

# Academy for College Excellence

## Evidence of Success

Since its inception at Cabrillo College in 2002, the Academy for College Excellence (ACE)—formerly called Digital Bridge Academy (DBA)—has been rigorously evaluated qualitatively and quantitatively. Ten independent external evaluations have been conducted, all demonstrating significant impacts on vulnerable students and community college faculty.

This document summarizes the results of the recent findings of two longitudinal evaluation studies of the ACE Program: the Columbia University's Community College Research Center (CCRC) study published in 2009 and the RTI International (RTI) study released in January 2014. The two key findings:

1. The ACE academic outcomes are replicable at colleges adopting the ACE model; i.e., the academic outcomes produced in the CCRC study are replicated when the ACE Program is implemented at multiple colleges where some of the colleges are scaling to serve over 350 students per year.
2. The ACE accelerated math approach shows strong results when integrated with the ACE social justice primary research course, and the accelerated math approach is successful when combined with accelerated English in the same semester.

The CCRC study evaluates 9 cohorts of students enrolled in the ACE/DBA program at Cabrillo College between Fall 2003 and Fall 2007 and studied longitudinally for 4 semesters.

The RTI study, funded by the Bill and Melinda Gates Foundation, analyzes the achievement of multiple cohorts of ACE students at 4 colleges—Berkeley City College, Cabrillo College, Hartnell College, and Los Medanos College—from Fall 2010 to Spring 2013, using comparison groups constructed from institutional and program data.

Data collected from the colleges includes transcript information (e.g., courses and grades), assessment/placement test results for English, math, reading, and/or ESL, and demographic information (i.e., date of birth, gender, ethnicity). RTI measured credit accrual, retention, persistence, full-time enrollment, successful completion of transfer-level math and transfer-level English for students at one college, and successful completion of gatekeeper English courses for all ACE students as well as from a larger group of students used to construct comparison groups.

The RTI report shows that ACE students experience a high velocity of advancement through transfer-level English and transfer-level math, as well as shifts in affective factors that are important for academic success.

These two studies show that the ACE model has very positive effects on those students who participate and contributes strongly to their persistence and achievement rates.



Transformative Education Begins With You

## 2009 Columbia University Community College Research Center (CCRC)

The CCRC study showed that students in the accelerated ACE program are:

- 145% more likely than their peers to pass associate-level English courses
- 84% more likely than their peers to pass transfer-level English courses
- Earn an average of 21 more credits than their peers
- 97% more likely than their peers to enroll full time in following semester

Further, evaluators noted: “ACE students are very likely to be more at-risk than Cabrillo students with similar levels of academic preparation... To the extent that the ACE students in the sample were substantially more disadvantaged than other students, it may be that the estimates produced through this analysis understate the effect of participating in ACE.

## January 2014 RTI International Evaluation Studies

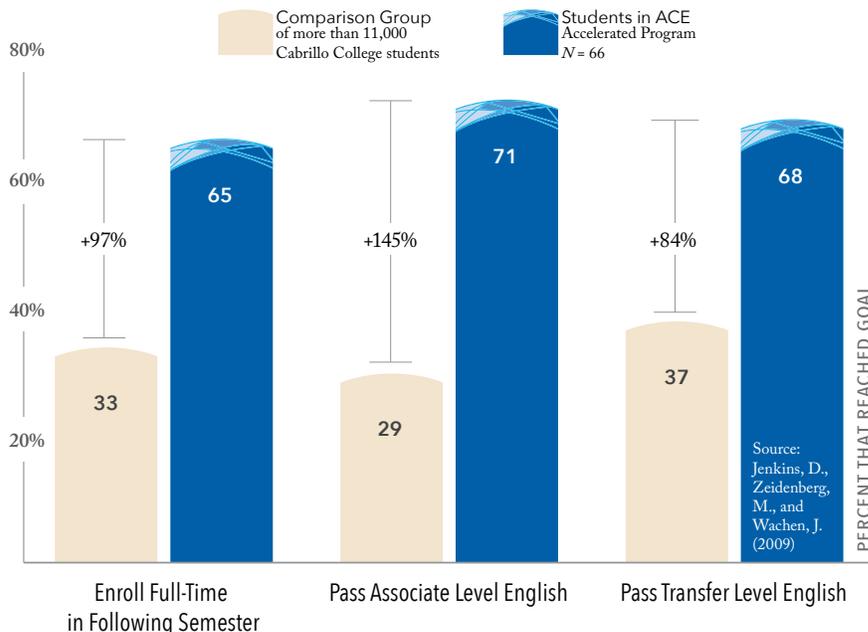
For tentatively connected students, completing developmental or remedial courses is one of their most difficult obstacles and the first critical step in completing college. Among the findings of the RTI evaluation study released in January 2014 is that ACE students are 2.3 times more likely to complete transfer level English one semester after attending the ACE accelerated program than comparable non-ACE students.

An ACE math program offers pre-statistics integrated with the ACE Social Justice Primary Research Course during the ACE bridge semester. Overall, the results studying 113 students suggest that this pilot program combining both English and math acceleration in the same semester to the same students leads to greater completion of both transfer-level English and math following the ACE semester. ACE acceleration students were 7.8 times more likely to pass transfer-level English and math courses one semester after attending ACE, compared to non-ACE students. In this pilot, ACE math acceleration students were 4.3 times more likely to pass transfer-level math one semester after attending ACE.

2009 Columbia University CCRC		
	Assessment Cohort	Accelerated ACE
N	11,578	66
Mean Age	21	23
Latino	32%	83%
Female	50%	53%
Prior College Credits	18	11
No HS Diploma	12%	15%
Low Income Zip	27%	85%
ESL Student	4%	8%

Data from Cabrillo College's student information system and multivariate analysis was used to compare attainment by ACE students with that of a comparison group of more than 11,500 students at Cabrillo College who did not participate in ACE.

### Columbia University Community College Research Center Summary of Outcomes



## Velocity

Tentatively connected students enrolled in ACE also make significant gains after they leave the ACE program, compared to non-ACE students. ACE students have the advantage of completing transfer-level English sooner than the control group and this advantage enables them to take other more advanced courses that require transfer-level English as a pre-requisite sooner than would otherwise be possible.

## Academic Outcomes

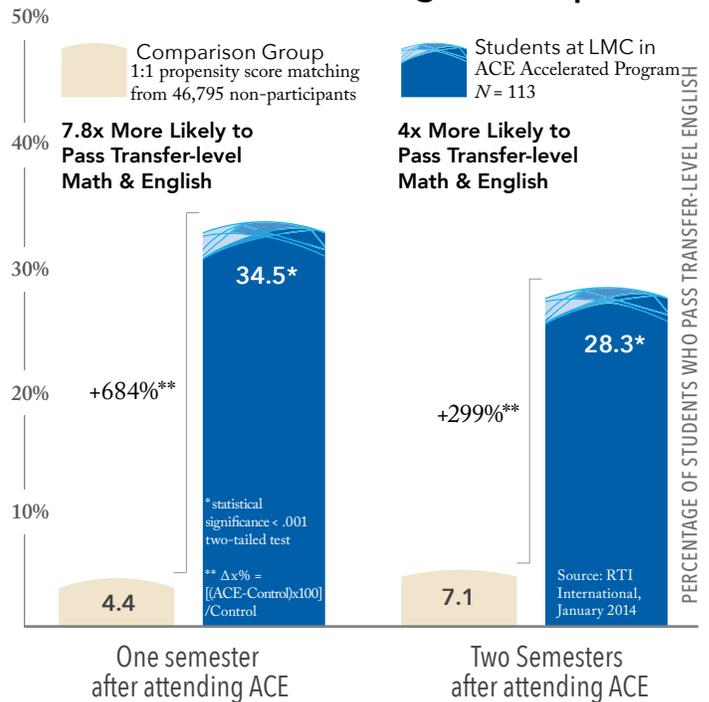
Most ACE participants completed college-level English in the ACE semester, a key requirement for

2014 RTI International	
ACE	
N	1,020
Mean Age	24
Latino	56.7%
Female	43.9%
Prior College Credits	2.4
GED or HS Dropout	11.1%
Placed 2+ levels below College English	48.4%
Placed 1 level below College English	42%
Assessed 2 or more levels below College Math Los Medanos College only	88.9%

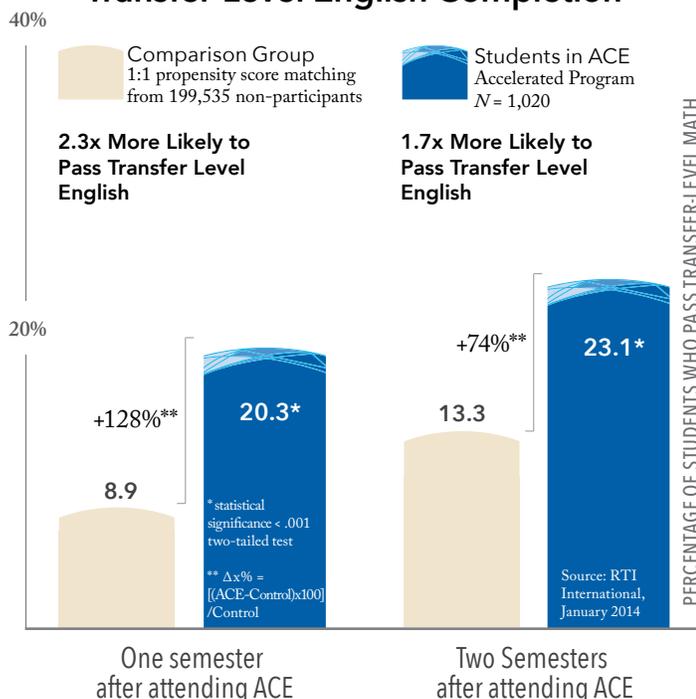
*The comparison group was created using regression analysis, and was chosen through propensity score matching. The total sample size for the regression is 139,865.*

associate's degrees and for enrolling in transfer-level English, despite placing into remedial English. This English completion rate is more than double the rate of a comparable group of non-participants. ACE par-

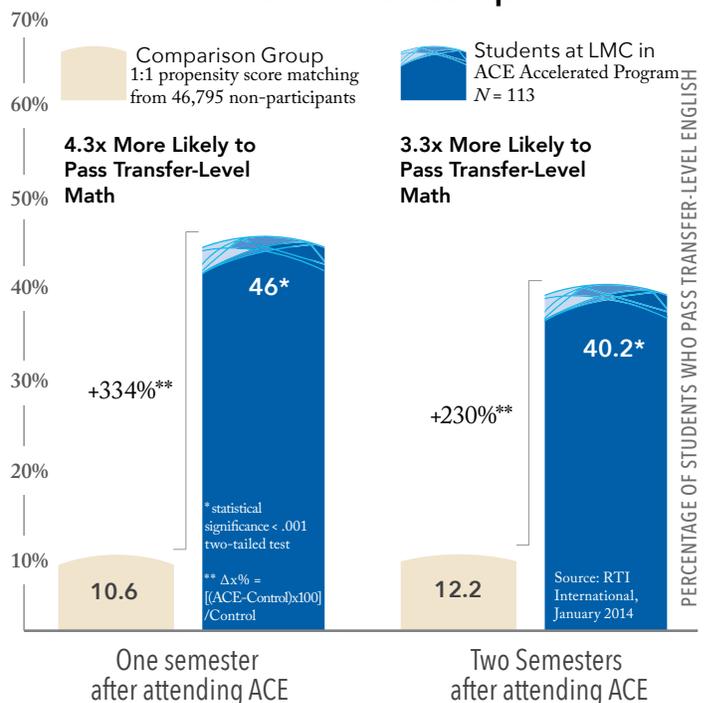
## 2014 ACE Longitudinal Study – Los Medanos College Transfer-Level Math & English Completion



## Four College Longitudinal Study of 1,020 Students Transfer-Level English Completion



## 2014 ACE Longitudinal Study – Los Medanos College Transfer-Level Math Completion



Participants also earned more than twice as many college-level credits on average as non-participants in ACE, another early momentum point associated with completion and transfer. ACE participants were more likely than non-participants to enroll full time in the semester following the ACE semester, enabling them to earn credits more rapidly.

The academic outcomes analyzed in the RTI study show similar results to the outcomes published in the Columbia University Community College Research Center (CCRC) study of the ACE program, which analyzed the ACE implementation at Cabrillo College when it only served 25 students per semester. The RTI study has shown evidence that the ACE model, curriculum, faculty development, and train-the-trainer approach can reproduce similar academic outcomes at multiple colleges, some of which are serving between 250 and 350 students per year.

*The ACE Program is scalable and sustainable because it is delivered through curriculum in the classroom.*

### Affective Research

The ACE program addresses non-cognitive skills that have typically not been developed by students most likely to enroll in the ACE program, due to the negative circumstances of their lives and their prior negative experiences as students. ACE, RTI and Professor Martin Chemers—professor emeritus of psychology from the University of California Santa Cruz, developed an instrument that combines eight mediating factors from standardized instruments including academic self-efficacy, personal responsibility, college identity, four factors of mindfulness, and leadership and teamwork efficacy. ACE named this instrument the *College Student Self Assessment Survey (CSSAS)*.

ACE students who completed the ACE Foundation Course and Bridge Semester exhibited significant gains in the 8 factors measured: academic self-efficacy, personal responsibility, college identity, four factors of mindfulness, and leadership and teamwork efficacy. In fact, students improved in 7 of the 8 factors

at a  $p < .001$  level of significance after the 2 week Foundation of Leadership Course (FC). With the exception of two factors, the change remains consistent or improved four months later (at the end of the semester).

Survey responses were based on a five-point scale, from “strongly disagree to strongly agree” for the non-mindfulness items and from “never or very rarely true” to “always or almost always” true for the mindfulness items.

\* $p < .001$ ; statistical significance is based on comparison with Time 1 scores.

