govern themselves.

Ewen’s (1976) point that the central function of business has been to define a social order that would feed and adhere to the demands

of neoclassical economics now can be applied to higher education. Universities are social orders, following Ewen, that go beyond feeding and adhering to marketization and commercialism; they *are* markets themselves. While it seems to me impossible to imagine universities *outside of* markets, the larger point is not to argue for the destruction of markets, but for a reformation of them. I discuss this point later when I investigate neoclassical economics and post-autistic economics specifically. But before then I want to focus on marketing researchers and their methods and how they raise specific ethical concerns—much like faculty researchers and their methods.

ETHICAL CONSIDERATIONS

Consultant and psychologist Michael Cohen conducts in-school surveys by approaching schools with what sound like non-profit-oriented topics and with what appears to be non-commercial motives (Schor, 2004). But his motives quickly become clear when one attends carefully to his surveys, in which questions about “particular brands or spending habits are buried in the back of the survey, attracting less notice” (Schor, p. 114). Importantly, as Schor points out, while some schools ask to see his surveys in advance, not all schools do so. Students are not made aware of the underlying motives of the surveys and valuable classroom time is spent administering what, in effect, is private-market research in public schools. Furthermore, in schools where this and other forms of market research are done, they make use of passive consent, in which parents have to explicitly inform the school that they do *not* want their children involved in the research. If parents are unaware of the nature of the marketing research, how would they even know to raise an objection?

For higher education, the issue of informed parents becomes less clear, if no less important when credit card debt builds up for undergraduates (Palmer, Starr, Pinto, & Parente, 2001). In the 1990s, bankruptcy filings for people under 25 rose 51%, from 60,180 in 1991 to 118,000 by 1999 (Haddad, Patel, & St. Pierre, 2001, p. 48). The ethical point that comes prior to the dire consequences of bankruptcy, however, is that credit card marketing on college campuses is akin to the marketing questions inserted in P-12 surveys. By having students fill out applications themselves, with no co-signer, credit card issuers knowingly supply students with cards that carry balances larger than those that have a parental co-signer (Palmer, Starr, Pinto, & Parente, 2001). This is a form of economic exploitation since college

students are inordinately unaware of the risks associated with their action.

Peer-to-peer marketing is another example of questionable ethics by marketing firms hoping to secure vulnerable market segments. Perhaps the most notorious example of peer-to-peer marketing is the Girls Intelligence Agency (GIA). Founded in 2002, the GIA recruits girls via a website and trademark product—Slumber Party in a Box. In essence, the

host girl (a GIA agent) invites up to eleven of her friends to the party. Their first instruction is to put on pajamas and ‘eat too much junk food.’ Then partygoers are given a product sample that they use during the evening. That’s the only payment for the agent or her guests (Schor, 2004, p. 77).

Schor clarifies that the host

is required to provide feedback to GIA after the event. The party becomes a natural, intimate focus group or sales session. Sometimes parties are videotaped with GIA staff in attendance, but most are run by the agents themselves. When they sign on [to the website], hosts are congratulated for winning the “distinguished honor” of becoming an “Official GIA Agent,” described as a “VERY ELITE GROUP” with “EXCLUSIVE” access to products and events. Then they’re asked to “be slick and find out some sly scoop on your friends,” like what they’re listening to, what the fashion must-haves for this year are, and what they buy for their bedrooms. The company’s literature explains to agents that they’ve “gotta be sneaky” in promoting GIA (p. 77).

With the number of girls participating, and given that market researchers estimate that each girl can reach 512 other girls (from classes at school to after school sports to carpools and churches, etc.), GIA estimates, according to Schor, that it can reach 20 million girls across the country.

There are numerous troubling aspects of this example, but Schor focuses on the exploitation of one of the most private relationships humans have: friendship. Under the logic of GIA, friends exist to help companies sell goods and services. “Marketers,” notes Schor (2004),

are teaching kids to view their friends as a lucrative resource they can exploit to gain products or money.... But friendship is important precisely because it is insulated from commercial

pressures. It is considered one of the last bastions of non-instrumentality, a bulwark against the market values and self-interested behavior that permeates our culture (pp. 77–78).

Beyond this point, it would be interesting to know the demographics of the slumber party along at least class and race lines. My suspicion is that they reflect the homogeneity of the market segment “pod,” that is, sameness within groups even though differences exist among groups. Whatever those differences are, however, is it not the case that status quo expectations of success, prosperity, and an odd quest for sameness, pervade many if not most of those “pods”?

One may think that the logic of peer-to-peer marketing would not apply in higher education, but it does, albeit in different form. This logic now gets reconstituted in, for example, faculty-to-faculty expectations for promotion and tenure. In place of GIA agents, faculty members enforce expectations that research, primarily, or teaching evaluation ratings, alternately, are necessary to earn promotion and tenure. Research expectations influence faculty into modes of socialization that, while not always successful, are nonetheless ever-present (Tierney & Bensimon, 1996). Accordingly, to be a member of the university’s “very elite group,” one has to demonstrate conformity to promotion and tenure document expectations. Untenured faculty members are subjected to a very GIA-like experience when they assemble their dossiers and make sure those dossiers are formatted precisely and include the exact forms of “evidence” in the research, teaching, and service categories. These expectations do not arise out of thin air. Faculty produce and reproduce them.

Differently, but related, with the increase in non-tenure track positions in higher education, the GIA “friendship” game extends to higher education positions as well as emphasis areas. Membership in the tenurable ranks is based on research and those whom “we” (i.e., already tenured faculty) protect. Non-tenure track positions are inordinately focused on teaching, so higher education hierarchically legitimizes research and tenure at the expense of (expendable) non-tenure track “teachers.” In the process, like with GIA and segmented marketing, faculty are culpable of requiring sameness and homogeneity over difference and diversity. By hierarchically distinguishing between tenure-track and clinical or non-tenure track lines, we also send the targeted marketing message that one group buys into research while the other buys into teaching. Like the “Blue Blood Estates” and “Shotguns and Pickups” titles given to targeted markets and lifestyle brands from earlier in this essay, higher education appears to

take promotion and tenure, job lines, and their entailing value-laden areas of focus as means to both segregate and homogenize at the same time.

Bill Readings (1996) helps clarify the homogenizing aspects of promotion and tenure when he writes about the role of individuals in “communities” within a state apparatus. I replace “state” with “university” to help substantiate and further the larger point: faculty homogenize themselves and other faculty in the name of the university, but frequently believing themselves to be autonomous enactors of academic freedom. “The effect of domination inherent in this fiction of the [university],” writes Readings, “is apparent once we consider how the alleged autonomy of the subject...is conditional upon its subjection to the idea of the [university]” (p. 181). Readings continues:

The subject is “free” only insofar as she or he becomes, for her- or himself, primarily a subject *to* the [university]. The [university] positions individuals as subjects subject to the idea of the [university] as an instance of community. Subjects, that is, first have an allegiance to the idea of the [university].... The singularity or difference of others is reduced, since community with others becomes possible only insofar as those others are...civil subjects..... In this sense, the modern community [and university] is inherently universalizing, since it is based upon the assumption of a shared *human* capacity for communication (pp. 181–182, emphasis in original).

We communicate our expectations for “professional development and behavior,” for what it means to be a “good academic citizen,” and what is expected in terms of research and teaching, whether explicitly tied to promotion and tenure guidelines, annual reports, or merit raise reviews.

Ethics factor into these guidelines, reports, and reviews when, for example, faculty profit from their research, plagiarize to expand their vitae, or—differently—battle universities for intellectual property rights and academic freedom. On the negative side of ethics are examples of faculty like Charles Thomas of the University of Florida who accepted \$3 million in consulting fees from a privately held prison company in which he held stock (Washburn, 2005, p. 81). Arguably on the positive side of ethics (the proviso of grants follows), is William Kaufman of the University of Michigan who sued to the university and his chair for “allegedly stealing an educational proposal he had written to bring aerospace design professionals to the University

as part of a new design center for students” (Sprow & Van Tine, 2003, p. 1). In both examples, the issue of greed arises and whether exploitation of others is as noble as neo-classical economic foundations would have us believe. Related to these examples is the ethical consideration embedded in the research versus teaching binary as well as the rise in entrepreneurialism in the academy. Acculturating new tenure-track faculty to research (and an increasingly homogenized version of research perhaps best characterized by the National Research Council’s *Scientific Research in Education*), has meant the continued bifurcation between research and teaching. By expecting particular kinds of research, higher education accommodates entrepreneurialism in many forms, but the most prominent form is grant writing.

GRANTS, HISTORICAL CONSIDERATIONS, AND MORE GRANTS

As Benjamin Baez and I have written (2002), we have all heard at one time or another colleagues and administrators offer variations of the following comments, which really are only marketing or sales-pitching devices:

1. In order to continue our contributions to economic growth and ensure quality education, we must collaborate with corporate, government, and private agencies to promote research and innovation.
2. We need to ensure our strength and independence by securing a variety of funding sources, both public and private.
3. Last year, we exceeded the 10 million dollar level in funded research; we now rank second to UGA in the state in funded research.
4. We have the highest quality faculty in our department; this year, our faculty has attracted 10 million dollars in external funding.
5. Let’s congratulate Jane for getting a one-million dollar grant from the Department of Education to conduct research on school-business partnerships.
6. In order to be seriously considered for the promising scholar award, you should call attention to work in progress that has won support from foundations or government agencies.
7. John, to ensure your promotion, you must get a grant.

8. I don't know what I am doing wrong, but I have not been able to secure a large grant.
9. Let us thank Jane and John, whose grants will allow many of you to travel to conferences (p. 11).

What these statements have in common is the importance of sponsored research in, and to, the academy. By sponsored research Baez and I mean projects (research and otherwise) funded by external private and public agencies. The point here is not whether public (i.e., federal) funding is somehow better than private (especially that coming from corporations) funding, although some have argued about the restrictiveness of private funding versus public funding (Bonewits & Soley, 2004). The point is the pervasiveness of a discourse requiring the seeking and obtaining of grants, publicly *and* privately funded.

Part of the reason such discourse is prevalent is the larger “crisis” language related to funding higher education (Aronowitz, 2000; Newfield, 2003). Concerned about declining state support, colleges and universities, so the meta-narrative goes, must seek alternative funding. Whether the new source of funds comes from increased tuition or external grants, the point nonetheless turns on semi-transitive assumptions and values in the form of expenditure priorities. Instead of successfully lobbying legislators to increase funding, for example, some universities will close programs under the guise of “saving money.” These same universities, including my own, then turn around and fund programs within institutionally developed (and faculty sanctioned) “areas of focus.” The meta-narrative of “saving money,” then, masks the shell game of moving money around—arguably to academic units best situated (typically in the sciences) to secure grants.

The pursuit of grants, whether for institutional or individual reasons, has led to what Baez and I refer to as a “grant culture” that now characterizes much of what happens in the name of research at universities. Institutions are pressuring faculty to be like the GIA (instead of “slumber parties in a box,” we can call them “faculty meetings in a box”) and obtain external funds to subsidize their research, but, despite the rhetoric of necessity that is so pervasive in higher education, it is not certain why this is the case. Conventional wisdom suggests that universities pressure faculty to engage in sponsored research because of decreasing public funds for research. Perhaps it is a form of “soft Taylorism,” a phrase coined by Christopher Newfield (2003). Newfield notes that the

first stage in the development of the modern research university was to establish the baseline assumption that business thinking as a form of practical reason is better for university decision making than the thinking of faculty and staff. Scientific management did not become a set of regulative techniques in higher education so much as it served as the standard of objective efficiency by which existing faulty and staff practices might be regularly judged” (p. 35).

It is here that I wish to highlight some salient features of the history of higher education and connect them with the current culture that appears to take “grants” as an intransitive and, as a result, homogenizing feature of the academy.

As Newfield (2003) outlines, the history of higher education in the U.S. has always been an odd blend of freedoms and dependencies. The oddity of the blend is the role of public funding and support of higher education married with a business-minded organizational structure that emerged at around the turn of the twentieth century. While vestiges of corporatism can be identified prior to the turn of the twentieth century, Frederick Taylor’s scientific management and its sweeping influence in industry also directly influenced discussions, if not actually practices, of university governance. Newfield points out the degree to which Taylorism was permeating governing rationales in business and industry, but historically higher education was not an easy fit for the logic of scientific management.

Beyond the Ivy League, land-grant institutions and “new” universities like The Johns Hopkins University were increasingly bipolar in their functions. Newfield (2003) points to William Rainey Harper of the University of Chicago as an example of this point: “he was an organizational diva who also crusaded for the liberal arts. In the morning he would devise managerial solutions to business problems during a dozen appointments. In the afternoon he would teach classical languages to undergraduates” (p. 30). The point here is that there was always a tension between the economic and educational features of institutions of higher education, especially in research universities. What this set up was a standard for other colleges to emulate, even when their purported purposes or structures were different from those of research universities. All colleges and universities juggled academics and finance in what Newfield calls “mutually suspicious and interdependent” ways (p. 30). Newfield writes specifically regarding research universities that they

defined institutional success through quantitative measures resembling those of growth industries in competitive markets. Of course the advancement of knowledge remained the university mission, and it was invoked by financial officers in trustee meetings no less than by literature professors in their classrooms. Each academic field maintained its own non-financial definitions of intellectual progress. Administrators rarely operated by confronting or ignoring these intellectual definitions. But the advancement of knowledge is hard to define and measure, differs drastically from one area of knowledge to the next, and is usually contested within each field.... Research universities assumed that research would exist within the parameters of its business system, helping the processes of administration to become increasingly unlike internal intellectual practices and increasingly like business practices outside them (p. 30).

Newfield's (2003) analysis indicates that faculty and institutions of higher education occupy a weirdly contested series of spaces. In some spaces, they are seen as bridges between liberal learning and a national economy. In other spaces, they are seen as governed by business practices while trying to maintain traditional academic roles. One result of the negotiation of contested spaces is a form of divided governance, with administrators enacting Fordist, Taylorist, and Bobbittesque efficiency models and faculty presuming to have communal and artisan-like control over curriculum, admissions, and hiring of colleagues. Newfield's historical account seems correct, but he focuses only on the beginning of the twentieth century and, while no doubt accurate for the time frame with which he deals, he does not address the rise of the grant culture currently in vogue.

Many in higher education take as given the grant culture, sometimes semi-transitively questioning particular practices associated with grants (such as a reduction in basic research, a lack of disinterested research, lack of adequate funding, shifting governmental and foundation priorities, narrow views of science by the IES, and so forth), but not the logic of the culture itself. As Baez and I note (2002),

the logic of the culture is such that faculty who secure grants become in a large sense more 'independent' from their institutions, as those with grants are relieved from their duties (such as teaching and service) and can move more easily to other institutions (or threaten to do so), where they can negotiate better working conditions (that is, more freedom to pursue grants). But this point suggests a paradox: Faculty gain a measure of independence from

their universities but only by increasing their dependence on grants. Such a dependence on grants seems to be one of the hidden consequences of the grant culture: The pursuit of grants requires something like a Faustian bargain, offering a kind of independence by requiring dependence on grants (pp. 13–14).

In this way, faculty members are neither immune to commercial pressures and realities nor innocent of complicity with those pressures. Indeed, faculty perversely engage in the very consumerist practices that children do; faculty are no less puppets of corporatism than anybody else. Why? And, exasperatedly, is there anything that can be done to thwart such consumerism? How can one further critical transitivity in our educational system in the face of such pervasive commercialism and marketing? I happen to be skeptical, but I offer the following guiding questions for both P-12 and higher education, respectively: For P-12 schools and teachers:

1. What is the primary reason for entering into marketing agreements and school-business partnership?
2. Whose interests are being served? Who benefits most? Who benefits in the long run?
3. How much time is given to the business part of the marketing and school-business partnership? What amount, in terms of teacher (or administrator) salary, does the time equal on an hourly basis?
4. What is learned or gained as a result of the marketing or partnership? In addition to the claims associated with specific projects, what is the larger message or meaning being conveyed to students, if any?
5. Are marketers and business partners willing to share financial information with teachers and students regarding their benefits from the partnership?
6. Can individual teachers or classes opt out of marketing or partnership programs?

For college faculty perpetuating the grant culture:

1. What is represented about one's teaching when the first thing grant-getters do is to buy themselves out of teaching?
2. To what degree is the research outcome mitigated by the funding agency itself?
3. Differently, what is "independent" about research that is tailored to funding agency specifications?

4. How much money is given in grants that could otherwise be used for the general support of all faculty and their students?
5. More generally, does grant-getting hegemonically further a neoclassical agenda to under-fund higher education?

These questions represent an effort to confront status quo acceptance of homogeneity, intransitivity, and consumer materialism. I will expand on these types of questions and their purpose at the end of this essay, but in the next section I focus attention on another set of assumptions that inform the larger problems I have described. Specifically, marketing sameness, intransitive consciousness, the grant culture, and so forth all are made possible by neoclassical economics. As a way of extending the foregoing critique, I explore neoclassical economics and an alternative to it. In demonstrating both a language of critique and a language of possibility, I hope to indicate how a critically transitive stance might best situate students and faculty in both P-12 and higher education settings to challenge themselves and others to think about economic and market assumptions pervading U.S. culture.

NEOCLASSICAL ECONOMICS AND BEYOND

Given that my intent is to challenge the long-standing notion that the overriding purpose of U.S. higher education should be to replicate and reinforce neoclassical economic ideology and practice, I question the prevailing discourse we use when we talk about research, teaching, curriculum, and the like. In effect, the academy has a history of replicating neoclassical economics and a comparatively miniscule history of criticizing it. The problem is that even when there are critiques of neoclassical economics, the critiques most often represent internal questioning over how best to work within the system. That is, the questions and critiques rarely indicate options outside of revising neoclassical economics on its own terms.

One of the underlying assumptions of colleges and universities that they are primarily in existence to replicate or revise neoclassical economics must be questioned by anyone seriously concerned about other purposes. I claim that a new language of inquiry and critique is needed in order for teachers, students, parents, and others to realize a significant, if untapped, potential for U.S. higher education: namely, critical analysis of the taken-for-granted. I am specifically interested in challenging those within the academy not to become (or continue to be) agents for neoclassical rationality. The challenge is a difficult one,

given that the history of higher education is steeped in neoclassical economic theory. For purposes of clarity, I will (a) define and illustrate neoclassical economics; (b) indicate various critiques of it; (c) explore the degree to which the critiques are insufficient in terms of questioning neoclassical theory outside of its tenets; and (d) offer an alternative to neoclassical rationality that provides a different language for understanding the possible roles of colleges and universities in a post-neoclassical world. According to Gordon Bigelow (2005):

neoclassical economics tends to downplay the importance of human institutions, seeing instead a system of flows and exchanges that are governed by an inherent equilibrium. Predicated on the belief that markets operate in a scientifically knowable fashion, it sees them as self-regulating mathematical miracles, as delicate ecosystems best left alone (p. 37).

Accordingly, neoclassical economics positions itself as a science and claims objectivity in order to reify its standing and exert its power. When William Jevons (1871) made the case, in 1871, that economics was akin to physics, he elevated economics to an objective and value-free realm. The problem, as Bigelow (2005) points out, is that:

the laws of Newtonian mechanics, like any basic law of science, depend on the assumption of ideal conditions – e.g., the frictionless plane. In conceiving their discipline as a search for mathematical laws, [neoclassical] economists have abstracted to their own ideal conditions, which for the most part consist of an utterly denuded vision of man himself (p. 37).

What this underscores is a central fallacy of neoclassical economics: that there is a free market—objectively standing—within which organizations (colleges and universities) would or do actually function. By reifying objectivism and value-neutrality, questionable premises and debatable assertions are only questionable and debatable by those who operate within the view that what they are debating are law-like propositions within a “scientific” realm. This point is perhaps better understood when connected to the positions put forward by neoclassical economists.

As Steve Cohn (2003) notes:

neoclassical orthodoxy asserts five main claims: 1) Neoclassical economics is a scientific theory and as such demands belief in ways similar to modern physics; 2) Market outcomes reflect free

choice; 3) People are naturally greedy, with insatiable consumer appetites. Capitalism is successful, in part, because it offers an incentive system that builds on this “human nature;” 4) The major purpose of economic theory is to promote economic efficiency and economic growth, as both provide a basis for human happiness; [and] 5) There is no alternative to capitalism. The failure of the former Soviet Union proves that socialism can’t work. The message of the 20th century is “let (capitalist) markets work.” The onus is on the government to justify “intervention” in the market.

Commercialism and marketization are outgrowths of these five aspects of neoclassical economics and are extensions of the quest for certainty represented by standardized tests, packaged curricula, and tracking—each characteristic of reductionism and the business language of “efficiency” already permeating P-12 and higher education. For schools and colleges, a parallel analogy goes something like this: (a) utilize the privileged status of “science” and statistics to support claims and to advance the assumption that “objective” and measurable data can be reliably derived from educational settings in order to generalize across space and time; (b) offer school and colleges vouchers and let the market decide which schools succeed and which institutions “go out of business,” or build recreation centers on college campuses in order to attract more customers; (c) students are naturally competitive and schools and colleges exist to prepare future workers for a technologically advanced, global (neoclassical) economy; (d) the major purpose of schools and colleges is to promote conformity to rules, subordination to authority, and efficient means of information-transfer from packaged curricula or pre-ordained majors to students; and (e) there are many alternatives to “public” schools and traditional colleges and universities which should be explored and supported. The failure of progressive or reconstructionist education is deemed to show that alternatives to “public” schools must be allowed in order for the free market to work.

The idea of businesses “showing the way” or influencing colleges and universities is not a new idea. Clyde Barrow (1990), James McKeen Cattell (1912/1977), Christopher Newfield (2003), David Noble (1977), Frederick Rudolph (1962/1990), and Lawrence Veysey (1970), are only some among a long line of scholars who document the history of the role of business in higher education. This history indicates that there often has been a struggle between the “efficiency” advocates from business and the more traditional academics. As indicated earlier, the tensions are still visible in many colleges and universities, but I

am asserting that the efficiency advocates have essentially won. The language we use to talk about schooling is inordinately “accountancy” language that devolved from an early twentieth century effort to promote a national culture, albeit under the guise of social efficiency.

In the early 1900s, when there was much talk about industrialization, Fordist “factory” references were abundant. We now talk about a “knowledge industry” and the role of “advanced” technology. The shift toward professionalization and expertism came as both a response to and a consequence of corporatization. On one hand, disciplines had to band together and “sell” themselves as essential or important in order to continue to exist (Newfield, 2003). At the same time, on the other hand, the segmentation meant the same kind of perverse homogenization noted earlier. While literature departments highlighted perennialist canons and physics departments supported the military-industrial complex (Slaughter & Rhoades, 2004), the overall result was entrepreneurial homogeneity: each “specialization” used marketing strategies to survive (or expand).

For P-12 schools and within the nexus of immigration, industrialization, and urbanization, schools became places where people were not only housed for a good part of the day, but they became places where cultural assimilation (homogenization) and corporate work ethics were instilled. The National Association of Manufacturers (NAM) spearheaded efforts to increase industrial and vocational ends via the Smith-Hughes Act of 1917. One result of business influence was that private corporations would benefit from public schooling. Another result was the success of private businesses at influencing the rhetoric surrounding school reform (Engel, 2000). NAM’s efforts, along with social efficiency advocates like David Snedden, W.W. Charters, and Franklin Bobbitt, established and reinforced the careerist, vocational, trade-oriented training that is now extended to the “Information Age” or “Knowledge Industry.” The meta-narrative is basically the same, however: public schools exist to supply private companies with workers (Kliebard, 1995). Indeed, institutions of higher education, as producers of school leaders are well placed in this “supply chain,”

The point here is that both P-12 and higher education institutions are suffering under the weight of the economic and political forces of marketing and corporatization. With schools firmly entrenched in management hierarchies, they emphasize consumer-materialist expectations: efficiency, authority, and good “end-products.” The state of Georgia (Board of Regents of the University System of Georgia, n.d.) has gone so far as to “guarantee” graduates from education programs

as though they are automobiles or microwaves. Read for what it actually means, in the Regents' policy, any graduate deemed to lack "quality" is essentially determined to be defective and is subject to being returned to the higher education institution *qua* factory to be repaired and fixed. Facing societal appeals to certainty, schools become training grounds for transmitting (efficiency) necessary information from curriculum guidelines (authority) via "guaranteed" teachers to students who become testable widgets for school-by-school or county-by-county comparisons (end products). Schools also face constrained budgets and limited resources, making them increasingly vulnerable to business "partnerships," typically entered into in order to buy technology, purchase supplies, have corporate "mentors" assigned to them, and, in short, to help them.

P-12 schools are sites for consumer materialism, in part because of the nature of the organization and in part because American schools have had a relatively recent bifurcation in their purposes: (1) general education for citizenship versus (2) specialized training for economic production (Brosio, 1994). McNeil (1994) suggests that the first purpose requires schools to offer information and processes of learning which result in knowledge. Theoretically, the information and processes are multi-faceted and broad. McNeil notes that from an organizational standpoint, this purpose is problematic insofar as the outcomes of learning are unpredictable. Students learn at varying paces, and while they share interests, there are important differences as well. The differences are not deemed a problem for the first purpose because achieving knowledge is a messy and cumbersome affair which takes differences as necessary conditions for learning. "Knowing" (via general education) is an inherently messy process, so that any organizing of information and learning will have to recognize—if not appreciate—those differences. But differences *are* a problem for the second purpose, because they get in the way of standardization, homogenization, and efficiency. To achieve specialized training, the function of the school is to fit learners into a preconceived economic scheme. It is similar to a "paint-by-numbers" metaphor, where the lines, colors, and amounts of paint are given, and where the role of the painter (teacher?) is to fill in the lines of the predetermined picture (students?)—indeed, being sure not to paint outside them. For the second purpose, "schools process students through stratified steps leading to predictable, marketable credentials for the workplace. The steps, and some of the outcomes, can be managed, controlled. Thus the school is organized to be in conflict with itself" (McNeil, 1994, p. 3).

It was not always this way. Before widespread industrialism, grade schools were places where students would go—just long enough—to learn necessary information to further their purposes. Early American schooling expanded and reflected general education and literacy at a time when schooling was also seen as a means for social mobility, only not in terms of consumer materialism. Regarding the general education purpose of schools, Cremin (1970) notes that “As almanacs, newspapers, pamphlets, and books dealt with matters of topical interest, especially after the Stamp Act crisis of the 1760s, a premium was placed on literacy in segments of the population where illiteracy had long been [stigmatized]” (p. 545). Kantor (1982) further clarifies that “prior to 1880, schools were seldom seen as mechanisms to prepare youths for jobs...Nor, by and large, did people expect that schooling beyond the elementary and grammar grades would influence one’s chances for employment” (p. 15). McNeil (1994) adds, “While having school-supplied skills (geography, accounting, literacy) might help a person find an apprenticeship, there was no notion of going to school in order to get a job or be trained for one, or to obtain a certificate of attendance” (p. 6 see also Collins, 1979; Kantor, 1982; Katz, 1968). By learning to read and cipher, students would apply this knowledge as *they* intended it, or found utility for it. Literacy and economic achievement were linked; that is, those who were functionally illiterate had less earning potential on average than those who were literate, but the argument for schools as sites for specific forms of literacy (math and science achievement, industrial-/computer-oriented vocational training, etc.) is a mid- to late nineteenth century and twentieth century development (Law, 1986). These arguments also lay the foundation for consumer materialism by recasting schools as reductionist institutions whose purpose it is to compartmentalize and transmit bits of information deemed “marketable.”

Spring (1972) suggests that an inherent tension here is one between cooperation of a particular kind and the agrarian individualism of the late nineteenth century. The cooperation to which he refers was the result of immigration, urbanization, and the rise of industrialism. “Early American society was conceived of at a time when growth and progress resulted from everyone working for his own self-interest as an independent economic unit without the restraints of a tightly knit social organization. By the end of the century many Americans believed this conception of society was no longer relevant to the urban and industrial world of the post-Civil War period” (p. 12).

Perhaps the roots of the push toward consumer materialism can be traced to arguments given in the nineteenth century by Horace

Mann in favor of common schools. He advanced the “wealth position”: individual wealth depends upon the general wealth of the community, and schools are places where the traits which make productive workers can best be instilled (Messerli, 1972; Spring, 1986). Mann’s position should not sound strange to contemporary ears, partly because the success of consumer materialism has dulled sensibilities about what is primarily pedagogic—not economic—about schools, and partly because the sensibilities which are dulled are easily dulled. That is, without a thoughtful position regarding the various purposes of schools (social, political, economic, pedagogic, etc.), Americans hear appeals to their materialist fears about jobs, productivity, and competition. By linking these concerns to schools, conversation about the purpose of schools is slanted. Mann understood the power of this link between school and work, but not quite for consumer materialist purposes. Mann’s position was offered to sway voters in favor of common schools, but was also the way to have people swallow a bitter pill: funding in the form of taxes to support common schools. What he did was successfully argue that those who should pay for school are not only those who have children attending school. This way, more people must pay because, according to the “wealth argument,” it was in everyone’s interest to see to it that schools succeeded in producing productive members for society (Rush, 1965).

For higher education, its history reveals that most colleges and universities in the nineteenth century essentially used tuition to cover expenses (Newfield, 2003). This meant that universities, if they were to grow and expand, would have to move beyond only tuition as the major source of funding. This reliance on a limited resource pool opened the door to corporate influence and was “the central symptom of its dependent position within a capitalist economy” (Newfield, p. 32). While other funds would be forthcoming in the late nineteenth and early twentieth century, particularly in the form of private benefactors, state governments, and alumni, the university’s control over these funds (i.e., who decided how the money could be spent) was increasingly diminished. Indeed, from the 1870s onward, “state legislatures realized that they would have to contribute regular funds to university budgets” (Newfield, p. 33).

Just prior to the 1870s, at about the same time common schools were proliferating, industrial expansion increased dramatically. Wirth (1980) details many of the particulars of this period, but our purposes only call for a brief history and general understanding of the players involved, their arguments, and the consequences for educational institutions

which resulted in the twentieth century. There were four major players: (a) business/industry, (b) managerial progressives, (c) organized labor, and (d) humanitarian progressives. The first three ultimately opted for policies and practices which increased consumer materialism, even though the history of labor hints at different intentions and goals.

Regarding the first of the groups, businesses, well represented by the National Association of Manufacturers (NAM), wanted schools to be training sites in the manner of German technical institutes and argued that funds should be diverted from general education into "commercial and technical schools" (National Association of Manufacturers, 1898) (not in refs). This position has changed little in over a century, with only the addition of advanced technology to serve its purposes. The NAM staunchly favored free-enterprise and saw the increase in immigration at the turn of the century as an important source of cheap labor. They considered trade schools, continuation schools, and corporation schools to be models for reforming public education (Cubberley, 1947). Continuation schools were too expensive, trade schools were too advanced, and corporation schools missed the point altogether. Why have a corporate school that costs businesses when one could have a public system train students instead—and at taxpayer expense?

Colleges and universities were also influenced by private corporations. As Noble (1977) points out, "cooperation between universities and industry became the urgent message of the science-based industries, the engineering profession, and technical-school educators from roughly 1906 on" (p. 130). Newfield (2003) also argues that educators and professionals did not pursue

markets profits in the same way as commercial business: the development of professional protocols, peer review, and other mechanisms enforced major differences. Nonetheless, the university's financial dependence helped to ensure that its client would also be its customer. The university and the professions would control the treatment while practicing under the laws of supply and demand (p. 37).

Still, the degree of distinction between peer-reviewed commercial ventures and non-peer reviewed commercial ventures seems questionable. It is as though the university wanted to engage the market while at the same time protecting itself from the crass realities of the business world. Long before the current NSF-funded rush to grants,

universities were already struggling with their own form of homogenization: how to be distinct centers of knowledge production without capitulating to business-efficiency rationales. Universities rationalized, according to Newfield (2003), that

Market forces were...compatible with the highest professional standards. There would be no deep contradiction between the market and truth, the outcome of unfettered research. Those who felt that commerce usually distorted the pursuit of knowledge could expect no influence in the university and, in many cases, no employment. Genuine knowledge would always, at least potentially, be a saleable product. The university-trained professional middle class would, in general, assume continuity between higher learning and the market system (p. 40).

While the tensions inherent in pursuing knowledge versus pursuing money were consciously debated in the early twentieth century, the same kind of segmented market discussed at the beginning of this essay is essentially what came to pass at colleges and universities. Departments became segmented markets in competition with one another to secure as much money as they could, all the while proclaiming their academic freedom, intellectualism, and distance from crass commercialism. The roots of this process of homogenization, though, can still be found in turn-of-the-century industrialism in higher education as much as it was in public schooling. McNeil (1994) notes:

This period of early industrialization is critical to any understanding of the situating of course content within the organization of the schools. It was during this time, when the school was being directly used as an agency of social control, that our present forms of high school organization were being established. These include administrators who function as business managers rather than as educators; curriculum differentiation by track and time according to students' social class and expected job future; and emphasis on testable "outputs" of schooling rather than on longer-term learning (p. 6).

Given McNeil's point, has anything really changed? On one hand, we might argue that, yes, the kind of work students and faculty will be doing is different because of technology or what is often referred to as the "knowledge industry." This view generally holds that the idea of "workers" has changed in a globalized economy. Traditional work, such as manufacturing, has not only taken a back seat to information

technology, but the work left in manufacturing is increasingly rare in the United States. Accordingly, in the quest for larger and larger profits, work is being shipped to foreign lands where workers are exploited even more than they are in the U.S., and workers in the United States are left out in the cold-or have to become a different kind of worker altogether (Brown, 2003; North Carolina and the Global Economy, 2004; Wilson, 1997).

On the other hand, continuing McNeil's (1994) logic, the kind of work claimed as distinct or unique to a "knowledge industry" only shifts some of the work from one of the tracks in U.S. schools. The concept of "worker" is still with us. It simply means a rise in, say, the service industry sector or areas of work where "knowledge industry" is a misnomer: increasingly jobs do not require "advanced knowledge," just familiarity with routine processes. It might also *still* be the case that U.S. schools are in the production/reproduction business where incultural expectations for work, even if the sites have changed, maintain the kind of hegemony that is the same as traditional expectations for workers. The assumption is that schools and colleges are *still* sites for worker training and consumer preparation. Their "new wave" business discourse held that students were to be more active, and teachers were to be more like "facilitators" and so forth, but how realistic is it to think that corporations want critical questions raised about their own business practices? "New wave" businesses claim that they do not want workers who are unthinking automatons. Instead, they claim to want creative, thoughtful, well-rounded employees. Are these employees expected to become "whistle-blowers" when it comes to legal and ethical violations? Are schools and colleges going to alter their curricula to promote such a form of critical consciousness or assertiveness? Or is it more likely that these institutions will continue to foster the social efficiency expectations of standardization, comparison, and competition that promote a discourse that furthers accountability (read as: auditing), preparation for jobs, and high-stakes testing?

REVISING THE DISCOURSE

The not-so-covert intention here is to reveal how marketization, commercialization, and the language of neoclassical economics are each pushing uncritical consumerism into what businesses no longer consider open educational environments, but private markets. For the utilitarianism and reductionism of such a viewpoint to go unchallenged will mean giving over to businesses the markets they so eagerly crave. Businesses

exist to make money, educational institutions do not. Careerist though many public schools and colleges may be, my claim here is that we will do ourselves a favor by critically analyzing marketization, commercialism, and the language of economics that appears ever-present in the discourse on both P-12 schooling and higher education. This favor is one that challenges oligarchical power, that is, corporate interests directing and controlling government, and the discourse that goes along with it.

I think John Dewey's critique of corporate influences is instructive. Writing in *Reconstruction in Philosophy* (1920). He states,

In spite of its interest in a thoroughly social aim, utilitarianism fostered a new class of interest, that of the capitalistic property-owning interests, provided only property was obtained through free competition and not by governmental favor. The stress that Bentham put on security tended to consecrate the legal institution of private property provided only certain legal abuses in connection with its acquisition and transfer were abolished. *Beati possidentes*—provided possessions had been obtained in accord with the rules of the competitive game—without, that is, extraneous favors from government. Thus, utilitarianism gave intellectual confirmation to all those tendencies which make “business” not a means of social service and an opportunity for personal growth in creative power but a way of accumulating the means of private enjoyments (pp. 182–183).

Dewey is not arguing against businesses, per se. He is arguing against a logic of business as a mechanism for private gain at the expense of society. Further, he is arguing against the instantiation of “business” as some idealized form separate from the people who make up businesses.

Dewey (1954) appears at first glance to conflate the “public” with the “social,” stating that: “Many private acts are social; their consequences contribute to the welfare of the community or affect its status and prospects” (p. 13). Dewey, therefore, accepts the distinction between public and private but his distinction hinges not on government action versus private action or public action versus social action. He draws the line between public and private “on the basis of the extent and scope of the consequences of acts which are so important as to need control, whether by inhibition or by promotion.” (Dewey, 1954, p. 15). For Dewey, it seems the public and the private can be understood only in the concrete experiences of individuals.

Thus Dewey, being anti-dualist, rejects the position that the public is *opposed* to, rather than distinct from, the private. He teased out

the terms in order to uncover their malleability and to determine their usefulness in conjuring a more democratic and just society. In this way, commercial influences on and in schools and colleges are not—indeed, cannot be—*prima facie* injurious, since they are parts of what makes up the public. Yet, they can be critiqued, following Dewey, not because they exist in the schools but because of the consequences they have. Regarding our overall concern in this chapter, one can critique the privatization that is transforming public education, even if we recognize private interests as part of what makes up that education. The consequences of privatization, no matter how well-intentioned, result in procedural, rote, and prescriptive methods that serve the individual only in the most narrow, careerist, rugged-individualist ways. The vocationalism associated with business influences in schools and colleges cannot hide behind a larger social agenda that mouths “preparation for the 21st century,” or “the need to compete in an international, global marketplace,” since there are other competing interests that should have their day in court, so to speak. This is particularly true when the consequences of the business agendas privilege a few and only residually benefit the rest in society. This is one negative consequence brought about by consumer materialism: it poses individuals as completely self-interested and defines them in overwhelmingly mercantile terms.

Extending Dewey, Bourdieu (1998, 2003) challenges the rhetoric of universalism that sets up the structures within which schools and colleges operate as stifling places for external imposition. For Bourdieu (1998), “the effect of shared belief...removes from discussion ideas which are perfectly worth discussing” (p. 6). Indeed, Bourdieu envisions a kind of collective intellectualism that challenges deeply held beliefs. Long standing assumptions become the focus of renewed critique and action. He is specifically interested in examining the major power brokers in modern society. As he puts it,

the power of the agents and mechanisms that dominate the economic and social world today rests on the extraordinary concentration of all the species of capital—economic, political, military, cultural, scientific, and technological—as the foundation of a symbolic domination without precedent (2003, p. 39).

This symbolic domination is difficult to critique, however, because of the power it has over members of society. For Bourdieu, students are also a direct target and engage in hegemonic practices that further subjugate them to the influence of the market. He claims, for example,

that the ‘civilization’ of jeans, Coca-Cola, and McDonald’s has not only economic power on its side but also the symbolic power exerted through a seduction to which the victims themselves contribute. By taking as their chief targets children and adolescents, particularly those most shorn of specific immune defenses, with the support of advertising and the media which are both constrained and complicit, the big cultural production and distribution companies gain an extraordinary, unprecedented hold over all contemporary societies—societies that, as a result, find themselves virtually infantilized (2003, p. 71).

Following Dewey and Bourdieu, one might ask, bringing back a previously discussed example, about the use to which grants will be put: are they pathways for innovation, obstacles to teaching, or mercenary rewards for compliance to externally imposed rules and regulations? Are they conduits for wider access to information, interactive engagements to support graduate students, or necessary features for academic stardom? The answer, of course, is that it *depends*—and that “depends” must be a constant reminder to us that the question of consequences must always remain open. A grant, per se, is not the point—it cannot be *the* point. The point must be to ask, To what consequences are the use of those grants directed—and is that still the case tomorrow? The interpretation of those consequences also depends upon the social expectations held up for all educational institutions—and who is persuasively voicing those expectations. Dewey held out hope for a supportive balance between the public sphere and the private one, but history seems to show us an exploitative imbalance favoring private business interests. We are left therefore with the question of whether public education, pre-collegiate and collegiate, can be a sphere for questioning and critique. The following section extends Dewey’s and Bourdieu’s arguments to specific cases of commercialism in schools and colleges.

ILLUSTRATIVE CASES OF COMMERCIALISM

At the end of the summer of 2001, Office Depot ran a “back-to-school” advertisement on television. The slogan for the ad was “Helping Schools Take Care of Business.” The ad featured a man and woman sitting at a table going over what appeared to be a budget. The man commented that funds were limited, but the woman responded that her students still needed supplies. Tension was evident in their facial expressions. Fortunately, the ad made clear, Office Depot was there to help. The company would give schools five percent of sales from the specified

“back to school” time period. The ad ended with the man and woman at different check-out lines at the same Office Depot store. The woman spotted the man in line and beamed when she realized that the man was buying supplies for her. She silently mouthed “thank you.”

One might argue that the meaning of the slogan is the one preferred by Office Depot: that the company was helping schools by donating a percentage of sales to “participating schools” during the designated “back-to-school” time frame. Like many other similar programs in which businesses “donate” certain proceeds from purchases, Office Depot is using the school funding crises to maximize its bottom line. Ironically, the very slogan Office Depot uses to align itself with schools arguably reveals more about the intrusion of commercialization in U.S. classrooms than it suggests about corporate America’s interest in schools as anything more than markets. Recall the slogan, “Helping Schools Take Care of Business.” If Office Depot meant “take care of business” in a vernacular (i.e., to mean “get things done”) way, then their marketing would be seen by most in the commercial world to be a success. If Office Depot meant “take care of business” literally, then the marketing campaign capitalized on the irony that schools are really the ones helping out businesses and not the other way around.

There are multiple examples of corporate leaders asserting their authority and ideas on education issues. Bill Gates of Microsoft and the Bill and Melinda Gates Foundation weighed in on high school size and the role of technology (Gates, 2005). Michael Bloomberg espoused his business acumen when taking over the New York City schools as mayor in 2002. In the October 29, 2001 edition of *Newsweek*, the magazine considered what classrooms of the future might be like (The classroom of the future, 2001). The magazine proclaimed that it had assembled an elite list of thinkers especially well-equipped to address the future of schooling. *Newsweek* included Steve Jobs, the CEO of Apple; Bill Gates, CEO of Microsoft; John Doerr, a technology investor; Maria Cantwell, Real Networks executive-turned U.S. Senator; Danny Hillis, chairman of Applied Minds, Inc.; Herb Allen, distance-learning technology investor; Brandon Lloyd, the only teacher (but one whose classroom is part of a pilot project sponsored by Microsoft); and Linda Darling-Hammond, a Stanford professor of education. The general conclusion was that classrooms of the future will have plenty of multimedia equipment and access to the internet will be a panacea. The classroom of the future, we are led to believe, will do a better job preparing students for the real, if changing, world.

Aside from Steve Jobs, who noted that he would give up all his technology for an afternoon with Socrates, and Linda Darling-Hammond, a long-time advocate of teachers, the other “experts” represent an interesting narrative. John Doerr, for example, noted that classrooms will no longer have desks bolted to the floor (something that generally went out of favor decades ago) but will see a curriculum that guarantees reading by fourth grade, algebra by eighth grade, and designing web sites by the time senior year rolls around. He stated, further, “the final component is to be set to learn for life on your own, to be ready to vote, to be a functioning citizen in the information economy” (p. 62). Brandon Lloyd, the Microsoft-sponsored teacher prognosticated that “instead of markers, there will be a graphic-arts program. The teacher can send an assignment or give a grade, classmates can send collaboration, all without being physically present” (p. 67). Herb Allen claimed that the “computer-literate generation won’t look at...education as ‘distance learning’; they’ll look at it as immediate access.... Immediate-access learning will be driven by democratic, economic impetus” (p. 67).

Within the futurist claims of a technological panacea, one wonders whether there is something more telling about the discourse and what it represents. John Doerr talks about being a functioning citizen, but one qualified by an information economy. Herb Allen claims that instant gratification (i.e., “immediate access”) has as its engine, a “democratic, economic impetus.” Citizenship and democracy, then, serve the economy, not the reverse (or something else). Citizenship is qualified as functioning, and functioning is qualified by technological job skills. Being a citizen, this sort of logic goes, means no less than functioning, but one wonders if it means anything *more* than functioning, either. If one considers Brandon Lloyd’s claim that collaboration can be “sent” via computer and need not require physical presence, then indeed democracy is in for a back-seat ride on the information superhighway. The larger point, however, is that Doerr, Allen, and Lloyd engage in and reify, in important ways, very particularly narrow parameters for a discourse on schooling. Even setting aside the layer of technophilia present in their remarks, they each reinforce the idea that the primary purpose of education is to prepare future workers for private corporations, and citizenship is not only a qualified afterthought, it is subsumed under a market logic. Those engaged in the discourse on schooling, in this example anyway, do not talk about critical investigation. They talk about “manipulating information.” Education is commodified, knowledge is reduced to information, and collaboration is as simple as sending an email.

Once a month, on a Tuesday, the cafeteria at Sutton Middle School in Atlanta, Georgia is filled with hungry students. On that Tuesday, however, administrators walk around wearing "Eat Mor Chikin" t-shirts supplied by Chick-fil-a. The administrators are not alone. A teacher also walks around the same cafeteria. The teacher, however, wears a sandwich board of two long placards forming an inverted "V" from neck to foot. "Eat Mor Chikin" is displayed again, in larger letters. The point? One Tuesday per month is "Sutton Night" at the local Chick-fil-a fast-food restaurant. A percentage of the proceeds from that night's sales will go to the Sutton Middle School Parent-Teacher Organization. The wrestling team is sent to Chick-fil-a. The band goes, too. Cheerleaders appear. Fast food is the diet, profit the goal, and residual "donations" made to the local public middle school by a private corporation. Children and their families *pay* twice for these so-called "donations": they pay once, and at once, when they buy food at Chick-fil-a, since the company only "donates" from what the families buy that night, and they "pay" again, but later, in higher health costs as a result of the poor nutritional values of that food.

In terms of the discourse represented here, one wonders about the "one-sided" message to which students are exposed. "Businesses are our friends" is one message students might receive. Doing one's "duty" or being a "participant in the school community" are other messages students might receive. In the present illustration, however, "duty" and "participation" are inextricably linked to uncritical consumerism. Whatever the specific wording of the message, parents are apparently overwhelmingly supportive (as is the school administration) of these kinds of school-business "partnerships." Again, though, to focus on the discourse represented, one wonders about the questions to which Dewey's and Bourdieu's work leads us. Where are they? Does anyone ask whether businesses pay enough taxes in the first place so that schools would not have to rely on "one-time donations." What about the fat and calorie content of the food the students eat? How much money is spent on teacher/administrator time developing and redeveloping these sorts of programs? How much money does Chik-fil-a make on those Tuesdays in relation to the "donation" they "give" the school? Can all of the students afford to buy the fast-food from the restaurant they are cajoled into visiting?

As if those of us in higher education can think that this does not relate to us, when attending to the examples in higher education one must conclude that the differences between us and schools in one of degree, not kind. Slaughter and Rhoades (2004) detail the

Missyplicity project at Texas A&M University. The project was the brain child of billionaire John Sperling, the founder of the for-profit University of Phoenix, and ostensibly was set up to clone his dog, Missy. The initiative meant that Sperling used \$3.5 million in company profits from the Apollo Group to start the genetic research project. Sterling then set up venture capital (\$5.5 million) to establish a publicly traded company, Genetics Savings and Loan, which was linked to research at Texas A&M. Slaughter and Rhoades point out that Texas A&M then “actively lobbied to have the state of Texas change laws that prevented institutions from holding equity shares in corporations based on faculty discoveries” (p. 5; see also Schmidt, 2002). One point that Slaughter and Rhoades raise is to consider the degree to which the Texas A&M researchers, who earned their degrees and special qualifications from state subsidized programs and universities, used public support to engender private gain. Specifically, veterinarians at Texas A&M, who had already successfully cloned a cow along with other animals, had their research federally-funded. “Thus,” write Slaughter and Rhoades, “the Missyplicity project drew on taxpayer-funded, state-subsidized educational and research talent” (p. 5).

Initiatives such as the Missyplicity project are made possible, in large part, because of the Bayh-Dole Act of 1980. The Act was among a number of initiatives in the early 1980s to encourage global competitiveness and market dominance. The Act essentially claims to serve a public interest by permitting colleges, universities, and small businesses to patent inventions that came from federally-funded research. As Baez (2005) interprets it, the “corporatization of the university means its globalization, because the crucial corporations are typically transnational” (p. 134). This globalization is, I argue, inextricably linked to the marketing initiatives leading to homogenization. The Missyplicity example, it could be argued, is an illustration that counters the claim about homogenization. To the contrary, any research project that seeks proprietary limits on the openness and shared nature of the resulting knowledge is in conflict with the idea of the university as a place for the search for truth and wisdom. Yet, has this struggle between corporate and university culture, already highlighted throughout this essay, already ended? With the increased emphasis placed on grants and external funding, corporate culture appears to be the victor in the battle over the role of the university. In this way, universities are already markets, faculty are already entrepreneurs, and, as a result, represent homogenization and sameness.

ENTRENCHED DISCOURSE: BUSINESS-SPEAK INSIDE AND OUTSIDE THE IVY-COVERED WALLS

What the illustrations I discussed throughout this chapter have in common is how they exemplify popular discourse on education, both inside and outside the academy. One example is about national advertising; one is about who is qualified to speak about schooling issues (and what they say and how they say it); one is about the local impact of the previous two; and one is about publicly subsidized researchers reaping private profit in the name of “science.” The over 300 percent increase in school-business partnerships since 1990 indicates a boon for businesses and a feeding frenzy for “partnering,” not only in public schools (e.g., The Center for Commercialism, n.d.), but also in higher education, especially in the commercial exploitation of knowledge (e.g., Baez, 2005; Slaughter & Rhoades, 2004). The problem is that the popular discourse on education has become so corporate- and commercial-friendly that critical analysis and questioning are rarely in evidence.

The cost to society is difficult to determine, certainly in profit and loss terms, but not difficult to hear or see. The cost, the damage, is a language of economics over and above a language of inquiry. In other words, schools and universities are increasingly subjected to market analyses (accountability, competition, privatization, etc.) that put critical investigation and inquiry almost out of bounds. Questions about the merit of private business influence on public schools, for example, are inordinately unasked – both inside and outside of schools and colleges. They are muted before they are mouthed because the popular discourses on education are so saturated by free-market entrepreneurialism that there is little or no space for critical analysis. Faculty do not contest “outcome objectives and assessments” because they represent the new corporatized reality of university life: the mandate exists and faculty “must” comply.

Costly national advertising campaigns do not lend themselves to anything but pro-commercial interests. *Newsweek* does not even include independent teacher perspectives in a story on the future of classrooms. Students in Sutton Middle School’s cafeteria are only told of the opportunity to support their school by eating fast food at Chik-fil-a, but are not engaged in discourses on nutritional values, corporate exploitation of farmers and workers, and environmental impacts of globalization. Perhaps it is in the cafeterias and in residence halls that the larger cycle of the popular discourse on education, exemplified in

part by national advertising campaigns and national media, begins—or ends. Students learn that advertising in their classrooms is sanctioned by business-minded adults (via the over-representation of business leaders in their school boards and councils, or in boards of trustees) that they learn their place in the discourse on education: they are only consumers and schools are places governed by businesses. Indeed, one may say that in higher education, their institutions are, for all purposes, businesses.

The point here is not just school-business partnerships or over-representation of business leaders on governing bodies. Educational leaders in schools and colleges have, for years, adopted a “corporate culture,” “private-enjoyments,” business approach and mentality—arguably another part of the problem with schools (Bolman & Deal, 1991; Deal & Kennedy, 1982; Gallagher, 2002; Hansen, 2006; Kilmann et al., 1985; Meyer, 2003). What makes the entire issue more interesting, if also more frustrating, is that many people appear sympathetic to corporate language and ideology. That is, the process of homogenizing discourse is complete. Many parents and educators (and as a result, students) apparently *want* schools and colleges to prepare their children for jobs. Often what is desired, however, is an overly-vocational approach to learning that so narrowly defines, constricts, and restricts what schools do, and students really lose out on developing a critical citizen role in favor of an uncritical consumerist view of life. Some call this process hegemony—a kind of leadership that succeeds by getting individuals to willingly participate in their own subjugation. What gets lost is not that schools should not play a role in helping students with their futures—jobs included—but helping students with *their* futures means engaging them in the kind of discourse which questions their assumptions, and the societal norms and structures that maintain them.

A seriously democratic, critical, socially responsible approach to education *will* yield employees. But they will be smarter and be able to question more than what most corporate leaders want, protestations to the contrary notwithstanding. So this is not what businesses really want. What is the driving interest of corporate leaders? Do business people want a truly educated citizenry who question advertising claims, profit margins, safety records, environmental impact, living wages, and so on? Businesses say that what they want from schools and colleges are the brightest and best prepared employees in the world in order that “we” can compete in a high-tech, global economy (Allstate Forum on Public Issues, 1989; Hamel & Prahalad, 1994; Holland

et al., 1989; Secretary's Commission on Achieving Necessary Skills Assessment Committee, 1992; Senge, 1990; Townley, 1989). We hear about "competing in a high-tech, global economy" so much, we can all recite the phrase, or something very similar. Perhaps this is the most insidious kind of learning of all—recitation without criticism.

Discourse without critique means conversations without questions. We "buy" the corporate logic (e.g., we all have to work, don't we?), but if in the process we also forego questions in schools and university faculties about the problems with technology, globalization, market forces, exploitation of workers, greed, class differences, academic freedom, and so forth, we should question whether we are committing a kind of educational malpractice. As with school-business partnerships and grants, corporate interests are not going away (Boyles, 2000; Engel, 2000; Gelberg, 1997; Giroux, 2001; Molnar, 1996; Saltman, 2000). But that fact does not mean that schools and universities should refrain from raising questions about the "real world" in which they live. Will faculty senators, deans, and provosts be supportive of such questions? If not, what recourse will faculty have? If so, how far are faculty members in both P-12 and higher education willing to go in having students and colleagues raise, address, answer, quarrel over, and debate such questions? The more questions, the better, perhaps. Questioning the motives and realities of business influences on and in schools is one way educators can influence the discourse about it.

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SUBJECT INDEX

A

Academic drift, 123, 124, 156, 165, 171
 Academic labor markets, 501
 Access, 11, 23, 40, 46, 50, 53, 61, 76, 77, 78, 86
 Accountability, 1, 58, 59, 60–66, 69–71, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86
 African Americans, 134, 509, 511, 517, 542
 Appropriations, 288, 290, 292, 320, 354, 386, 387, 390, 391
 Asian Americans, 195, 200, 499
 Assessment, 32, 48, 57–63, 65, 66, 70, 73–75, 79, 81, 83, 84, 86–91, 93–95, 97–99, 102–104, 109–111, 411, 517, 519, 575, 577
 Attitudes, 48, 68, 80, 83, 111, 183, 184, 186, 187, 193, 195, 198, 211, 215, 223, 245, 246, 511, 513, 518, 529

B

Behaviors, 144, 152, 155, 158, 159, 164, 166, 167, 172, 173, 174
 Benchmarking, 60, 73–76, 82–84, 86, 90, 92, 97, 99, 100, 101, 108
 Bennett hypothesis, 283, 317, 318, 319, 320, 321
 Bias, 442, 443, 444, 502, 511
 Blacks, 304, 508, 509, 542

C

CCSSE, 87–88, 425
 Characteristics of, 72, 123, 129, 130, 172, 223, 224, 226, 229, 230, 235, 258, 262, 270, 318, 326, 335, 341, 343, 359, 360, 366, 371, 373, 398
 Classroom interaction, 258
 Cluster Samples, 422, 426

College, 2, 3, 7, 9, 11, 13, 14, 15, 18, 20, 22, 23, 25, 26, 27, 29, 30–35, 76–79, 82, 91, 94–106, 108–110
 Commercialism, 537, 544, 545, 546, 549, 557, 560
 Community College Faculty, 451–488
 Community Colleges, 64, 76, 77, 78, 85, 99, 155, 315
 Comparative Studies, 7, 39, 48
 Consequences of, 122, 123, 158, 160, 165, 174, 358, 362, 412, 428, 498, 543
 Consumer materialism, 537, 543–546, 558, 562–564, 565, 569
 Corporatism, 452, 455, 458, 459, 470, 555, 557
 Corporatization, 462, 476, 537, 561, 574
 Critical transitivity, 544, 545, 546, 557
 CSEQ, 87, 187

D

Design Weights, 434–436
 Difference, 11, 23, 39, 41, 42, 82–85, 89, 105
 Diversity climate, 510, 511, 514, 527
 Diversity, 63, 66, 70, 71, 76, 88, 123, 139, 140, 160
 Doctor Fox studies, 234, 236, 258, 260

E

Early Career, 136, 164
 Educational research, 22, 40, 58, 67, 69, 71, 74, 82, 84
 Engagement, 81, 87, 89, 98, 99, 127, 159–162, 165, 166, 185–189, 191, 199, 205, 208
 Epistemology, 66, 67
 Equality, 135, 340, 455, 498, 507, 541
 Expressive behavior, 224, 235, 237, 273, 274

- F
 Faculty governance, 499, 545
 Faculty Work, 472, 477, 478, 483, 485, 486, 488, 489
 Faculty, 2, 9, 11, 14, 16, 19, 20, 21, 22, 25, 26
 Federal aid, 283, 287, 288, 298, 304, 308, 309, 310, 311, 314, 318, 319, 320
 Forces compelling, 174
 Further research on, 123, 130, 152, 161, 162, 168, 174, 391, 399
- G
 Globalization, 211, 362, 452, 455, 456, 457, 460, 462, 471, 472, 476, 538
 Governance, 26, 38, 39, 45, 49, 52, 62, 69, 96, 140, 157, 163, 164, 166, 169, 170, 390, 453, 454, 469, 470, 472, 476, 477, 478, 484, 499, 545, 546, 555, 556
 Graduation, 4, 64, 65, 71, 76, 77, 78, 79, 85, 88
 Graduate Education, 16, 132, 133, 161, 165, 529
 Grants, 554–557, 565, 570, 574, 577
 Grants Received, 22, 41, 160, 283, 288, 304
- H
 Higher education, 1, 2, 7, 10–14, 17, 18, 21–23, 25–35, 43–53
 Higher education finance, 358, 400
 Hiring, recruiting, 9, 497–529, 556
 Hispanics, 306
 Homogeneity, 368, 419, 455, 537, 538, 539, 540, 544
- I
 Identifying, 66, 77, 82, 83, 84, 95, 97, 99, 104, 159, 169, 171, 172, 174, 201, 221, 269, 300, 324, 412, 413, 432, 433, 465, 506, 548
 Information Technology, 464, 466, 471, 474, 475
 Institutional aspirations, 136, 156, 163
 Institutional diversity, 139, 140, 169
 Instructional Technology, 91, 451, 472, 473
 Instructors' NV behavior, 219, 224, 225, 238, 250, 263, 264, 266, 272
- J
 Job search, 512
- K
 Knowledge, 14, 16, 18, 22, 26, 28, 33, 44, 50, 58, 60, 65, 68, 69, 74, 79, 80, 82, 90, 91, 97, 100, 101, 102, 107, 108, 109, 110, 111, 132, 143, 155, 159, 185, 191, 198, 210, 211, 212, 214, 249, 301, 343, 468, 471, 474, 505, 506, 510, 516, 523, 556, 561, 562, 563, 566, 575
- L
 Latinos, 88, 195, 502, 509, 542
- M
 Managerialism, 52, 477, 478, 479, 480, 487
 Marketing, 18, 145, 146, 153, 506, 537, 539, 540, 541
 Methodology, 58, 213, 231, 238, 239, 242, 244, 245, 269, 282, 307, 324, 340, 500
 Micro (molecular) analysis, 225, 269, 270, 272, 273
 Microteaching, 222, 227, 251
 Minimal context, 258
 Motivation Theory, 28, 232, 338
 Multistage Samples, 421, 424
- N
 Native Americans, 418, 526
 Need-based aid, 148, 161, 162, 282, 284, 299, 300, 309
 Neoclassical economics, 544, 545, 549, 558, 559, 560, 567
 Neoliberalism, 451, 455, 456, 457, 463, 467, 470, 471, 472, 478
 Networks, 183, 199, 213, 214, 300, 326, 317, 519, 528, 571

New World College, 460, 463, 464, 470,
485, 486, 488
Nonverbal (NV) behavior, 219
NSSE, 87, 127, 159, 160, 161, 186,
199, 430
NV repertoire, 219, 220, 221, 222, 223,
224, 225, 226, 227

O

OR, 388, 389
Organizational Studies, 1, 13, 16, 23,
30, 38, 39, 90, 165, 229, 555

P

Part-Time Faculty, 26, 454, 459, 472,
474, 478–482, 485
Pell program, 314, 316, 317, 318, 319,
321, 322, 324, 325
Pell Grant, 161, 168, 283–293,
295–298, 301–304, 307–313
People of color, 497, 498, 499, 510,
511, 512
Political economy, 345, 350, 353, 357,
358, 363, 365, 369, 398 selective
welfare, 337, 374
Politics of higher education, 400, 401
inequality and higher education,
393
Population Weighting, 433, 434, 435,
436
Post-autistic economics, 549
Precision, 414, 416, 418–421, 426, 428,
432, 435
Prediction of student evaluations, 233,
236, 257–259
Prestige-seeking, 124, 137, 146, 148,
155, 164
Productivity, 58, 62, 63, 85, 89, 90,
104, 107, 108, 143, 162, 163, 166,
169, 340, 341, 343, 345, 365, 459,
464, 466, 472, 474, 476–479,
483–488, 506, 513, 564
Publications, 27, 28, 45, 49, 143, 163,
240, 252, 517
Pursuit of prestige, 122, 123, 129, 136,
142, 144, 147, 152, 162, 165, 167,
169, 174

R

Raking Ratio Estimation, 433, 437
Research Interests, 27, 51, 516
Response-Propensity Weighting,
432, 438
Retention, 64, 76, 88, 125, 162,
165, 187

S

Sample Design, 424, 427, 445
Sample Weighting, 433, 435–438,
443, 444
Sampling, 199, 412–428, 432, 434–437,
439–445
Science, 2, 10, 13, 15, 19, 21, 23,
40–42, 66–68, 72, 94, 110, 111,
138, 159, 182, 184, 213, 243, 289,
320, 338, 339, 368, 462, 463, 484,
485, 539, 554, 556, 559, 560, 563,
565, 575
Segmented marketed, 540, 541, 542,
548, 566
Signaling, 497, 498, 506, 507, 509, 519,
522, 523, 526
Social psychology, 221
Sociology, 17, 30, 32, 67, 139, 338, 498
Stratified Samples, 426, 444
Striving (defined), 122
Striving, 122, 123, 124, 125, 126, 129,
130, 132, 133, 134,
135, 136–151
Student satisfaction, 87, 137, 161,
235, 247
Students' learning gains, 224, 232
Students' ratings of teaching (SRT),
229, 234
Students, 353, 355, 356, 357, 358, 366,
369, 370, 396, 399, 411, 412, 413,
414, 415
Subcultures, 183, 184, 188, 191, 195,
197, 199, 202, 209,
210, 214
Survey Nonresponse, 412, 427, 428,
429, 430–432, 434, 441
Surveys, 63, 70, 87, 105, 186, 187, 199,
302, 303, 387, 411

T

Targeted marketing, 547, 551

Teacher enthusiasm, 225, 228, 230,
231, 234, 238, 240, 252, 253, 255,
256, 260, 264, 270, 272

Teacher immediacy, 225, 228, 238, 240,
241, 242, 243, 244, 246, 247, 249

Teaching Experience, 14, 23, 35, 60,
73, 459

Thin slices of NV behavior, 258,
261, 266

U

UCUES, 200, 201, 210, 212, 214

USNWR rankings, 122, 123, 125–129,
137, 149, 154, 155, 160, 165, 171,
172, 173, 174

V

Variance Estimates, 444, 445

Y

YFCY, 199

AUTHOR INDEX

- Abel, E. K., 479
 Abelman, C., 80, 83
 Abraham, K. G., 324, 327
 Abrami, P., 231, 234, 235
 Acosta, R. J., 320
 Agans, L., 503
 Aguirre, A., 512, 514
 Aldersley, S. F., 122, 123, 130, 150
 Aleman, A. M., 510
 Alexander, F. K., 63, 85
 Alford, R., 368
 Alger, J. B., 517
 Alger, R. J., 517
 Allen, D., 227, 245, 527
 Alon, S., 71
 Alpert, D., 151
 Alt, J., 364
 Altbach, P., 183, 210
 Ambady, N., 258, 260–261, 262, 264, 267, 270
 Anderson, J. D., 134, 238
 Angrist, J. D., 313, 322, 400
 Antonio, A. L., 199, 514
 Appadurai, A., 455
 Apple, M., 457
 Archer, D., 221
 Ards, Sheila, 516
 Argyris, C., 17
 Aronowitz, S., 537, 554
 Ashenfelter, O., 342
 Ashenfletr, O., 343
 Astin, A., 343
 Astin, A. W., 127, 135, 160, 165, 182, 186, 201, 439, 441
 Austen-Smith, D., 371, 372, 373
 Austin, A. E., 161
 Autor, D. H., 473, 475
 Avery, C., 147
 Avery, D., 511
 Ayers, D. F., 63, 457, 467
 Babad, E., 226, 256, 259, 262, 263, 266, 267, 268, 269, 270, 271, 272, 273, 279
 Baez, B., 457, 517, 553, 554, 556, 574, 575
 Bailey, T., 76, 77, 85, 99
 Bailey, T. R., 463, 465
 Bakan, J., 539
 Baker, B. D., 122, 123, 125, 130, 137, 150, 151, 152, 157, 164, 394
 Baker, G. A., 461
 Bakia, M., 464, 465
 Bandura, A., 227
 Bannan-Ritland, B., 101, 102, 107
 Banta, T. W., 73
 Barak, R. J., 75, 87
 Barber, A., 507
 Barber, E. G., 51
 Barker, K., 479
 Barnett, R., 458
 Baron, D., 363
 Barr, R., 462
 Barrow, C. W., 560
 Bartel, A. P., 341
 Bartels, L. M., 368
 Bauman, G. L., 68, 80, 81, 82, 88, 89
 Bay, C., 18, 181
 Becker, H. S., 529
 Becker, W. E., 300
 Bender, B. E., 74, 75
 Bennefield, R. M., 522
 Bennett, W., 317, 322
 Bensimon, E. M., 68, 81, 82, 88, 98, 143, 163, 529, 551
 Beoku-Betts, J., 539
 Berdahl, R. O., 123, 124
 Berkowitz, D., 391
 Berliner, D. C., 67
 Berry, W. D., 390
 Besley, T., 363, 364, 365
 Bess, J. L., 1, 12, 15, 24, 39, 50, 53

- Bess, N. M., 39
 Bethlehem, J. G., 432
 Beutel, A. M., 498
 Bevia, C., 367, 368, 369
 Bigelow, G., 559
 Bilorusky, J., 15
 Bingman, L. G., 516, 520, 524
 Birnbaum, R., 130, 132, 139, 140, 141, 154, 169
 Blackburn, R. T., 143
 Blackwell, J. E., 513, 517
 Blakemore, A. E., 305
 Blanck P., 259, 262
 Blau, P. M., 154
 Block, P., 82
 Bloomgarden, A., 122, 130, 149, 153, 160, 162, 163, 164, 172
 Bogue, F. G., 82
 Boice, R., 513
 Boix, C., 36, 345, 368, 391, 399
 Bok, D., 452, 458, 537
 Bollag, B., 61
 Bolman, L., 140
 Bolman, L. G., 576
 Bonewits, S., 554
 Borden, V. M. H., 77
 Boulding, K., 84
 Bound, J., 323, 327, 394
 Bourdieu, P., 569, 570
 Bowen, H., 84, 167
 Bowen, H. R., 343, 344
 Bowen, W. G., 79, 343, 344, 346
 Boyer, E. L., 198
 Boyles, D., 577
 Bramen, C. T., 501
 Braunstein, A., 311
 Brawer, F., 459, 461, 463, 465, 470, 482, 485, 487
 Brender, A., 364
 Breneman, D. W., 352, 390
 Brewer, D. J., 124, 130, 137, 155, 169, 172
 Brinkman, P. T., 305
 Brint, S., 461, 478
 Brockmeier, J., 1
 Bronstein, P., 503
 Brophy, J., 256
 Brosio, R. A., 562
 Brown, G., 227
 Brown, P., 567
 Bryk, A. S., 215
 Burke, J. C., 62, 63, 64, 74, 76, 85, 86
 Burke, R. J., 510, 518
 Burrell, G., 51
 Byce, C., 290
 Byrne, P., 251
 Callan, P. M., 62
 Cameron, D., 360
 Campbell, J., 457
 Campbell, R., 305
 Caplan, B., 364
 Carbaugh, D., 1
 Card, D., 322
 Carlin, J. B., 426, 433, 440
 Carneiro, P., 370
 Carnoy, M., 451, 452, 464, 480
 Carper, J. W., 529
 Carroll, D., 312
 Carter, D. J., 503
 Case, A., 364, 365
 Casey, C., 458, 459, 463, 471, 478
 Castells, M., 456, 465, 474, 480
 Cattell, J. M., 560
 Cavanagh, J., 458
 Chait, R. P., 499, 502
 Chang, M. J., 160
 Chapman, D. W., 432, 439, 440
 Chatterji, M., 65, 67, 69, 72, 73, 101, 104, 106
 Cheslock, J. J., 99
 Chickering, A. W., 189
 Chomsky, N., 457, 539
 Christophel, D., 243
 Cicarelli, J., 305
 Clark, B., 183, 184, 452
 Clark, B. R., 156, 172, 187
 Clark, M. A., 324, 327
 Clarke, S., 456
 Clay, K., 391
 Clotfelter, C. T., 136, 137, 138, 149, 151, 355
 Coate, S., 363
 Coates, D., 317
 Cobb, P., 69, 72, 73, 91, 101, 107

- Cohen, A., 452, 454, 459, 460, 461, 463, 465, 470, 482, 485, 487
 Cohen, D. K., 60, 68, 71, 72, 84, 91, 96, 100, 101, 102, 104, 106, 109
 Cohen, L., 539, 540, 541, 542
 Cohen, M., 401
 Cohen, P., 262
 Cohn, E., 337, 340, 356, 357
 Cohn, S., 559
 Collins, M., 503
 Collins, R., 563
 Collins R. W., 503
 Comstock, J., 254
 Connor, A., 461
 Considine, M., 452, 457, 477
 Cook, P. J., 355
 Cooper, H., 243
 Cornwell, C., 327
 Costanzo, M., 221
 Couper, M. P., 428, 429, 430, 433, 440
 Coutourier, L., 344
 Creedy, J., 365, 368, 369
 Cremin, L. A., 563
 Cronbach, L., 243, 244
 Cross, K. P., 461
 Cross, T., 503
 Cubberley, E. P., 565
 Cukierman, A., 360
 Curs, B. R., 305, 307, 309, 314, 315, 316, 319, 327
 Curtin, R., 429
 Curtis, J., 499, 501
 Cuzan, C., 364

 D'Souza, D., 196
 Dahl, R., 368
 Danielson, C., 63, 64, 70, 77, 84
 Danowitz Sagaria, M. A., 503, 514, 518, 519, 523, 524
 Daresh, J., 529
 Davis, C., 539
 Deal, T., 139, 140, 576
 Deal, T. E., 576
 Dee, J., 53
 Deegan, W., 460, 461
 Deem, R., 477, 479, 488
 Deetz, S., 482
 DeFraja, G., 369, 374, 399

 de Heer, W., 411
 De la Luz Reyes, M., 503, 517, 518
 de Leeuw, E., 411
 Delgado, R., 503
 Dellow, D. A., 76, 77
 DeMartino, G., 457
 Demb, A., 465
 Deming, W. E., 438
 Dennison, J., 461, 464, 470, 477
 DePaulo, B., 220, 221
 DesJardins, S. L., 71, 89, 311
 Dewey, J., 16, 568, 569, 570, 573
 Dey, E. L., 123, 165, 215, 411
 Dichev, I., 122, 127
 Dill, D. D., 63
 Dillman, D. A., 427, 428
 DiMaggio, P., 123, 124, 139
 DiMaggio, P. J., 82
 Doerfel, M. L., 75, 90
 Dougherty, K., 464, 465
 Dougherty, K. J., 63, 64, 76, 78, 79, 85, 86, 99, 465
 Dowd, A. C., 57, 59, 63, 68, 71, 83, 85, 99
 Doyle, W., 258
 Doyle, W. R., 335, 338, 390, 396
 Drazen, A., 364
 Drew, J. H., 439
 Dubrow, G., 122, 157, 163
 DuMouchel, W. H., 427
 Duncan, B. L., 529
 Duncan, G. J., 427, 431
 Dundar, H., 345
 Dunnette, M. D., 500
 Dwyer, C. A., 59, 61, 74, 83, 85, 109
 Dynarski, S. M., 71, 107, 293, 313, 324, 327, 328, 355

 Edelman, M., 430
 Edmundson, M., 196, 198
 Edwards, J. W., 471
 Ehrenberg, R. G., 122, 125, 128, 130, 137, 146, 147, 148, 149, 150, 152, 156, 157, 167, 169, 281, 305, 320, 355
 Ehrlich, T., 127
 Eide, E., 125
 Einarson, M. K., 74, 411

- Eisenhardt, K., 454
 Ekman, P., 220, 221–223, 237, 269, 270, 273
 El-Khawas, E., 503
 Ellis, E. M., 529
 Ellwood, D., 281, 336
 Elmore, R., 80, 83
 Engel M., 561, 577
 Erickson, F., 67, 72
 Erikson, E., 188
 Erisman, W., 59, 64, 76, 82, 85
 Esteller-More, A., 364
 Evans, N. J., 186
 Ewell, P. T., 62, 73
 Ewen, S., 542, 548, 549
- Fairweather, J. S., 143
 Farmer, R., 510
 Faust, F., 213
 Feeley, T., 245
 Feldman, K. A., 181, 182
 Feldman, R., 254
 Fenstermacher, G., 258
 Fernandez, R., 338, 358, 366, 367, 368, 369, 370, 371, 373, 374, 377, 378, 383, 384, 386, 391, 394, 395, 398, 399, 400
 Ferreira, F., 345, 368, 391, 398
 Festinger, L., 213
 Feuer, M. J., 66, 67, 68, 69, 72, 103, 109
 Field, K., 61, 110
 Finkelstein, M., 132, 164
 Finnegan, D. E., 136
 Finney, J. E., 62
 Flacks, R., 181, 184, 193, 194, 214
 Fleming, B., 61
 Francois, P., 365, 368, 369
 Freeman, H. E., 72
 Freeman, J. P., 453
 Freire, P., 544, 545
 Friedkin, N. E., 215
 Friedland, R., 368
 Friedman, H., 221
 Friedman, M., 340, 344
 Friedman, T., 455
 Friedman, T. L., 455
- Friesen, W., 220, 221–222, 224, 269, 270
 Frye, J., 461, 464
 Fuller, W. A., 439
- Gabbard, D., 537
 Gabbard, G., 99
 Gada-Jain, N., 259
 Galbraith, J. K., 388
 Gallagher, P., 461, 470
 Gallagher, R. S., 576
 Gallimore, R., 66, 68, 80, 81, 88, 89, 96, 97
 Galloway, C., 258
 Gamson, Z. F., 122, 130, 136, 143, 149, 156, 163, 501
 Gao, L., 59, 64, 76, 82, 85
 Gappa, J., 499
 Gappa, J. M., 479, 480
 Garratt, R., 366, 368
 Garza, H., 517
 Gates, B., 571
 Gates, S. M., 124, 130, 137, 155, 169, 172
 Gay, G., 528, 529
 Gee, J. P., 462
 Geiger, R. L., 132, 135, 157, 537
 Gelber, S., 20
 Gelberg, D., 577
 Gelman, A., 426, 433, 440
 Gendrin, D., 251
 Gibson, D. P., 541
 Gillmore, S., 265
 Gilmour, J., Jr., 477
 Giroux, H., 457
 Giroux, H. A., 537, 543, 577
 Giroux, S. S., 537
 Gladieux, L. E., 284
 Glynn, T., 223
 Goldin, C., 367
 Goldsen, R. K., 182, 183
 Good, T., 243
 Goodchild, L. F., 133
 Gorelick, S., 191
 Goyder, J., 430, 440, 445
 Granados, R., 528
 Greene, J. C., 67, 69
 Greene, M., 546

- Greene, W. H., 386, 391, 392, 393
 Greenwald, A., 265
 Gregory, S. T., 517
 Griffith, M., 461
 Griswold, C., 338
 Griswold, C. P., 338, 398
 Grogan, C. M., 390
 Groves, R. M., 428, 429, 430, 433, 440, 445
 Grubb, W., 465, 472
 Grubb, W. N., 453, 461, 487, 488
 Grunig, S. D., 62
 Guillén, M., 455
 Gumpert, P. J., 63
 Gutierrez, K., 67, 72
- Haddad, C., 549
 Hagedorn, L. S., 162, 513, 516
 Halcon, J. J., 503, 517, 518
 Hale, T., 388
 Hamel, G., 576
 Hansen, D. A., 576
 Hansen, L., 303, 304
 Hansen, W. L., 336, 339, 340, 342, 343, 345, 347, 348, 349, 350, 351, 352, 356, 357, 358
 Hanushek, E. A., 343, 345
 Hardy, C., 1, 477, 479
 Harris, K., 122
 Harris, M., 226, 238, 242, 245, 246, 247, 256
 Hart, A., 259
 Hartman, R. W., 337, 340, 351, 355, 356, 357
 Harvey, W., 503
 Hausman, J., 392, 394
 Hearn, J. C., 338, 398
 Hebel, S., 475
 Hechtman, T., 199
 Heck, R. H., 419, 424, 425, 427, 445
 Heckman, J., 370
 Held, D., 455
 Heller, D. E., 300, 338, 355, 398
 Henderson, B. B., 163
 Herideen, P. E., 488
 Herman, E. S., 539
 Herrera, R. R., 528
 Hight, J., 356
- Hill, C., 318
 Hill, P., 21
 Hines, E., 476, 477
 Hirschhorn, L., 82
 Hoenack, S. A., 317
 Hoffer, T. B., 505
 Holland, R. C., 576
 Holt, D., 420
 Holzer, H. J., 508
 Hong, E., 63, 64, 76, 78, 79, 85, 86, 99
 Horn, L., 311
 Horowitz, H. L., 190, 191, 194, 201, 205, 209
 Hossler, D., 125, 127
 Hough, L. M., 500
 Hoxby, C., 342
 Hu, S., 310
 Huisman, J., 130, 139, 143, 150, 156, 157, 169
 Humphreys, B. R., 317
 Hune, S., 510, 527
 Hunnicutt, V., 254, 255
 Hurley, R. G., 75, 85
 Hurtado, S., 527
 Husted, T. A., 360
 Hutchinson, J., 430
- Iturbe-Ormaetxe, I., 367, 368, 369
- Jackson, G. A., 254, 298, 303, 305, 306
 Jackson, I., 254
 Jackson, P. B., 509, 510
 Jacobs, J. A., 453, 465, 488
 Jacobson, L., 256
 James, E., 341, 351
 James, J., 510
 Jaquette, O., 57, 78, 85
 Jenniskens, C. G. M., 130, 150
 Jevons, W. C., 559
 Johnson, G., 401
 Johnson, G. E., 365, 368, 369, 374, 401
 Johnson, G. P., 401
 Johnson, J. A., 503
 Johnson, N., 353, 355
 Johnson, S., 251
 Johnson, S. L., 465
 Jones, J., 411, 429
 Jordan, D., 527

- Kalton, G., 412, 413, 414, 416, 417,
418, 419, 420, 421, 422, 423, 424,
426, 427, 429, 430, 432, 433, 434,
435, 436, 437, 438, 439, 443
- Kane, T. J., 281, 307, 308, 310, 324,
326, 336, 341
- Kane, W. D., 163
- Kanter, R. M., 509, 510, 513
- Kantor, H., 563
- Kaplan, R. S., 88
- Karabel, J., 461
- Karpoff, P., 342
- Kasprzyk, D., 435, 436, 437, 439
- Kater, S., 453, 472, 478
- Katz, L. F., 473
- Katz, M. B., 563
- Keeter, S., 430
- Kellner, D., 543
- Kelly, D. H., 183
- Kenen, P. B., 511
- Kenen, R. H., 511
- Keniston, K., 185, 193
- Kennedy, A. A., 576
- Kenny, L., 361
- Kenny, L. W., 360
- Keohane, N., 498
- Kerckhoff, A. C., 529
- Kilmann, R. H., 576
- Kingdon, J. W., 401
- Kirp, D., 537
- Kirst, M. W., 498
- Kish, L., 412, 413, 414, 417, 418,
422, 423
- Kliebard, H., 561
- Klinzing, H., 254, 255
- Knapp, M., 223
- Kniker, C. R., 75, 87
- Koestenbaum, P., 82
- Konrad, A. M., 497, 498, 511
- Krueger, A. B., 400
- Krussell, P., 360
- Kuh, G. D., 62, 73, 126, 127, 152, 160,
186, 430, 441
- Kulis, S., 502, 508, 509, 511, 513
- Labaree, D., 452, 465
- Lachs, J., 165
- Laden, B. V., 513, 516
- Ladson-Billings, G., 510
- Lagemann, E. C., 59
- Lassen, D., 364
- Lather, P., 65, 66, 67, 68, 109
- Law, G., 563
- Lawler, A., 498
- Lawrence, C., 252, 253, 255
- Lawrence, J. H., 143, 517
- Lazerson, M., 81
- Leavitt, H. J., 95
- LeChasseur, K., 148, 161, 164, 168, 169
- Le Compte, M. D., 454
- Lederman, D., 61
- Lee, C. B. T., 135
- Lee, J. J., 165
- Lee, M. J., 539, 542
- Lemeshow, S., 414
- Lemieux, T., 322
- Leslie, D. W., 479
- Leslie, L., 142, 401, 452
- Leslie, L. L., 305, 396, 401
- Leveille, D. E., 63, 85, 110
- Levin, H. L., 98, 345
- Levin, J. S., 63, 167, 169, 451, 452,
453, 454, 455, 456, 458, 459, 461,
462, 464, 465, 470, 472, 474, 475,
476, 477, 478, 483, 485, 488
- Levine, A., 194, 198
- Levitt, J., 364
- Levitt, T., 538
- Levy, P. S., 414
- Lewis, D. R., 345
- Li, J., 318
- Lichtenberg, F. R., 341
- Light, P., 515
- Lindblom, C. E., 60, 109
- Lindert, P., 360
- Lindholm, J. A., 441
- Lindley, D., 215
- Lininger, C. A., 434
- Linsenmeier, D. M., 107
- Lipman-Blumen, J., 95
- Lipset, S. M., 185, 467
- Little, R. J. A., 428, 434, 437
- Loeb, P., 198
- Long, B. T., 321, 529
- Lopez, J. M., 528
- Lott, J. R., 361

- Lovett, C. M., 167
 Low, S., 305
 Lowry, R. C., 338, 398, 399
- McCartan, A.-M., 464
 McCarty, N., 364
 Machung, A., 147, 148
 McConnell, T. R., 14, 15, 16
 McCormick, A. C., 126, 144
 McCroskey, J., 239, 241, 251
 McCroskey, P., 238, 242, 243, 244, 247, 251
 McDaniels, M., 161
 McEwan, E. K., 69
 McEwan, P. J., 69, 98
 McGrath, D., 311, 461
 McGuire, J., 339, 340, 347, 348, 352, 356, 357
 McKay, P., 511
 McKinney, C., 254, 255
 McLendon, M. K., 338, 390, 399
 McMillen, D. P., 321
 McNeil, L., 562, 563, 566, 567
 McPherson, M. S., 156, 281, 309, 318, 345
 Magnuson, J., 232
 Mahtani, M., 512
 Maki, P. L., 73
 Manski, C. F., 303, 304
 Marginson, S., 451, 452, 457, 477
 Marin, P., 355
 Marsh, H., 234, 262, 265
 Marshall, C., 454, 529
 Marshall, J. M., 366, 368
 Marti, C. N., 87, 425
 Mason, J., 454
 Massy, W. F., 62, 81, 122, 123, 124, 130, 150, 151, 153, 156, 157
 Matsusaka, J., 364
 Maxwell, J. A., 454
 Mazzeo, C., 452, 488
 Mead, M., 12
 Mehrabian, A., 238, 240, 241, 249
 Meier, K., 464
 Meltzer, A. H., 358, 359, 360, 361, 363, 371
 Menendez, A., 356
- Meredith, M., 122, 125, 128, 130, 137, 154, 157, 161, 173
 Merkle, D. M., 430
 Merton, R. K., 51
 Messerli, J., 564
 Metz, G. W., 311
 Meyer, J. W., 139
 Meyer, N. D., 576
 Mickelson, R. A., 514, 519
 Milem, J. F., 123, 165, 527
 Miller, A., 251
 Miller, D. L., 81
 Miller, G., 540
 Miller, S., 430
 Minassians, H., 62, 63, 64
 Mintrom, M., 401
 Moffatt, M., 198
 Molm, L. D., 439
 Molnar, A., 537, 577
 Monks, J., 122, 128, 130, 148
 Moody, J., 519
 Moore, D., 223
 Moore, D. L., 17, 429
 Moore, W. S., 62
 Morest, V. S., 463, 465
 Morgan, G., 51
 Morphew, C. C., 122, 123, 125, 130, 137, 139, 140, 141, 142, 143, 150, 151, 152, 153, 156, 157, 161, 163, 164, 165, 169, 173, 174
 Mortimer, K. P., 15, 45
 Mueller, D., 360, 362
 Mumby, D., 482
 Mumper, M. A., 357
 Murray, H., 229, 230, 231–233, 236, 240, 243, 252, 253, 255, 270
 Muthén, B. O., 425, 427
 Myers, S., 251
 Myers, S. L., 499
 Myers, S. L., Jr., 502, 503, 510, 513, 516, 520, 527
- Naftulin, D., 233
 Nelson, D. J., 498, 515
 Nelson, M., 364, 365, 401
 Nelson, R. R., 341
 Nelson, S. C., 390
 Nerad, M., 539

- Netz, J. S., 317
 Neulip, J. W., 251
 Newcomb, T. M., 181, 182, 183, 184, 185, 214
 Newfield, C., 537, 554, 555, 560, 561, 564, 565, 566
 Ng, E. S. W., 510, 518
 Niskanen, W., 365
 Noble, D. F., 560, 565
 Noell, J., 306
 Nordhaus, W. D., 401
 Norton, D. P., 88, 461

 O'Brien, E. M., 503
 O'Donnell, M. L., 141
 O'Meara, K., 122, 149, 153, 160, 162, 163, 164, 165, 172
 Ogren, C. A., 135
 Oh, H. L., 428, 432, 443
 Oliver, C., 140
 Oliver, M. L., 519
 Orfield, G., 307
 Ortiz, F., 519
 Owen, P. S., 465

 Pace, C. R., 70, 186, 187, 198
 Palley, T. I., 456
 Palmer, P., 81, 462
 Palmer, T. S., 549
 Parker, C. W., 141
 Parker, F., 305
 Parker, K., 528
 Pascarella, E. T., 70, 126, 127, 152, 160, 165, 181, 182, 186, 187, 215, 441
 Paulsen, M. B., 341, 401
 Pechman, J. A., 340, 342, 344, 350, 351, 352, 355, 356, 357
 Pedersen, O., 457
 Peltzman, S., 357, 364, 365
 Pena, E. V., 81, 82, 83, 89
 Pencavel, J., 341
 Penner, K., 232
 Perkins, J. A., 10, 11, 12, 45
 Perrott, E., 227
 Perry, R., 229, 230, 231, 232, 234, 235, 236, 240, 244, 247, 248, 262
 Persson, T., 336, 339, 358, 363, 364
 Peterson, M. W., 8, 73, 311, 314, 411

 Pfeffer, J., 497, 498, 511
 Pfeffermann, D., 427
 Phelps, E. S., 341
 Phillips, R., 67, 521, 524
 Pierro, D. J., 317
 Pike, G. R., 127, 160
 Pillett, G., 515
 Pincus, F., 464
 Playko, M., 529
 Politz, A., 438, 439
 Polkinghorne, D. E., 60, 65, 68, 75, 80, 96, 102, 109, 110
 Pollock, R., 356
 Porter, S. R., 411, 412, 430
 Postman, N., 154
 Powell, W. W., 82, 123, 124, 139, 143
 Prahalad, C. K., 576
 Preissle, J., 454
 Pribyl, C., 251
 Pryor, J. H., 425, 441
 Puiggàos, A., 457
 Pujol, F., 364
 Pusser, B., 63, 77, 141, 452, 472

 Rab, S., 452, 465, 488
 Radbill, L., 427
 Rains, F., 510
 Ramey, G., 396
 Ramirez, A., 78, 83
 Raudenbush, S. W., 67, 68, 69, 71, 72, 73, 96, 100, 102, 103, 104, 215
 Readings, B., 458, 547, 552
 Redline, C. D., 428
 Reich, R., 144
 Reskin, B., 505, 511
 Rhoades, G., 142, 451, 452, 453, 456, 457, 458, 459, 460, 471, 473, 474, 476, 477, 479, 486, 537, 561, 573, 574, 575
 Rhoads, J. A., 165
 Rhoads, R., 461, 462, 465
 Rhoads, R. A., 529
 Rice, R. E., 162
 Richard, S., 358, 359, 360, 361, 371
 Richardson, R. C., 62, 78, 83, 461, 464
 Richmond, J., 238, 242, 243, 244, 251
 Richmond, V., 238, 239, 252, 253, 255
 Riesman, D., 123, 124, 181

- Rios-Rull, V., 360
 Rizzo, M. J., 320
 Roach, K., 251
 Roberts, K., 360
 Robertson, R., 455
 Robinson, C., 528
 Roche, L., 265
 Rodrik, D., 362
 Roe, C. E., 472, 475
 Rogerson, R., 338, 358, 366, 367, 368, 369, 370, 371, 373, 374, 377, 378, 383, 384, 386, 391, 394, 395, 398, 399, 400
 Romano, R. M., 76, 77
 Romer, T., 360
 Rosenthal, J. T., 19
 Rosenthal, R., 226, 238, 242, 245, 246, 247, 256, 258, 259, 260–261, 262, 264, 267, 270
 Ross, M. L., 391
 Rossi, P. H., 72, 213
 Rossman, G., 454
 Roueche, J. E., 461, 480
 Roueche, S. D., 461
 Rouse, C. E., 71, 107, 341, 342
 Rozada, M., 356
 Ruben, B. D., 75, 90
 Rucker, M., 251
 Rudolph, F., 560
 Rueda, R., 57, 68, 89, 98
 Ruscio, K. P., 156
 Rush, B., 564
 Russell, P. G., 523, 524
 Ryan, K., 227
 Rynes, S., 506, 507, 522
 Rynes, S. L., 506, 507, 522

 Saad-Filho, A., 456
 Sachs, J. D., 391, 392
 Sacks, P., 198
 Said, E., 539
 Saletsky, R., 251
 Saltman, K. J., 537, 577
 Sanford, N., 181, 182, 214
 Sarraf, S., 122, 160
 Satorra, A., 425, 427
 Saul, J. R., 458
 Schapiro, M. O., 156, 281, 309
 Schenet, M. A., 284
 Scheuren, F., 428, 432, 443
 Schmidt, P., 574
 Schonwetter, D., 232
 Schor, J. B., 548, 549, 550
 Schroeder, C. C., 188
 Schuh, J. H., 74, 75
 Schultz, R. E., 123, 156
 Schultz, T. W., 339, 345
 Scott, P., 124, 543
 Scott, W. R., 139
 Scott-Jones, D., 503
 Seftor, N., 308, 310
 Selingo, J., 61
 Seneca, J. J., 305
 Senge, P., 462, 577
 Sennett, R., 452, 457, 459
 Sergiovanni, T. J., 68
 Shavelson, R. J., 66, 67, 68, 107, 109
 Shaw, K. M., 148, 161, 164, 168, 169, 461, 465, 488, 502, 511
 Sherman, D., 305, 306
 Shleifer, A., 362
 Shor, I., 544, 545
 Shorris, E., 198
 Siegel, B. N., 305
 Silva, E., 141, 142
 Simmons, W., 438, 439
 Simon, H. A., 68
 Singell, L. D., Jr., 299, 307, 309, 310, 311, 312, 314, 315, 316, 318, 319, 321, 327
 Slaughter, S., 141, 142, 451, 452, 456, 457, 458, 460, 474, 476, 477, 486, 537, 561, 573, 574, 575
 Slemrod, J., 361, 362
 Smalling, T. R., 62
 Smith, A., 215
 Smith, B. L., 188
 Smith, D. G., 500, 503, 512, 515
 Smith, H., 223–224
 Smith, T. M. F., 420
 Smith, V., 17, 459, 479, 480, 481
 Smith, W. R., 539, 540
 Soley, L., 554
 Sorensen, G., 239
 Spear, M., 461
 Spence, M., 498, 506

- Spring, J., 454, 539, 563, 564
 Springer, A., 502, 504, 517
 Sprow, M., 553a
 St. John, E. P., 290, 304, 306, 310, 311, 312, 328
 St. Pierre, E. A., 67, 549
 Stadtman, V. A., 169
 Stake, R. E., 91
 Stanley, M., 323
 Starkey, J. B., 311
 Stephan, F. F., 438
 Stickler, W. H., 123, 156
 Stimson, J. A., 386, 392
 Stratmann, T., 360, 362
 Streeter, B., 255
 Stromquist, N. P., 457
 Strout, E., 61
 Summers, J., 305
 Sweitzer, K. V., 122, 154, 155, 157, 162
- Tabellini, G., 336, 339, 358, 360, 363, 364
 Taber, L., 461
 Tagg, J., 462
 Tang, T. L. P., 317
 Tarnai, J., 429
 Taussig, M. K., 305
 Taylor, P., 259, 262, 509
 Tenny, D., 353, 355
 Terenzini, P. T., 70, 127, 165, 181, 182, 186, 187, 215
 Terry-Long, B., 342
 Tewksbury, R. D., 309
 Tharp, R. G., 66, 68, 80, 81, 88, 89, 96, 97, 100
 Thelin, J., 132
 Thomas, G., 311
 Thomas, J. B., 81
 Thomas, K. M., 510
 Thomas, S. L., 199, 412, 414, 417, 419, 422, 424, 425, 427, 445, 452
 Thomsen, I., 430, 433
 Tierney, M. L., 305
 Tierney, W. G., 51, 143, 163, 476, 529, 551
 Tillman, L., 512, 513
 Tinto, V., 70, 188
 Titus, M. A., 71, 107
- Tolley, K., 539
 Toutkoushian, R. K., 63, 64, 70, 77, 84
 Townley, P., 577
 Tremblay, V., 428, 433
 Trow, M., 14, 62, 181, 183, 184
 Trower, C. A., 499, 502
 Turban, D. B., 508
 Turner, C. S. V., 497, 498, 499, 500, 502, 503, 504, 509, 510, 513, 515, 516, 520, 521, 522, 523, 524, 525, 527
 Turner, J. K., 77, 500
 Turner, S., 308, 310, 315, 318, 323, 327
- Umbach, P. D., 430
- Valadez, J., 461, 462, 465
 Van Horn, P., 514
 Van Tine, T., 553
 Vartivarian, S. L., 428, 433, 436, 437, 444
 Vasquez, M. J. T., 528
 Vaughan, G., 411, 461
 Venezia, A., 498
 Veysey, L., 560
 Vishny, R., 362
 Volkwein, J. F., 62, 70, 88, 122, 154, 155, 157, 162
- Wagner, G., 364
 Wagoner, R. L., 453, 472, 479, 481
 Wallace, W. L., 214
 Walleri, R. D., 69
 Ward, K., 122, 136, 149, 156, 157, 162, 163, 172, 174
 Ware, J., 233, 234
 Warner, A. M., 391, 392
 Warwick, D. P., 434
 Washburn, J., 537, 552
 Wasserman, S., 213
 Watson, L. W., 528
 Wawrzynski, M., 160
 Weathersby, G. B., 305
 Weber, L., 364
 Webster, D. S., 50
 Webster, T., 126, 137, 154
 Wechsler, H., 197
 Weems, R. E., 541

- Wei, C. C., 311
 Weider, D. L., 199
 Weidman, J. C., 528, 529
 Weis, L., 461, 462
 Weisbrod, B. A., 336, 337,
 339–358, 370
 Weiss, C. H., 65
 Wellman, J. V., 85, 86
 Wernick, A., 543
 Wetzell, J., 311
 Wheatley, M. J., 462
 Wheelless, L., 239, 245, 246
 Whitcomb, M. E., 411, 412, 430
 Williams, B. N., 516
 Williams, R., 234
 Williams, S. M., 516
 Wilson, E. K., 184
 Wilson, R., 503, 508
 Wilson, W. J., 567
 Windham, D., 340, 345, 357
 Winship, C., 427
 Winslow, S., 453, 465, 488
 Winston, G., 122, 130, 137,
 147, 156, 342
 Wirth, A., 564
 Wise, D. A., 304, 341
 Wise, P. G., 510
 Witt, P., 239, 245, 246
 Wolff, R. A., 62
 Wolf-Wendel, L., 136, 156, 163, 172
 Wong, K., 504
 Wood, A., 230, 232, 233, 253
 Woolfolk, A., 258
 Wyckoff, W., 253, 254, 255
 Wyner, J., 59, 95

 Youn, T. I., 501

 Zamboanga, B. L., 516, 520, 524
 Zaritsky, R., 68, 90, 102, 103
 Zemskey, R. M., 63, 81, 122, 123, 124,
 130, 150, 151, 152, 153, 156, 157
 Zhao, C.-M., 186
 Zimmerman, D. H., 199
 Zuckerman, M., 220, 237
 Zumeta, W., 62, 110
 Zwerling, L., 340, 356