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By Rebeca Fernandez, Joy Kreeft Peyton, and Kirsten Schaetzel

Educational Attainment: Limited Implications for Adult Literacy Learners
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Review of Action Research to Improve Youth and Adult Literacy: Empowering Learners in a Multilingual World
Edited by Hassana Alidou and Christine Glanz | Reviewed by Federico Salas-Isnardi

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By David J. Rosen
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Dear Readers,

We are pleased to present the summer issue of the Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education. If you have not already realized that the journal is now open access, we invite you to look online at both the present (at https://www.coabe.org/current-issue/) and past issues online (at https://www.coabe.org/past-issues/) on the COABE website. We are very excited about the possibilities that this wider dissemination offer. We hope that, as a result, you will engage more often, broadly, and deeply with the journal.

The first research article in this issue, by Rebeca Fernandez, Joy Kreeft Peyton, and Kirsten Schaetzel, reports on the results of a survey of adult education teachers about their teaching of writing. Their findings point out the need for more systematic research on this topic. The second article, by Christine Dunagin Miller, Daphne Greenberg, Robert C. Hendrick, and Alice Nanda compares word usage patterns of high school drop-outs and high school graduates. Interestingly, they found few statistically significant differences between the two groups.

Finally, the practitioner article included in this issue was written by Susanne Gardner and examines the experience of one English Language Learner in a Correctional Education setting. Of particular interest is her description of how this student utilized other resources to support his continuing growth.

This issue also includes a fascinating forum discussion on the possibilities and challenges offered to adult basic education by the increasing influence of technology. Jeff Carter begins the conversation with an overview of the possibilities and limitations for learning that technology offers. Most importantly, he urges adult educators not to ignore the importance of human resources in favor of the computer ones. In her response to Carter, Jen Vanek also notes the potential of digital learning, particularly mobile devices, as adjuncts to the learning process. However, she points out that educators have engaged in “magical thinking” in viewing technology as a panacea that can cure the problems endemic to education generally and adult education particularly. Especially important, is her discussion, echoing Carter, of the detriments of diverting resources to technology. Finally, the final submission to this Forum, Diane C. Inverso, Jennifer Kobrin, and Shazia Hasmi, also discuss both the importance and the limitations of technology in adult basic education. They, as all of the contributors to this Forum, remind us that uneven access to the Internet is a paramount concern in the expansion of the use of technology to adult learners. They also note that cell phones can be important learning tools and the dissemination of these devices could go far in expanding access to adult basic education.

In his Webscan column, David Rosen presents some helpful websites that teachers can use in their instruction. Teachers may find these sites useful even without student access to the Internet. Tyler H. J. Frank and Jill Castek continue this discussion with their review of research on digital literacies. They make an important distinction between basic digital literacy and digital problem solving, noting that basic skills are no longer sufficient; research shows that adult learners need to be able to use technology to solve problems.

Finally, Federico Salas-Isnardi reviews Action research to improve youth and adult literacy: Empowering learners in a multilingual world edited by Alidou and Glanz. Salas-Isnardi reminds us of the important uses that educators can make of action research and its implications for effecting change through education.

As always, we welcome your feedback and continuing dialogue about these issues,

Amy D. Rose
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A Survey of Writing Instruction in Adult ESL Programs:
Are Teaching Practices Meeting Adult Learner Needs?

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We are indebted to adult ESL instructors and coordinators at Central Piedmont Community College in North Carolina for their feedback on the survey and to their state director, Gilda Rubio-Festa, for providing important updates on national policy.

Abstract
Recent legislation and education standards focus on the importance of developing students’ academic and professional writing skills. Research on the teaching of writing has articulated the types of texts and features of writing that students need to produce to succeed. At the same time, studies of writing in adult education have found that limited time is devoted to writing instruction. The experiences and needs of adults learning English as an additional language (L2 learners) are often not understood and met by teachers, and teachers often have limited professional development in the effective teaching of writing to adults. This article reviews this research and reports the results of a survey of over 400 teachers of L2 learners in adult education across the United States about their teaching of writing. The results show some positive trends and a number of challenges. As a field, we need to work together to understand the qualities of academic and professional writing that students need to produce and to implement effective instruction in adult education, community college, and university programs.
During the past five years, two major national trends have influenced adult education curricula and instruction. The underlying theme of these trends is that adult learners entering the workforce lack the skills they need to be successful and have limited opportunities to acquire them (National Commission on Adult Literacy, 2008). Evidenced by the Workforce Innovation and Opportunity Act (WIOA, 2014) and the College and Career Readiness Standards (CCRS), the first trend aims to better equip adult learners for economic self-sufficiency (Pimentel, 2013; U.S. Department of Education, 2016).

Workers today need to understand complex processes, be problem solvers, have some degree of computer literacy, and attain fluency in professional English (Casner-Lotto & Barrington, 2006; Parrish & Johnson, 2010). Many minimum wage jobs, such as taking orders in restaurants, parking cars, or providing security, require workers to use computer software, make independent decisions, and find solutions to problems. These tasks involve high-level language skills, critical thinking skills, and confidence, and adult education classes need to facilitate development of these skills. The 2013 College and Career Readiness Standards (CCRS) directly address this need through their shift in focus on what learners need to be prepared to do, such as carrying out complicated learning tasks, producing academic language and complex texts, using evidence from texts to anchor ideas, and learning from informational texts. Writing is an integral part of these activities; adult learners need to be able to present evidence for their ideas and the knowledge they acquire from texts in clear academic and professional language. Face-to-face communication, the focus of much English language instruction in the past, is no longer enough to equip learners entering the workforce. In order to effectively communicate professionally and academically, written communication is essential.

The second, and similar, trend is seen in higher education. In this environment, adult learners who lack fluency in academic English enroll in university and community college courses in order to gain workforce skills but do not complete their degrees. In an article in The Atlantic, Hulbert (2014) observes, “Nationwide, barely more than a third of community-college enrollees emerge with a certificate or degree within six years.” The results are not much better for students pursuing bachelor’s degrees. A study by the Harvard Graduate School of Education (2011) found that only 56% of students who begin bachelor’s degrees obtain them within six years. It may be that students are taking longer to graduate because of the high cost of full-time college tuition, the need to work and attend school simultaneously, and the obligation to support a family (Turner, 2004).

However, new research points to another reason why students may not complete their degree programs. Grube and Gabriner (2013) point out that 60% of students attending community colleges need remediation classes. Among students needing developmental reading classes, many of whom are learning English as an additional language (English learners), only 44% complete the full sequence of required courses. Spurling, Seymour, and Chisman’s (2008) study at the City College of San Francisco found that 56% of English learners in non-credit courses did not advance a single level, and only 18% transitioned to credit classes. Further, Almon (2012) reports that 45% of the community college students in the study sample never finished their selected program or degree. One adult ESL (English as a second language) teacher, DeAnna Coon (Coon & Jacobsen, 2014), observed, “In my community college work, I noticed that a lot of students were coming in, but many weren’t making it out, just out of the writing courses, and sometimes this derailed their college plans and aspirations completely.”

Prompted by national initiatives to improve workforce training, such as WOAI and CCRS, and by community colleges and universities grappling with higher drop-out rates, adult education programs and instructors have begun to revise their curricula. Ideally, these changes should emphasize different
written forms and literacies (Street, 1985; Wrigley & Guth, 1992) needed for successful academic and professional endeavors.

In an attempt to ascertain whether adult learners are getting the writing instruction they need, the authors of this article surveyed adult English as a Second Language (ESL) instructors across the nation. We asked them to identify the writing instruction they deliver, the text types they teach, the time they devote to writing, and the importance of writing in student placement decisions. After a review of the research on academic writing and writing approaches in adult ESL programs, we report on the results of the survey and make recommendations for writing instruction in these programs.

**Writing in Academic Programs**

In response to national trends to better prepare adult learners, we review here the nature of the writing tasks that they are asked to do and the ways that classes for adult English learners prepare them for these tasks.

Hinkel (2004) posits that students may be stumbling during their general education courses, often taken during the first year of college, because of their lack of academic reading and writing skills. While taking courses to meet general education requirements, students must read many academic texts, complete many short and long writing assignments, and take exams that often have short-answer and essay questions. At community colleges, English learners without these skills cannot even enroll in general education courses. They must first complete a sequence of tuition-based academic ESL or developmental English/composition courses that do not count toward the general education requirements of most certificate, diploma, or degree programs (Zafft, Kallenbach, & Spohn, 2006).

In preparing these learners for college-level academic courses, widely used approaches to writing instruction and adult ESL curricula may not be adequate. Since the 1980s, writing instruction has predominantly used the process approach to teaching academic writing (Reid, 1993; Zamel, 1982, 1987) and focused on “methods for teaching L2 composition to nonnative speakers of English that …have little to do with the learning needs of L2 students specifically” (Hinkel, 2015, p. 77). Focused primarily on global writing concerns as students pre-write, draft, and revise papers, the approach has not considered that English learners may “lack the necessary language skills (e.g., vocabulary and grammar) to take advantage of the benefits of writing process instruction” (Hinkel, 2004, p. 9). Even when they master the writing process, they may still have a product that is difficult for native English speakers and their instructors to understand. Furthermore, Crandall and Shepherd (2004) conclude that many adult ESL curricula focus more on listening and speaking than on reading and writing, making it difficult for adults learning English to move from ESL to academic courses.

**Academic Literacy**

In light of the concerns and reforms discussed earlier, we should first understand the characteristics of academic writing. In the field of academic ESL, known as English for academic purposes (EAP), practitioners (e.g., Hyland, 2006) sometimes differentiate “general from “specific” features. General includes features of academic English common across all disciplines (e.g., use of a thesis statement, supporting generalizations with specific data), while specific includes those general features plus features that are discipline-specific (e.g., use of the passive voice in scientific texts; use of discipline-specific vocabulary). In general English for academic purposes, “academic writing consists of the ability to articulate and support complex ideas, analyze an argument, and sustain a focused and coherent discussion” (Rosenfeld, Courtney, & Fowles, 2004, p. 1). Articulating and supporting an idea based on the reading of a text or analysis of data is the basis for most writing assignments and essay exams in general education as well. For academic and professional writing tasks, students read and write
literary, historical, legal, scientific, or other texts and statistical, geographical, or other data (Scheiber, 1987; Spack, 1988). From these texts and data, they fashion an argument and support it.

These features of academic English are part of what Lea and Street (2000) describe as academic literacy, the unique communicative practices of genres, fields, and particular subject areas. Hyland (2006) describes these communicative practices as the “deep language, literacy and discourse issues involved in the institutional production and representation of meaning” (p. 120).

Rosenfeld et al.’s (2004) survey of professors in Master’s and Ph.D. programs offers further insights into the literacy practices of different fields and disciplines. Their survey focused on what academic literacy practices the Graduate Record Exam (GRE) should test in order to determine whether a candidate for admission to an MA or Ph.D. program can perform them. Even though this exam is used to determine student readiness for graduate level work, the literacy practices it measures provide a good definition of academic and professional literacies. Survey respondents rated 36 of the 39 task statements as “important” or “very important” for entering students to be able to perform competently. The following 12 tasks were rated the highest (pp. 14 & 15):

1. Credit sources appropriately
2. Organize ideas and information coherently
3. Use grammar and syntax that follow the rules of standard written English, avoiding errors that distract the reader or disrupt meaning
4. Avoid errors in mechanics (e.g., spelling and punctuation)
5. Abstract or summarize essential information (e.g., from speeches, observations, or texts)
6. Analyze and synthesize information from multiple sources
7. Integrate quoted and referenced material appropriately
8. Develop a well-focused, well-supported discussion, using relevant reasons and examples
9. Write clearly, with smooth transitions from one thought to the next
10. Write precisely and concisely, avoiding vague or empty phrases
11. Revise and edit text to improve its clarity, coherence, and correctness
12. Work independently to plan and compose text

Whether in adult ESL, EAP, or mainstream writing courses, adult English learners may receive differing amounts of instruction in these skills. As Matsuda (2006) noted, “In many composition classrooms, . . . language issues beyond simple ‘grammar’ correction are not addressed extensively, even when the assessment of student texts is based at least partly on students’ proficiency in the privileged variety of English” (p. 640).

Attending to the needs of an increasingly multilingual student population, the field of writing instruction has shifted slightly to focus on written products as well as on writing processes. “Writing is no longer regarded as spoken words taken down” . . . but rather “is deemed to be a complex, recursive process, including various operations with preceding and succeeding operations contributing to one another” (Mostafa & Aliabadi, 2013, p. 192). Thus, as a student is composing a piece, reviewing, and revising it, ensuring that the language is clear and comprehensible is of utmost importance. Given what academic writing entails, it is understandable that students not yet proficient in English in general, and academic English in particular, will have difficulty doing well in advanced ESL composition, freshman writing, and general education courses.

**Academic Writing in Adult Education**

Studies of the uses and key features of academic writing in adult education are limited. Angelova
and Raizantseva (1999) found that English learners in adult education classes had three categories of problems in acquiring academic writing skills: attitudinal, cognitive, and social. Their attitudinal problems pertained to motivation and others’ expectations for academic writing and their own views about writing and their ability to do it well. They had cognitive difficulties with topic selection, academic organization, critical stance, academic register, and the writing process. Socially, they struggled with relating to their professors and reacting to evaluation and feedback.

Challenges are significant in community colleges, considered to be a gateway to higher education and success for English learners. ESL classes at community colleges are the largest and fastest-growing component of adult education in the United States (Community College Consortium for Immigrant Education, 2015). These learners are not the “typical” international ESL students who have “learned English through formal, metalinguistically oriented classroom instruction, . . . are literate in their first language (L1), or . . . have had considerable life experience abroad to be drawn on in interpreting their experience in the United States” (Harklau, Siegal, & Losey, 1999, p. 2). They are immigrant English learners with diverse education backgrounds, including degrees in their native languages, U.S. high school diplomas, and limited or interrupted schooling (Chiang & Schmida, 1999). Coon and Jacobsen’s (2014) literature review of effective writing approaches for English learners in community colleges mentions that most faculty are not prepared to teach adult immigrant students writing in the ways they need to learn and develop. Finding that there is no one-size-fits-all solution, they conclude that English learners benefit from programs that offer additional background in and support for academic writing. Low-cost or tuition-free adult education courses can provide this support for some English learners (Zafft et al., 2006).

A Survey of Writing Practices and Challenges in Adult ESL Classes

Surveys of the focus on and approaches to writing in adult education programs can provide a useful snapshot of adult educators’ teaching practices and priorities. Gillet’s (1997) academic writing survey of adult education teachers in Michigan concluded, at that time, that teachers needed and wanted more training in teaching writing and on ways to incorporate more writing into their classes. Two decades later, the field’s shift away from life skills to college-and career-readiness has underscored the importance of academic and professional writing, yet we do not know to what extent it has equipped teachers accordingly. We believe that more information is needed about the writing instruction that students are receiving, the beliefs that their teachers hold about writing instruction, and their ability to reach their educational goals. In essence, our national survey of adult ESL practitioners explored the following questions:

- What do practitioners in the field believe about the importance of writing in their programs and classes?
- What writing practices do teachers and learners engage in?
- What support for the teaching and learning of writing do teachers and learners receive?
- How can we facilitate the success of learners who aren’t “making it out of the program or writing courses”?

Designed in Qualtrics, the survey consisted of 43 questions, a combination of item types, including yes/no, multiple-choice, and ordinal (ranking) questions as well as four open-ended questions.

Members of the Adult Education Interest Section (AEIS) listserv of Teachers of English to Speakers of Other Languages (TESOL) and Adult English Language Learners listserv, LINCS Communities of Practice (communitysupport@lincs.ed.gov) were invited to participate in the survey on November 19, 2014 by clicking on an open link. By targeting
these national organizations, we sought to capture a range of adult ESL providers in the United States, including community colleges, community-based organizations, and grassroots organizations. Since adult ESL classes tend to emphasize an integrated skills approach to instruction (Lesgold & Welch-Ross, 2012), solicitation posts and the opening page of the survey addressed adult ESL educators broadly rather than academic writing instructors specifically.

In January, 2015, after a low response rate, we contacted state directors listed on the National Adult Education Professional Development Consortium (NAEPD) website, who forwarded the invitation to program coordinators at community colleges and CBOs for further dissemination. As a result of this revised recruitment strategy, 75% of respondents (279) said that they learned about the survey from their program administrator. The beginning of the survey explicitly invited adult educators to respond. The first two questions asked how the respondent learned about the survey. The second asked if they worked in an adult education program, taking respondents to the end of the survey if they did not. The survey was closed February 1, 2015.

**Survey Findings**

**Survey Respondents**

There was interest in completing the survey, with 471 individuals starting it and 272 completing it. Respondents represented 25 states and Canada. Most respondents answered the yes/no, drop-down, and ranking of importance questions. Some didn’t answer the open-ended questions.

The majority of the 376 respondents reported working at community colleges (41%), followed by community-based organizations (31%) and K-12 schools (13%). Most were employed as part-time instructors (63%), followed by full-time instructors (19%). Only 6% said that they were volunteers, possibly because many volunteers wouldn’t have known about the survey. Administrators (17%) sometimes mentioned that they were only administrators and did not teach writing.

In response to the question regarding preparation they received to work in the adult ESL field, 38% responded that they held a K-12 credential; 15% of those had an ESL endorsement; 18% held a Master’s degree in TESOL; and 18% had a TESOL certificate. “Other” (44%) included short-term certificates; Masters, or PhDs in related fields such as adult education, applied linguistics, immigrant studies, and foreign languages; and qualification to teach through years of experience and workshops in the field.

These results suggest that respondents were a highly qualified group, suggesting either a sampling bias or a personnel shift in the field. Almost a decade ago, another survey of adult ESL educators found that teacher certification and credentialing, and state teacher credential requirements, varied widely from state to state (Crandall, Ingersol, & Lopez, 2008). It may be that well qualified teachers self-selected to complete the survey.

In terms of specific preparation to teach academic writing, most respondents (70%) had participated in workshops or short-term professional development. Smaller numbers had participated in second language writing courses (29%), a supervised teaching assistantship or internship in an adult ESL classroom (16%), or supervised tutoring of adult ESL students (17%). A small percentage (29%) mentioned receiving formal professional development on second language writing instruction within the past year, 39% within the past three years, and 33% more than three years ago or never.

**Students and Classes Taught**

Table 1 shows that respondents taught adult ESL students at all Educational Functioning Levels (EFLs), though levels one, six, and exited ESL students in ABE/GED were less well represented. These results are consistent across all proficiency levels. We did not ask specifically about the writing done in multilevel classes, though some teachers surveyed said that they teach these classes.
A Survey of Writing Instruction in Adult ESL Programs

Class Sizes and Time Spent Writing

Respondents’ class sizes ranged from fewer than 10 to more than 35 students. Most (71%) reported having 15 or fewer students in a class, and only 6% had more than 25 students. Over half (53%) had classes with the same students three to five days per week, and most classes were held for two to three hours, four days per week. Reasonable class sizes and several hours per week of instruction hold promise for favorable conditions for the teaching of writing.

However, when asked how much time per week they spent teaching writing, the majority (52%) said less than one hour per week. In comments, some mentioned that the amount of time spent writing depended on the level of the students and the class. When the data were disaggregated by level, instructors at the beginning and intermediate levels (1-4 in Table 1) were most likely to spend no more than 30 minutes per week on writing instruction. Those at the advanced level (6 in Table 1) and in ABE/GED classes most often reported spending as much as one hour per week (15 minutes per day for classes meeting four days per week) on writing instruction.

When asked how much writing their students produced for the class each week, 61% responded that they wrote a paragraph or less. Only 30% reported that students wrote one or more pages. When the data were disaggregated by level, instructors reported that students in beginning to low intermediate classes (1-4) wrote no more than one paragraph per week. High intermediate to ABE/GED students produced more extended prose, one or two pages per week. Most of the writing was handwritten (48%) or produced through some combination of handwriting and keyboarding (40%).

Types of Writing Done

A number of questions asked about the types of writing that students did, the audiences they wrote for, and their participation in collaborative writing activities such as peer conferencing and writers’ workshop. For the question about the types of writing and writing activities, the response options given were not mutually exclusive, and a respondent could choose as many as applied. As shown in Table 2, respondents reported a considerable amount of narrative writing, note taking, and descriptive writing and a small amount of technical/instructional and argumentative/persuasive writing. “Other” includes entries about writing simple sentences and paragraphs.

Table 2 lists the types of texts that students wrote, narratives being the most prevalent, followed by note-taking, description, and informational/expository prose. When the data were disaggregated by level, at all levels, narrative or imaginary prose was the most common text type reported. At the advanced level, expository writing was the second most common text type reported.

Using a 1-4 Likert scale, respondents were asked to indicate how often students produced different forms of writing (a question used by Gillet, 1997). The list below shows items with a mean of 2.47 and above (indicating Sometimes or Often), in order from highest to lowest score. Items with an asterisk are those for which over 50 respondents said that their students do this form of writing Often.

1. *Grammar and punctuation exercises
2. *Class notes
3. *Short answers to essay questions
4. *Biographical or personal writing
5. Current event descriptions
6. Descriptions of data or observations

The list below shows forms of writing with a mean score of 1.54 and below (indicating Seldom or Never), in order from the highest to the lowest score.

1. Reports or research papers
2. Reviews of a book, product, or movie
3. Editorials or advertisements
4. Scripts
5. Character sketches
6. Poems

These results are consistent across all proficiency levels.
levels. In comments, some respondents mentioned that students also write authentic materials, including job applications, medical reports, grocery lists, and driver license applications. Others mentioned classroom dictation and writing short sentences, prompts for pictures, and lists.

Audiences That Students Write For
When asked what audiences students wrote for (another question from Gillet, 1997), most respondents said that they wrote for the teacher, fellow classmates, and themselves.

Response to Student Writing
When asked if they evaluated student writing, most of the respondents (89%) said that they did so in some way. Those who did not evaluate student writing, two respondents, said that it is too time consuming, and three said that it is not necessary in adult ESL classes. When asked to rate (1-5) how often they provided certain types of feedback, respondents said that they did the following often (listed in descending order).

1. Focused correction on a few target areas
2. Direct correction of most or all errors
3. Comments on the margins
4. Summary comments at the end of the paper

Student writers occasionally received feedback through peer conferences and writers’ workshop. Only 17% of respondents said that they did this often or most of the time. When asked how often they asked students to revise their written work, 72% said that they did this most of the time, often, or sometimes.

Importance of Writing
When asked how important writing was to their students, their administrators, and student placement and program goals, 50% said that writing was important to their students, and 34% that it was somewhat important. Only 3% said that it was not important at all. When asked whether their program articulated goals for writing at each student level, 59% said no or that they didn’t know. Fifty-nine percent (126 respondents) believed that their program administrators ranked speaking, listening, and reading ahead of writing skills. Only 11 people said that administrators considered writing the most important skill, while 99 people reported that reading was most important.

Both closed and open-ended responses suggest that the assessment systems used by states and programs for student placement and program accountability have been driving the focus on reading rather than writing in adult education programs. When asked whether writing performance was considered in student placement decisions, only 27% said that it was considered most of the time or often, while 21% said never. One respondent noted, “I do not think that my students’ writing will improve much, because most of them do not work on their English writing skills outside of class. Also, the state system uses reading and listening to calculate Education Gains, so the school’s focus is on that and not on writing.”

Writing Supports for Students
Respondents indicated that students were able to access a number of resources for writing support outside of class. These included academic writing or tutoring centers (34%), tutors (22%), and career counseling centers (23%).

Opportunities for Teachers to Collaborate
According to respondents, collaboration with colleagues was minimal, with 36% saying that they never collaborated or did so only every couple of years; only 24% said that they collaborated at least once a month; and 11%, at least once a week.

Responses to Open-Ended Questions
In analyzing the content of the four open-ended questions about teachers’ thoughts and experiences,
we discussed possible coding categories after reading through all of the responses; then, each of us coded the data independently, keeping the discussed categories in mind. After reviewing each author’s independent coding, final codes for each response were agreed on and used. For many responses, we determined that there was a primary and secondary code; only primary codes are summarized here.

**Question 1:** “As you reflect on your students’ writing development last year, what do you consider to be their greatest accomplishments and challenges? Please make sure to mention their EFL level (i.e., beginning ESL literacy, low beginning ESL, high beginning ESL, low intermediate ESL, high intermediate ESL, advanced ESL, ABE or GED levels) as you describe these.”

The three most common categories of responses were 1) genre/text type, 2) sentences, and 3) progress. Comments related to genre and text type focused on the writing of specific genres and text types with students at specific English language levels (biographies, narratives, recipes, newspapers, journals, and others). Comments focused on sentence writing described students learning to write sentences and put sentences together in longer pieces. Some teachers described students’ writing progress and its impact on their confidence.

**Question 2:** “As you reflect on your own teaching of writing, what do you consider to be your greatest accomplishments and challenges?”

The three most common categories of responses were in the areas of 1) instructional strategies, 2) progress, and 3) motivation. Comments related to instructional strategies include the different strategies that teachers said they use with different groups. Some comments focused on the progress that students have made. Others focused on factors that enhance student motivation (such as seeing their own improvement and seeking to reach higher levels) and the desire of the teacher to motivate students.

**Question 3:** “Keeping in mind the constraints of your particular program, what could your administrators do better to support the teaching of writing at your institution?”

The three most common categories of responses were 1) professional development, 2) program design, and 3) writing being a focus or not a focus of instruction. Some responses discussed the features of good professional development they had received or a need for professional development on teaching writing. Some responses described how the design of the program and the levels of the students and classes either enhanced or hindered the teaching of writing. Mention of writing resources or time for writing, or lack thereof, accompanied responses about the need to make writing more of a focus.

**Question 4:** “At the state or national level, what should professional organizations and policy makers do to support ESL students’ writing development?”

The three most common categories of responses were in the areas of 1) funding, 2) having more of a focus on writing, and 3) professional development. Some comments focused on the need for adequate funding to pay teachers, provide professional development, and sustain strong programs. Some comments described the need to have more of a focus on writing and ways to do this at national and state levels.

**Discussion**

This survey, conducted at the end of 2014 and early 2015, and reaching nearly 500 practitioners in 25 states and Canada, provides a compelling view of thoughts about and approaches to writing for adult English learners. In interpreting the survey results, it is important to keep in mind that many respondents answered the survey because their administrators sent it to them, suggesting some degree of sampling bias. In addition, we do not have data on the total
number of adult ESL teachers in the country at this time, a figure that would help us determine the representativeness of the survey for the entire field. Nonetheless, the results point to some promising shifts in adult education as well as areas of concern for adult learners as they leave ESL classes and move into community college and university classes.

At the classroom and program levels, the survey points to some positive practices that promote English learners’ academic and professional writing development. Small class size—15 students or fewer for most respondents—bodes well for writing instruction and the individual attention it requires from teachers. Over half of the respondents had classes with the same students five days per week, and most classes met for two to three hours, four days per week. Having the same students every day for long class periods gives busy adult students, who cannot always find time for homework, time to work on writing during class and teachers opportunities to know their students’ writing strengths and weaknesses.

Teachers also reported using a process approach to writing—having students brainstorm, outline, draft, and revise their writing. Here we highlight one teacher’s description of a meaningful writing project that she assigned:

In my last low advanced class, my students worked on personal essays for our program’s annual writing contest. We worked on multiple drafts of the essay, and students worked several times in small groups and in pairs to brainstorm, get feedback, and proofread. At the end of the semester, we collected all their work into a class magazine. I was proud that several students were able to use their essays to gain scholarships that enabled them to transition to college credit and tuition-based classes.

A concern raised by Gillet’s 1997 survey was that teachers were not teaching process writing. That does not seem to be the case anymore, at least to such a great extent.

Some teachers also reported receiving training and doing coursework on writing pedagogy. Most respondents had participated in workshops or short-term professional development, though only a limited number had taken a course focused on second language writing.

Furthermore, programs and administrators have made strides in emphasizing writing instruction. In answer to an open-ended question, one participant wrote: “My state has a writing initiative that allows participants to really work on their skills in teaching writing.” Another stated:

They [program administrators] have already switched textbooks that include more writing activities and require each student to have a folder with at least three pieces of written work. I think this is a good thing! Writing is something the students know they HAVE TO learn.

These are positive steps indeed. Respondents also reported having some institutional support for writing, through academic writing or tutoring centers, tutors, and career counseling centers. While only one-quarter to one-third of the teachers reported having this support, it is encouraging that some is available.

While survey responses indicate some positive endeavors in helping English learners acquire academic and professional writing skills, respondents’ answers also indicate that more can be done. Academic and professional writing needs to be more of a focus in adult ESL classes. Types of writing taught and assigned need to be more aligned with the types of assignments that learners encounter in community college and university courses, and more professional development opportunities focused on academic and professional writing need to be available to teachers.

Few programs focus sufficiently on academic and professional writing. Underemphasized by accountability systems, writing is the last of program priorities. One respondent mentioned:
“At the national level, policymakers could support ESL students’ writing development by accepting the writing pre/post test scores as a measurement of growth” and, “Policymakers should include writing development in their grants.” In addition to changes at the national level, one respondent stated that in programs, “We need more explicit standards and curricular expectations around writing.” Several respondents lamented the limited amount of time devoted to writing in local and state curricula, with comments such as, “[The program] could provide a separate class specifically for writing development” and “Add an extra day to the program for more extended writing.”

In addition to teachers’ calls for writing to be more of a focus, the quality of current writing instruction leaves room for improvement. Text types, assignment lengths, and teacher feedback were not well aligned with college and university writing expectations. As mentioned in the literature review, academic and professional writing consists of specific literacy practices. These include creating, arguing for, and supporting a thesis statement; using and crediting sources; abstracting and summarizing supporting information; writing precisely and concisely; using appropriate vocabulary and sentence structure; and submitting a well-edited piece that is easily understood by a native English-speaking professor. Text types most appropriate for developing these skills are argumentative, technical, and informative writing; yet these are the types of writing that teachers reported assigning least. Even though argumentative/persuasive writing was most common at the advanced level, teachers reported that, in general, students mainly engaged in narrative and descriptive writing and in note-taking activities. While note taking is extremely useful in college, and narrative and descriptive writing underlie exemplification, without more instruction and practice in argumentative, technical, and informative writing at all levels, students will not learn to state and defend a position. In both higher education and in the world of work, students need to learn to develop and support their ideas in formal written prose and to engage in the communicative practices that Hyland (2006) describes as “deep language, literacy and discourse issues involved in the institutional production and representation of meaning” (p.120).

To help students develop the often complicated and sophisticated ideas inherent in academic and professional writing, teachers need to make time for students to develop their ideas. The process approach to writing now being used in many adult ESL programs is an important first step, but it must be paired with feedback (Lea & Street, 2000). Although most respondents said that they provide feedback on their students’ writing, most of it focused on correction in a few target areas or direct correction of errors. While feedback at lower levels of English proficiency can require focus on error correction, Zamel (1985) found that ESL teachers make mostly language-specific corrections and write vague comments on students’ pieces. Zamel also found that teachers rarely expect more than surface-level revisions. If students need to argue points and develop their arguments through careful logic and supporting statements, ESL teachers need to help them revise at a deeper level of thought and ideas.

Not only the quality but the amount of writing assigned is also unlikely to build writing fluency. More than half of the respondents stated that their students write a paragraph or less, and only one-third, that their students write one or more pages. Although most respondents taught students at several English fluency levels, most also taught at least one class at high intermediate ESL, advanced ESL, or ABE/GED levels. If students are not writing lengthier pieces in these courses, they will have a difficult time writing longer, well-developed pieces for college classes.

A final area of misalignment that our survey identifies is the mode in which writing occurs. At least half of writing assignments in adult ESL are completed via handwriting or via handwriting with some keyboarding. In today’s academic learning contexts, students’ papers are produced and submitted digitally, and students often take exams through
online learning platforms. Sometimes these exams are timed. Though access to computers may be difficult in some adult ESL programs, more effort needs to be made to help ESL learners acquire keyboarding skills.

The time allotted to writing, the kinds of tasks that students are assigned, the kinds of feedback that teachers offer, and the modality in which students write all need to be better aligned with the tasks expected of learners in higher education. Indeed, when answering one open-ended question, one teacher wrote: “I think that balancing the importance of the variety of skills required to write a decent paper is one of the greatest challenges I have faced.”

Thus, the survey results point not only to the need for more of a focus on academic and professional writing and better alignment with college and university writing tasks, but also to the need for more professional development in teaching academic and professional writing. Current professional development opportunities appear to be limited, especially for part-time staff with limited time and funding. Adult ESL teachers also expressed eagerness to collaborate. Comments included:

“Have professional development workshops on a regular basis and have teachers get together to discuss how to bring more writing opportunities into the classroom.”

“Providing professional development specifically on writing and time to collaborate with colleagues would be very beneficial.”

“Make it mandatory to attend Writing Professional Development.”

Professional development aligned with the writing assignments and tasks demanded of students in academic learning contexts would help transform current practices, closing the gap from ESL and ABE/GED writing to college-level writing.

Implications

If we allow our survey results to inform future directions in the field of teaching adult English learners, two immediate needs emerge. First, more needs to be done to prepare students for the writing demands of college and careers. Currently, adult ESL students are primarily taking notes and writing narrative, descriptive, and expository texts of inadequate length and depth. While these kinds of texts are worthwhile and needed for academic and professional work, the argumentative/persuasive writing required of learners in general education courses and freshman composition should not be neglected or delayed until the higher EFLs.

Second, in order to help adult ESL teachers incorporate argumentative/persuasive writing and sound writing pedagogy at all levels, they will clearly need professional development and opportunities to collaborate. As a follow-up to this survey, we are interviewing teachers about their promising practices teaching academic and professional writing, and we will report these in future publications.

The field of adult ESL education needs to seriously consider how and when professional development on academic and professional writing can occur and how programs can implement more opportunities for adult learners to acquire the skills that they need to do well in academic programs. Much more can be done to improve curricula that will include academic and professional writing skills at all levels of English proficiency. It is up to us to begin this journey.
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A Survey of Writing Instruction in Adult ESL Programs


Workforce Innovation and Opportunity Act (WIOA, 2014). http://www2.ed.gov/about/offices/list/ovae/pi/AdultEd/wioa-reauthorization.html


### Table 1—Educational Functioning Levels (EFLs) of Students Taught

<table>
<thead>
<tr>
<th>Level</th>
<th>Response</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Beginning ESL Literacy</td>
<td>133</td>
<td>43%</td>
</tr>
<tr>
<td>2. Low Beginning ESL</td>
<td>142</td>
<td>46%</td>
</tr>
<tr>
<td>3. High Beginning ESL</td>
<td>152</td>
<td>50%</td>
</tr>
<tr>
<td>4. Low Intermediate ESL</td>
<td>154</td>
<td>50%</td>
</tr>
<tr>
<td>5. High Intermediate ESL</td>
<td>155</td>
<td>50%</td>
</tr>
<tr>
<td>6. Advanced ESL</td>
<td>125</td>
<td>41%</td>
</tr>
<tr>
<td>7. ABE or GED level</td>
<td>52</td>
<td>17%</td>
</tr>
</tbody>
</table>

### Table 2—Types of Texts That Students Write

<table>
<thead>
<tr>
<th>Types of Writing</th>
<th>Responses</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrative/imaginary</strong>: Writer describes events or an experience—real or imagined—in a time sequence (e.g., autobiography, memoir, biography, short story)</td>
<td>153</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Note taking</strong>: Writer provides shortened version or verbatim transcription of oral input or reading material (e.g., graphic organizer based on reading or lecture, notes copied directly from the board or book)</td>
<td>132</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Descriptive sensory</strong>: Writer describes sensory details vividly; expresses individual feelings. (e.g., poems, describing images or events)</td>
<td>108</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Informational/expository</strong>: Writer provides accurate, well-organized facts and information about a topic by drawing on outside sources (e.g., summaries, news article, historical account)</td>
<td>109</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Technical/instructional</strong>: Writer gives the reader clear and concise information on how to perform specific tasks (e.g., brochures, recipes, directions, menus)</td>
<td>60</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Argumentative/persuasive</strong>: Writer presents a position with well-supported claims and clear reasoning so as to change or expand the reader’s thinking (e.g., newspaper editorial, book or movie review, political speech)</td>
<td>33</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Other</strong> (please specify)</td>
<td>68</td>
<td>22%</td>
</tr>
</tbody>
</table>

*Note.* Respondents were asked to “Check all that apply.” Through a glitch, the first 50 or more respondents were unable to check more than one category of type of writing done and wrote notes saying that they would have selected “all of the above.”
Educational Attainment: Limited Implications for Adult Literacy Learners

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Daphne Greenberg  
Robert C. Hendrick  
Alice Nanda  
Georgia State University

Abstract

Social science research often uses educational qualification as a signifier for characteristics such as abilities, earnings potential, and civic participation in adulthood. This study focused on two types of adult literacy students who were native speakers of English and identified words at the 3rd to 5th grade levels but differed in one key demographic identifier. One group had dropped out prior to attending high school while the other group had graduated from high school. Differences between the two groups were examined in terms of their underlying reading skills, employment, voter registration status, reading pleasure, self-perception of reading ability, print reading practices, and technology based reading practices. Results showed very few statistically significant differences between the two groups. These findings suggest that for individuals who have difficulty reading, higher educational qualification levels do not necessarily imply differences in other characteristics. Implications for further research are discussed.

Recent international adult literacy survey shows that one out of six adults in the United States reads at elementary levels (National Center for Education Statistics [NCES], 2013). Each individual who struggles with reading has his or her own educational history with each completing formal schooling as children at different grade levels (Archambault, Janosz, Morizot, & Pagani, 2009). Educational attainment measures the highest grade level completed by an individual (Schneider, 2011). Educational qualification can describe highest grade level, graduation status, type of diploma, or degree (Schneider, 2011).

Educational attainment and qualification are used to classify individuals. One study considered educational attainment the line of demarcation for numeracy, text literacy, and digital literacy skills (Bynner, Reder, Parsons, & Strawn, 2008). A study about informal learning and adults grouped the participants as high school noncompleters/no adult education participation, high school noncompleters/adult education participation, and high school diploma/general education diploma (Smith & Smith, 2008).

Educational attainment and qualification are often correlated with socio-economic status,
literacy skills, employment, and civic participation. Using educational qualification as an independent variable, high school graduates scored significantly higher for socioeconomic status compared to GED recipients or high school non-completers (NCES, 2011). Educational attainment has been positively correlated with voting in young adults (Kaplan & Venezky, 1994), as well as with better employment opportunities (Barro & Lee, 2001). A study analyzing the relationship between educational attainment, literacy practices, and literacy skill, indicated that participants who left schooling prior to high school have significantly lower skills and practices compared to participants with some high school or high school completion (Smith, 1996).

The participants of the above-mentioned studies were not specifically sampled from adult literacy programs where adults obtain reading instruction. While previous studies looked at a more general population, this paper focuses on adults who attended adult literacy programs, identified words at the same grade levels, but who possessed different educational attainment levels. We analyzed whether they were different in terms of various characteristics: their underlying reading skills, reports of reading pleasure, reading ability self-perceptions, reading practices, current employment and voter registration status. Our research investigated whether educational attainment can be used as a proxy for these characteristics in adult populations with low-level reading skills.

**Literature Review**

**Underlying Reading Skills**

The same underlying processes of reading appear similar for children and for adult struggling readers (Mellard, Woods, & Fall, 2011). For both groups, the goal of reading is reading comprehension. There are many component skills both necessary and interrelated to proficient reading comprehension.

Examples include vocabulary (expressive and receptive), fluency (word and sentence levels), word reading (both decodable and irregular words), and spelling (both regular and irregular words). Adults who struggle with reading often have different relative strengths and weaknesses in each of the components skills, and in reading comprehension itself (MacArthur, Konold, Glutting, & Alamprese, 2010; Nanda, Greenberg, & Morris, 2010; Sabatini, Sawaki, Shore, & Scarborough, 2010). Adult literacy reading classes often try to address these component skills with varying degrees of success (Greenberg, 2008).

**Reading Pleasure**

This study incorporates Aarnoutse and van Leeuwe’s (1998) definition of reading pleasure as a demonstration of one’s attitude about reading as an activity that changes depending on the context and kinds of reading involved. Most struggling adult readers suffered adverse school experiences and may not perceive reading as a positive or rewarding experience (Chamblee, 2003). Research has examined reading pleasure in children (Organization for Economic Cooperative Development [OECD], 2011); high school and college students (Jolliffe & Hari, 2008); and adults with intellectual disabilities (Forts & Luckasson, 2011). Based on a broad international data set collected in 2000 and 2009, which looked at child participants, a strong correlation was found between reading pleasure and skill (OECD, 2011). First-year college students reported that they were much more engaged in reading practices for their own pleasure over academic reading practices (Jolliffe & Hari, 2008). Research shows a relationship between reading pleasure and reading practices for adults with intellectual disabilities (Forts & Luckasson, 2011). Essays have been written about the importance of helping struggling adult readers discover reading
pleasure (Jackaman, 2006; Clarke & Jaeger, 2006). There is a lack of scientific research on struggling adult readers and their reports of reading pleasure.

**Self-Perception about Reading Ability**

Research on child readers indicates that ability self-perceptions influence engagement and learning motivation (Wigfield & Guthrie, 1997). Learners’ negative self-perceptions undermine their persistence, metacognition, and academic achievement (Duchéin & Mealey, 1993). Longitudinal research measuring the changes in self-perception about reading ability and motivation in 655 children over an eight-year period showed a significant relationship between these measures in children who struggled with literacy prior to the third grade (Archambault, Eccles, & Vida, 2010). The findings suggested that children’s negative self-perceptions inhibited their learning motivation (Archambault et al., 2010). In an intervention study of struggling middle and high school readers, students with the lowest pretest skills showed the most significant increase in reading ability self-perception along with greater skill growth compared to higher skilled peers (Melekoglu, 2011).

Compton-Lilly (2009) interviewed ten struggling adult readers to understand their self-perception as readers. One finding was that they struggled with conflicting external judgments and internal estimations of ability, which impacted their motivation and persistence in the adult literacy classroom. Interviews with both students and their teachers revealed dissonance between formal reading assessments, self-perception of reading ability, and reading identity. While students felt they were making progress, when their scores did not support this belief, they were greatly troubled because they believed that the periodic assessments defined who they were as readers. Another finding was that their teachers were unaware of their outside literacy practices or the private reading identities of their adult students. Added to the mix was an epistemological attitude shared by many students and teachers alike that literacy was a finite skill set that one acquires, i.e., that one is either a good reader or a poor reader.

**Reading Practices**

While there has been a dearth of adult literacy related research in the areas of reading pleasure and self-perception of reading ability, there has been more research in the area of struggling adult readers’ reading practices. Reder and Bynner (2009) reflect that participation in adult education programs seems to enhance literacy engagement and practices prior to measurable skill changes. Increased literacy engagement and practices may support motivation and persistence in future educational endeavors (Crowther, Maclachlan, & Tett, 2010).

Discovering how adults practice literacy in their daily lives gives researchers insight into their abilities, motivation, and interests; providing knowledge that can inform effective instruction (Mellard, Patterson, & Prewett, 2007). Research on adults suggests a positive relationship between reading activity, general skill, and academic achievement (Mellard et al., 2007). Reder (2012) found that adults continue to gain or lose proficiency in adulthood based on how they practice reading within or outside of formal learning situations. There are two types of reading practices: those which use print and those which use technology (Reder, 2010).

**Reading practices using printed text.**

Smith (1996) analyzed the literacy practices of the 24,842 adult participants in the 1992 National Adult Literacy Survey [NALS]. Data collected from the participants about their literacy practices using printed texts were compared to their performance on literacy measurements. Results indicated a positive relationship between their reading engagement and their reading proficiency (Smith, 1996). More than
half of the sample read at least two kinds of print texts on a regular basis and the 20% who reported no reading performed at the lowest proficiency level. This finding is similar to Kirsch and Jungeblut's (1986) conclusion that skills are most proficient in readers who reported reading a variety of print texts frequently. Finn (1998) also analyzed the results from the NALS and noted that of the 32 million United States adults self-reporting rare literacy practices (less than once a week), over half had dropped out of school and exhibited lower proficiency scores. When looking at literacy skills in high school dropouts, higher levels of literacy practices (at least weekly) significantly differentiated them from the high school dropouts who rarely engaged in literacy practices (Finn, 1998).

Purcell-Gates and her colleagues (2002) looked at the relationship between instructional activities and the out of class print reading practices of adult students using periodic surveys, classroom observations, and focus groups with participants in adult literacy programs from 22 states combined with data on the participant's reading skills changes, beginning class reading level, attendance, and class hours from the class instructors. Results indicated that increases in literacy patterns and attitudes reflected progress in proficiency (Purcell-Gates, Degener, Jacobson, & Soler, 2002). The results supported the notion that increasing literacy practices outside of the classroom is related to increases in literacy skills.

Mellard et al., (2007) developed a reading practices score using the responses from a survey which collected demographic and print text reading practices data on 273 participants. The participants completed skill assessments using the Woodcock Reading Mastery Test-Revised [WRMT-R] (1998) and the Comprehensive Adult Student Assessment System [CASAS] (2001). The results of this study supported a positive relationship between reading skills and reading practices. Reder (2009) used adult engagement in daily literacy activities as an instrument measuring adult literacy development in his Longitudinal Study of Adult Learning [LSAL]. Studying 944 adults over a seven-year period, there was a positive relationship between their print text reading skill and reading engagement.

**Reading practices using technology.** Over the past two decades, technological advances have dramatically changed modern life making computer use and the Internet an integral part of school, work, leisure, and the daily life of most Americans (National Center for Education Statistics, 2013). The skills required to access this technology are called technological literacy (Smith & Smith, 2010).

While struggling adult readers are heterogeneous, they are more likely to be members of other marginalized groups who are less likely to employ advanced technology in their daily lives (Reder, 2010). Technological literacy is increasingly necessary to access jobs and economic resources (Reder, 2010).

Using data from the LSAL study, high school noncompleters and their literacy changes were measured over time indicating positive correlations between literacy skills, technological literacy, and technological practices (Strawn, 2008). Smith and Smith (2010) used data from the 2003 National Assessment of Adult Literacy to compare prose, document, and quantitative (pdq) literacy scores to the computer and Internet practices of the participants. There were differences between computer users and nonusers on pdq literacy measures, ergo, users scored higher and non-users scored lower supporting the idea that a digital divide separates and blocks individuals with the lowest skills from enjoying the benefits of computer use for building knowledge capital (Smith & Smith, 2010). This study suggested that the literacy practice effect theory stating that adult engagement in multiple kinds and modes of print practices leads to higher assessed skill levels also applies to adult digital literacy. In a cyclical manner,
limited literacy may block adults from accessing and engaging in the technology based literacy practices which would help them develop reading skills.

**Rationale**

As Olson, Smyth, Wang, & Pearson (2011) note, many researchers substitute educational attainment for literacy skill level. Educational attainment is attractive as a variable approximating literacy proficiency because this information is easier to obtain than actually measuring literacy skills. The globalization of educational research and subsequent cross country analyses highlights that educational attainment may not always be a reliable indicator of literacy and numeracy skills here or abroad (Schneider, 2011). The traditional reliance on educational attainment as a variable approximating either intelligence or literacy proficiency is inadequate for racially and ethnically diverse populations because of weak correlations (Johnson, Flicker, & Lichtenberg, 2006; Manly, Schupf, Tang, & Stern, 2005). Longer mandatory schooling in the United States has not increased academic achievement (Hanushek, 2005). In countries like the United States where there is universal education, educational attainment has a weaker correlation to literacy skill which may be explained by variance in school quality and resource distribution (Park & Kyei, 2011; Somers, 2005; Lippman, 2002). Twenty-four percent of Greenberg’s (1995) sample included adults who had graduated from high school but read at the 3rd to 5th grade levels. The National Assessment of Educational Progress measured reading achievement for students in grades 4, 8, and 12, reporting that 28% of the 12th graders had Below Basic skills (National Center for Educational Statistics, 2016).

Individuals in K-12 education who have special difficulties in gaining literacy and numeracy skills are more likely to drop out prior to completing high school (Hernandez, 2011). It stands to reason that high school noncompleters are the majority of the participants in adult literacy research (Beder, 2007). Adult literacy research studies also include samples with high school graduates (Alamprese, 2009; Sabatini et al., 2010). A comparison of the differences between adult struggling readers who are high school graduates versus those who dropped out of high school has not been a major focus of previous research. The focus of this particular study was a comparison of struggling adult readers who graduated from high school versus those who did not attend high school. By gaining a clearer understanding about how educational attainment relates to reading skills, reading pleasure, reading self-perception, and reading practices, employment, and voting status, program administrators and teachers can better facilitate instruction by building on the interests and authentic needs of their learners which will enhance motivation and encourage persistence.

Adults attending adult literacy programs often receive reading instruction and are assessed in component skills areas such as vocabulary, fluency, word reading, comprehension, and spelling. Although, these skills are important, this research utilized the framework that there are multiple literacies and that literacy is a socio-cultural practice (Purcell-Gates et al., 2002). Multiple literacy theory defines reading as more than just an activity performed by an individual; rather, literacy is mediated by the broader context of culture, history, social class, and identity (Masny, 2010). Multiple literacies refers to literacy practiced in different ways depending on the setting, i.e., in academic settings versus home versus work; and, as a practice using different modes and technologies including books and paper, computers and the internet, cell phones and texting (Cervetti, D'Amico, & Pearson, 2010).

Participants in this study included adults who only completed the 5th-8th grade (Group 1/non-completers) and those who completed the 12th grade...
(Group 2/high school graduates). We investigated whether there are significant differences between the adults in Group 1 and the adults in Group 2 in their reading pleasure, self-perception of reading ability, reading practices using printed text, reading practices using technology, reading skills, employment status, and their voter registration status. Based on previous findings described earlier in this paper, we hypothesized that differences would be found based on their educational attainment levels, with Group 2 adults attaining higher ratings than Group 1.

Method

Participants

The sample was drawn from a population of adult students enrolled in adult literacy programs in the metropolitan Southeastern United States who had voluntarily engaged in a larger research project (funded by Eunice Kennedy Shriver National Institute of Child Health and Human Development, the National Institute for Literacy, and the US. Department of Education, grant #R01 HD43801-01). To qualify for this larger study, all participants (including our 82) identified words at the 3.0 through 5.9 grade reading equivalency levels as measured by the Woodcock Johnson Psycho-Educational III Letter and Word Identification subtest [WJ-III] (Woodcock, McGrew, & Mather, 2001). The 82 adults who participated in this study were native English speakers who reported that they had left school prior to attending high school or had completed grade 12. The measures selected for this study, were those administered in the larger study.

Measures

Demographic Survey. Data were collected about the participants’ gender, race/ethnicity, age, employment, voter registration status, and educational attainment. In Table 1, the demographics are described for the entire sample (n = 82), Group 1, who left school prior to high school, (n = 36), and Group 2, who graduated from high school, (n = 46). Participants ranged in age from 16-68, with a mean age of 37.43 years of age (S.D. = 15.77). Group 1 had a mean age of 37.72. Group 2 had a mean age of 37.20. As can be seen by the table, the majority of the participants were female and African American. The majority reported that they had registered to vote and were unemployed.

Reading Pleasure, Reading Self-Perception, and Reading Practices Survey. The survey included 15 items measuring reading pleasure, self-perception about reading ability, read practices-print, and reading practices-technology (see Appendix). Because of the low level reading ability of the participants, trained graduate research assistants orally administered the survey. The individual questions had different types of scales and values, which were re-coded in order to analyze the composites based on these questions. The answer options given had point values worth 0-2 points with 2 representing the highest values of each individual item. The reading pleasure composite included two items so the possible range of the composite scores was 0-4. The reading self-perception composite included six items so the possible range of the composite scores was 0-12. The reading practices-print composite included four items so the possible range of the composite score was 0-8. The reading practices-technology composite included three items so the possible range of the composite score was 0-6. Due to the fact that the survey items included different scales, the scales were normalized using the transform function in IBM SPSS Statistics Version 20. Transforming the scales put each construct on the same scale (0-2).

Reading Tests. (Raw scores were used for the statistical analyses)

Oral vocabulary. The Peabody Picture Vocabulary Test [PPVT-III]. (Dunn & Dunn, 1988) is an orally administered test measuring an individual’s receptive
vocabulary. Participants are shown four pictures and need to point to the picture that best depicts a word that the tester has said out loud. This test was normed on individuals ages 2 to 90 plus and has a reported reliability of .90. The Boston Naming Test [BNT]. (Kaplan, Goodglass, & Weintraub, 1983) requires a participant to verbally label a picture of an object.

**Reading fluency.** The Woodcock-Johnson Reading Fluency subtest. (Woodcock et al., 2001) requires individuals to silently read a sentence and mark whether the statement is true or false. They are given three minutes to complete the task and are instructed to complete as many items as they can within the time limit. This test was normed on individuals 6 to 80 plus and has a reported reliability of .90.

**Decoding.** The Woodcock-Johnson Word Attack subtest. (Woodcock et al., 2001) measures the participant's ability to read nonsense words. This test was normed on individuals 4 to 80 plus and has a reported reliability of .87.

**Reading comprehension.** The Woodcock-Johnson Passage Comprehension Test. (Woodcock et al., 2001) requires an individual to read a short passage and then to verbally provide the answer to fill in a blank that completes the passage correctly. This test was normed on individuals 2 to 80 plus and has a reported reliability of .88.

**Word reading.** The Woodcock-Johnson Letter-Word Identification Test. (Woodcock et al., 2001) requires the individual to read out loud words presented in a list. This is the test that was used to select participants in the larger study. It was normed on individuals 2 to 80 plus and has a reported reliability of .94.

**Spelling.** The spelling subtest of the Peabody Individual Achievement Test. (PIAT-R; Frederick & Markwardt, 1997) tests an individual’s ability to select the correctly spelled word from a choice of 4 words (3 are misspelled). This test was normed on individuals K-12 and has a reported reliability in the low to mid .90 range.

**Results**

**Group Comparisons**

For educational attainment and current employment, a significant difference was found between Group 1 and Group 2. For educational attainment and voter registration, a significant difference was also found between Group 1 and Group 2. Specifically, compared to individuals in the lower educational attainment group, individuals in the higher educational attainment group more often reported being currently employed and being registered to vote.

Table 2 shows the results for the reading test scores with only one dependent variable indicating a statistically significant difference, WJ Reading Fluency, $F (1, 83) = 4.13, p = .045, d = .45$. For the WJ Reading Fluency subtest, Group 1 (non-completers) scored significantly higher than group 2 (high school graduates). Table 3 shows the composite means and standard deviations for the survey measure responses. Results indicated that when the two groups were compared, there were no significant differences in reading pleasure, self-perception, and reading practices using printed materials. However, one difference was found. The dependent variable Reading Practice Technology Composite is statistically significant $F (1, 78) = 9.416, p = .003, d = .699$ with Group 2 (high school graduates) ratings higher than Group 1 (non-completers) ratings.

**Discussion**

This study focused on adults attending adult literacy programs who identified words at the 3rd to 5th grade levels but who differed on whether they never attended high school or graduated from high school. The high school graduates in this study clearly...
lacked word identification skills or they would not have been included in this study. Their poor reading skills demonstrate that educational attainment does not indicate literacy proficiency. Our research study looked beyond word reading skills and questioned whether school attainment is a proxy for several characteristics: underlying reading skills, reports of reading pleasure, reading ability self-perceptions, reading practices, current employment and voter registration status. Consistent with other studies, which compared high school graduates to high school non-completers, the high school graduates reported higher rates of current employment, voter registration and technology based reading practices. However, in this particular study, higher educational attainment was not indicative of higher level reading skills. The findings suggested that educational attainment is not an accurate proxy for different characteristics among struggling adult readers. Because adults with low level reading skills are a significant part of the United States general population, it calls into question how appropriate the use of educational attainment as a proxy for different characteristics has been in other studies with a more general population.

The higher rates of current employment may be explained by that fact that many types of jobs require employees to have a high school diploma or equivalent. This finding may highlight the fact that using educational attainment as a criteria for employment may not be useful if employers are using it as a way of screening literacy skills. It is unclear why the higher educated students were more likely to have registered to vote. A troubling speculation is that the less educated group may not register to vote because they may believe that there is a literacy test or educational requirement as there was in the not so distant past. Prior to the federal Voting Rights Act of 1965, many southern states used literacy tests and educational requirements as a way of preventing minorities from voting under Jim Crow laws. Subsequent extensions/amendments in 1970, 1975, 1982, and 2006 illustrate that there continue to be efforts to curtail the voting rights of some groups.

The significantly higher rates of technology based reading practices by the higher educated group may be explained by the digital divide between more highly resourced groups and less resourced groups. If the higher educated group has higher rates of current employment, it stands to reason that they will enjoy greater economic resources giving them greater access to technology. The longer that individuals stay in school, the more access to technology and digital literacy learning they enjoy. As technology development and use has grown exponentially, the gap seems to be closing in some respects because of smart phones. While a growing number of individuals are gaining access to the technology by having more affordable smartphones, they will not be able to reap the potential benefits without digital and technological literacy skills. Adult educators and policy makers should address ways to teach these skills to adults.

Results indicated that the two groups did not differ in any of the other areas measured. It is unclear why group 1 (5th-8th grade attainment group) scored higher on the WJ Reading Fluency test, but the fact that the two groups were the same on all the other skills (vocabulary, decoding, reading comprehension, and spelling) may be due to the fact that they all identified words at the 3rd-5th grade levels, and therefore this characteristic defines their overall reading abilities more than their educational attainment status. This may also explain the lack of differences found with the reading pleasure, self-perception, and reading practices using printed materials items. These results suggest that for adults who recognize words between the 3rd and 5th grade levels, classifying them by educational attainment levels does not necessarily provide different profiles of reading attitudes, print reading practices, and different types of reading skills.
The broader question for policymakers and educational stakeholders is how students can graduate from secondary education in the United States reading at only the 3rd through 5th grade level. These findings are supported by the PIAAC study results, which indicated that high school graduates in the United States scored lower on information-processing skills than high school graduates from other countries (OECD, 2013). Researchers concluded that it was the lower literacy skills of both high school graduates and non-graduates, which significantly lowered the mean for all U.S. adults.

Regardless of graduation status, all of the participants scored around the mid-range on reading self-perception, reading pleasure, and reading practices using print. These findings support other research suggesting that struggling adult readers engage in reading practices in their lives and enjoy reading as an activity (Reder, 2012). Program administrators and instructors should consider inspiring “out of school” reading pleasure and practices to supplement the short classroom time typically offered to adult basic education students. Limited resources at the disposal of typical adult education programs necessitates that further research be directed towards encouraging adult learners’ persistence and reading practices in and out of the classroom.

In general, the findings from this study call into question whether it is indeed appropriate for studies to use educational attainment levels as indicators of literacy behaviors, beliefs, and outcomes. It may very well be that in countries like the United States where there is universal free K-12 education, that educational attainment levels do not always tell a complete story because of systemic educational inequalities. Further research should explore this by replicating this type of study and looking at educational attainment levels with a larger sample size including adults who are not only able to identify words between the 3rd and 5th grade levels, but also including adults who read at high school levels and at college levels. It may be that it is an interaction effect between educational level and reading level that can begin to provide understanding about different literacy attitudes, patterns, behaviors, and outcomes. Race/ethnicity and gender may also play a role, and could be further analyzed given a larger sample size. Finally, it is unclear why Group 1 (the lower educational attainment group) scored significantly higher on the WJ Reading Fluency subtest. With a larger and more diverse sample size this could be further explored. ❖
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Alice Nanda is currently a special education teacher in Marietta, Georgia. She earned a master's degree in special education and a doctoral degree in educational psychology from Georgia State University. She is interested in reading instruction and assessment for both children and adults struggling with reading.
References


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Table 1—Demographic Characteristics of Whole Group (n = 82), Group 1 (n = 36), and Group 2 (n = 46) by Gender, Race/Ethnicity, Educational Attainment, Voter Registration, Current Employment, and Age.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total sample (n = 82)</th>
<th>Group 1 (n = 36)</th>
<th>Group 2 (n = 46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>70%</td>
<td>72%</td>
<td>67%</td>
</tr>
<tr>
<td>Male</td>
<td>30%</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>98%</td>
<td>100%</td>
<td>96%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1%</td>
<td>0</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other/Mixed</td>
<td>1%</td>
<td>0</td>
<td>2%</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th grade</td>
<td>2%</td>
<td>6%</td>
<td>0</td>
</tr>
<tr>
<td>6th grade</td>
<td>4%</td>
<td>8%</td>
<td>0</td>
</tr>
<tr>
<td>7th grade</td>
<td>7%</td>
<td>17%</td>
<td>0</td>
</tr>
<tr>
<td>8th grade</td>
<td>31%</td>
<td>69%</td>
<td>0</td>
</tr>
<tr>
<td>12th grade</td>
<td>56%</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Voter Registration Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>70%</td>
<td>56%</td>
<td>80%</td>
</tr>
<tr>
<td>No</td>
<td>27%</td>
<td>39%</td>
<td>15%</td>
</tr>
<tr>
<td>Current Employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22%</td>
<td>8%</td>
<td>33%</td>
</tr>
<tr>
<td>No</td>
<td>78%</td>
<td>92%</td>
<td>67%</td>
</tr>
<tr>
<td>Mean Age</td>
<td>37.43</td>
<td>37.72</td>
<td>37.20</td>
</tr>
</tbody>
</table>
### Table 2—Test Means and Standard Deviations for Whole Group (n = 82), Group 1 (n = 36), and Group 2 (n = 46)

<table>
<thead>
<tr>
<th>Reading Measure</th>
<th>Whole M</th>
<th>Whole SD</th>
<th>Group 1 M</th>
<th>Group 1 SD</th>
<th>Group 2 M</th>
<th>Group 2 SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPVT</td>
<td>135.24</td>
<td>19.16</td>
<td>133.75</td>
<td>14.79</td>
<td>136.41</td>
<td>22.07</td>
</tr>
<tr>
<td>PIAT</td>
<td>69.45</td>
<td>11.92</td>
<td>71.47</td>
<td>10.25</td>
<td>67.87</td>
<td>12.96</td>
</tr>
<tr>
<td>BNT</td>
<td>36.56</td>
<td>6.88</td>
<td>36.09</td>
<td>5.89</td>
<td>36.91</td>
<td>7.58</td>
</tr>
<tr>
<td>WJ Letter ID</td>
<td>48.33</td>
<td>4.22</td>
<td>48.94</td>
<td>4.18</td>
<td>47.85</td>
<td>4.23</td>
</tr>
<tr>
<td>WJ Reading Fluency</td>
<td>34.83</td>
<td>8.05</td>
<td>37.75</td>
<td>8.52</td>
<td>33.33</td>
<td>7.40</td>
</tr>
<tr>
<td>WJ Passage Comp</td>
<td>25.77</td>
<td>3.57</td>
<td>26.22</td>
<td>2.97</td>
<td>25.41</td>
<td>3.98</td>
</tr>
<tr>
<td>WJ Word Attack</td>
<td>11.20</td>
<td>5.71</td>
<td>11.72</td>
<td>6.55</td>
<td>10.78</td>
<td>4.98</td>
</tr>
</tbody>
</table>

### Table 3—Composite Means and Standard Deviations for Whole Group (n = 82), Group 1 (n = 36), and Group 2 (n = 46) on the Reading Pleasure Construct, the Reading Self-Perception Construct, the Reading Practices – Print Construct, and the Reading Practices – Technology Construct.

<table>
<thead>
<tr>
<th>Composite</th>
<th>Whole M</th>
<th>Whole SD</th>
<th>Group 1 M</th>
<th>Group 1 SD</th>
<th>Group 2 M</th>
<th>Group 2 SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading pleasure</td>
<td>2.56</td>
<td>1.11</td>
<td>2.71</td>
<td>1.10</td>
<td>2.4</td>
<td>1.12</td>
</tr>
<tr>
<td>Reading self-perception</td>
<td>6.82</td>
<td>1.54</td>
<td>6.73</td>
<td>1.46</td>
<td>6.90</td>
<td>1.62</td>
</tr>
<tr>
<td>Reading practices-print</td>
<td>4.33</td>
<td>1.59</td>
<td>4.28</td>
<td>1.61</td>
<td>4.37</td>
<td>1.60</td>
</tr>
<tr>
<td>Reading practices-technology</td>
<td>2.41</td>
<td>2.16</td>
<td>1.70</td>
<td>1.93</td>
<td>2.96</td>
<td>2.19</td>
</tr>
</tbody>
</table>
Appendix—Reading Survey Items Categorized By Construct

A. Reading Pleasure (2 items worth possible 0-2 points each for a total possible score of 0-4)

1. In general, would you say that you like reading?
   0 No
   1 Sometimes
   2 Yes

2. Do you like to read just for pleasure, that is, because you enjoy the story?
   0 Never
   1 Sometimes
   2 Frequently

B. Reading Self-Perception (6 items worth possible 0-2 points each for a total possible score of 0-12)

1. In general, how well do you understand what you read?
   0 I don’t understand anything I read.
   1 I understand some of what I read.
   2 I understand most of what I read.

2. In general, how would you describe your spelling ability?
   0 I cannot spell any words.
   1 I can spell some words without errors.
   2 I can spell most words without errors.

3. In general, how well do you sound out words?
   0 I cannot pronounce anything I read.
   1 I can pronounce some of what I read.
   2 I can pronounce most of what I read.

4. In general, how would you describe your ability to recognize words without having to sound them out?
   0 I cannot recognize any word I read.
   1 I can recognize some of the words I read.
   2 I recognize most of the words I read.

5. In general, how would you describe how fast you can read?
   0 I read very, very slowly.
   5 I read slowly.
   1 I sometimes read slowly and sometimes read quickly.
   1.5 I read quickly.
   2 I read very, very quickly.

6. In general, how would you describe your reading ability?
   0 I can’t read.
   .667 I am a poor reader
   1.333 I am an average reader.
   2 I am a better than average reader.
### C. Reading Practices – Print (4 items worth 0-2 points for a total possible score of 0-8)

1. Do you read advertisements?
   - 0 Never
   - 1 Sometimes
   - 2 Frequently

2. Would you say that you read magazines?
   - 0 Never
   - 1 Sometimes
   - 2 Frequently

3. Would you say that you read newspapers?
   - 0 Never
   - 1 Sometimes
   - 2 Frequently

4. Would you say you read books?
   - 0 Never
   - 1 Sometimes
   - 2 Frequently

### D. Reading Practices – Technology (3 items worth possible 0-2 points for a total possible score of 0-6)

1. How much information do you get from the Internet?
   - 0 None
   - .667 A Little
   - 1.333 Some
   - 2 A lot

2. Would you say that you read e-mail?
   - 0 Never
   - 1 Sometimes
   - 2 Frequently

3. Would you say that you read information from the computer?
   - 0 Never
   - 1 Sometimes
   - 2 Frequently
Abstract
Understanding the elements of educational success for adult English language learners (ELLs) is an important priority for correctional educators, especially today with an increased population of non-English speaking students in correctional schools throughout the country. There is a dearth of information, however, about incarcerated adult ELLs and how they approach learning in an academic context. This article documents the five-year journey of Adalberto, an 18-year-old incarcerated Hispanic student in Maryland and his quest for a General Educational Development (GED) diploma. Challenges included similar situations found in a more traditional high school and also unique situations found only in correctional education. Factors influencing Adalberto’s educational success included reading extensively in his second language, using bilingual dictionaries and textbooks, articulating his goals in class, cooperative learning including the use of inmate tutors, and being a positive role model for other ESL students.
A dalberto (a pseudonym) was an 18-year-old Hispanic inmate at the Maryland Correctional Institution in Jessup (MCI-J), a men’s state prison, when he was enrolled in the English as a Second Language (ESL) program in July, 2009. Because he did not have a GED or high school diploma, he was mandated to attend school for at least 120 days as is required by the state. Adalberto, a native Spanish-speaker, was initially given the Test for Adult Basic Education (TABE) by McGraw-Hill in English as a pre-test and he scored a 1.6 (E level) [scale of .7 – 12.9] in Reading at that time. Four and a half years later in December 2013, Adalberto passed his General Educational Development (GED) exam, taken in English, with a score of 2320 out of a possible 3000 points. This article documents Adalberto’s history, unique challenges, and factors that played an important part in his GED success.

There are few studies that have examined incarcerated English language learners (ELLs) and their progress in correctional education (CE), yet GED completions are one of the educational statistics, used for program evaluation and funding, reported to the state. An inmate who returns to the community with a GED and/or other training has a higher likelihood of not returning to prison. This fact has been documented by many studies and research on recidivism (CCCC, 1997; Dugas, 1990; Fabelo, 2002; MTC, 2003). Because of the enormous diversity in today’s ELL populations, it is optimal to study individual accounts of success in order to gain insight into the problems and solutions involved in educating minority populations. In Adalberto’s case, he not only succeeded in learning academic English, but he progressed through his academic classes in four and a half years. These classes included ESL, Basic Literacy, Intermediate Levels 1, 2, 3, and 4; and Secondary Levels 1, 2, 3, and 4. As his ESL instructor, I observed his progress with great interest and admiration. He was in my class for eight months, after which he scored a 5.6 in Reading (level E) on the TABE exam. At that time, he exited the self-contained ESL classroom into Basic Literacy, which class has both English-speaking adult basic education (ABE) and ESL students.

Methodology

Between 2009 and 2015, as a full-time correctional educator at MCI-J, I observed Adalberto in the ESL, basic literacy, intermediate, and adult secondary classrooms, and in the school in general. I documented the data on Adalberto as he progressed through school, and I took notes on what I observed and comments others made regarding Adalberto. I also interviewed other teachers and Adalberto and recorded in writing what was said. Because he came to volunteer for me after he exited my ESL class, it was easy to keep in contact with him, and I interviewed him frequently. Many of the interviews were short and informal, such as a quick question, “How is it going?” “Did you pass the math test?” “Were you able to figure out the main idea?” These types of questions would generally lead into more detailed conversations about frustrations and/or good moments. Adalberto was always open and direct in his communication with me. I took copious notes on Adalberto’s responses because I was curious to see if and how Adalberto would, indeed, achieve his goal of attaining a GED before leaving MCI-J. There was no preconceived notion on my part whether Adalberto would or would not pass in the time that he had. Many ESL students at MCI-J are transferred to other institutions in the state (due to security concerns) or released on parole or mandatory time before they have the ability to achieve a GED. Once students leave MCI-J, instructors do not keep in contact with them.

In addition to interviewing him frequently, I constantly checked in with his teachers to ascertain his progress. This also was done on an informal basis until the very end, after he had attained his GED,
and then a formal interview and discussion was held with his intermediate and secondary instructors and Adalberto himself. Adalberto was pleased to be the star of the case study, and he asked me to use his real name, but I told him I could not. Computerized school records also provided detailed information on TABE scores and progress. In 2015, I took all of my notes and data and incorporated them into the following qualitative study.

**Background**

Adalberto went to school for five years in his native Guatemala, in Central America, but he left school to get a job to help his mother and six siblings. At age 13, he became a taxi driver in the city of Gualán, and he drove a small three-wheeled taxi for mostly local citizens. This job was very common for adolescent males and Adalberto kept this job for three years. He made the equivalent of about $25 a day and gave the money to his mother. His father left the household when Adalberto was young, and Adalberto had no further contact with him. Adalberto’s four older siblings finished the eighth grade in Guatemala and as of this date, two younger siblings are still in school in Guatemala.

At the age of 16, Adalberto came across the Mexican border with his older brother. They wanted to work in the United States and make money to help take care of their family in Guatemala. They arrived in Montgomery County, Maryland and began working immediately with friends in a tree-cutting company. Adalberto was working at this company when he was arrested in 2009.

**Learning English**

Adalberto began learning English in Guatemala when he was in primary school. Several times a week, his Guatemalan teacher taught common English words and phrases to the class, such as *hello, thank you, I like you*, and *I love you*. He also learned colors, numbers, months, and days. Therefore, when he came to the United States in 2008, he had about 200–300 words in his English vocabulary. He quickly learned more phrases when he started cutting trees for a company in Silver Spring, Maryland. Although he worked with Hispanic friends who had helped him get the job, he also worked with Americans and spoke specific workplace language with them. These words and phrases, learned on the job, included *use the chainsaw, cut the trees, leaves, branches, take a break*, and other such words associated with his job. Adalberto enjoyed the work environment but he did not engage with co-workers unless they spoke Spanish. His supervisor was an English-speaking American who did not speak Spanish, but he had a bilingual assistant who would translate instructions for the many Spanish-speaking workers. At the same time, Adalberto started looking at and reading English newspapers that were in his apartment house.

**At MCI-J**

In the ESL class at MCI-J, Adalberto participated in classroom activities and literacy skills. Because the focus was on academic English, Adalberto soon learned how to put the phrases and words that he knew into a more formal register for school including question formation and sentence construction. Adalberto was an excellent student with perfect attendance; he listened attentively and practiced English profusely, and there was never any classroom drama or misbehavior on his part. In this way, his demeanor was very similar to other Latino men in the school (see Gardner, 2014a). As an ESL class, we focused on the four skills of language—listening, speaking, reading, and writing.

By the time Adalberto reached the intermediate levels in the fall of 2010 (15 months later), he was able to communicate effectively and independently with other English-speaking teachers and classmates. At the intermediate level, he initially scored a 3.6 in
Reading on the TABE M level; two months later he was tested again and scored 7.7. His intermediate instructor remembers Adalberto as an outstanding student, “He had the self confidence to participate and listen attentively in class. He came to class prepared with his homework; he had excellent attendance; and he got along with others.” At that time, there were only a couple of Spanish-speakers in the intermediate classroom, and those Hispanic students only spoke Spanish with each other in class when clarification was needed for instruction or explanation of a certain concept. Speaking one’s native tongue to clarify a problem in the classroom or to enhance instruction in any way is a strategy now endorsed by the National Institute of Literacy (Bigelow & Schwarz, 2010) due to the extensive research indicating the positive effects of bilingual instruction for English language learners (see Genesee, Lindholm-Leary, Saunders, & Christian, 2005; Ovando, Combs, & Collier, 2006).

Adalberto continued advancing in school and was promoted to Adult Secondary Level 1 in August, 2011. At this time he had a 3.3 in Reading on the D level (the most difficult test used at MCI-J). Three months later he scored 6.2 on a different test at the same level. The adult secondary classes are high school level classes and prepare students for the GED exam. By the time Adalberto completed his adult secondary classes, he had full professional language proficiency, speaking fluently in conversation and understanding almost all speech in any context. He had no problems communicating with his teachers or other English-speaking students as I observed and as he told me, “I talk with anybody; I feel very comfortable about that.” Although MCI-J now uses the Center for Applied Linguistics’s Best Plus oral proficiency exam to assess spoken language and listening skills for ESL students, Adalberto’s oral proficiency was never formally assessed.

Challenges

There are many variables that create challenges in school for ELLs generally. These include interrupted or lack of formal education, absent preferred learning styles, family dynamics, cultural differences, language barriers, to name a few (National Institute for Literacy, 2010). Incarcerated ELLs have the added burden of not always being able to communicate completely with their primary caretakers—correctional officers, medical staff, teachers, and case managers. Sometimes a translator is available on site, but many times there is not. Some challenges that ELLs at MCI-J face are similar to what students may confront in public schools; others are unique to correctional education. Adalberto took the GED exam two times before passing on his third attempt. Listed herein are the main challenges he experienced during his time at school at MCI-J.

Adjustment

When Adalberto exited the ESL program in 2010 to Basic Literacy, he transferred from an interactive learning environment, which is important for language learners and which has been described in detail at MCI-J (see Gardner, 2011 and 2014b). This environment focused on all four language skills, but Adalberto exited to a more traditional atmosphere of independent learning and literacy (reading and writing). At that time, the Basic Literacy class used inmate tutors (inmates with a high school diploma or GED) to facilitate instruction for every three or four students. The class was set up in stations, with an inmate tutor at each station. Thus, there was no collaborative discovery or communicative learning; students were grouped according to ability and worked progressively from workbooks. Although a tutor was assigned to Adalberto’s group, many times this tutor was unavailable or unable to assist students with questions and problems regarding content or language. The teacher was not familiar with, nor did
she speak Spanish, thus the students were often left to figure things out for themselves or find an inmate translator from another group who would assist them. Furthermore, in the Basic Literacy classes and above, students did not practice oral English with any regularity; there were no spontaneous English prompts for discussion, and there were no oral book reports or other assignments emphasizing spoken discourse. All assignments were focused on the written word and the goal was on literacy only. This was a problem for Adalberto and other ELLs who required immediate feedback, authentic communication, and language development in order to further develop their language skills (DelliCarpini, 2006).

In his in-depth study of best practices for interactive language pedagogy, Brown (2007) emphasizes the importance of integrating listening, speaking, reading, and writing so that language learners see the interdependence and authenticity of what they are learning. Additionally, the development of oral language has been proven to have a positive effect on literacy skills (Bernhardt & Kramil, 1995; Carrell, 1991), and this fact serves as a reinforcement for the inclusion of all four skills in the classroom. Adalberto commented to me, “We don’t get to talk anymore.” I responded to him and others that they would have to make an effort to speak English and engage with English-speakers outside of the classroom, in the housing unit and yard, as much as possible in order to practice their second language. I learned years later that Adalberto had made a concerted effort to do just that.

Too often, adult correctional programs are not designed with integration of skills as a focus, but instead seek to promote print literacy and independent learning (DelliCarpini, 2006). However, in 2012, a new Basic Literacy instructor was hired at MCI-J with experience in teaching ELLs, and she was adamant about an integrated curriculum with active, inquiry-based learning. The integration of skills is beneficial to all students (not just ELLs) in order to promote higher order cognitive skills and literacy through extensive collaboration with others (Ovando et al., 2006, p. 92). Although Adalberto is no longer in that class, many former students have expressed their delight in being able “to talk about things” in English. The most successful ESL students at MCI-J are the ones that actually participate in and use their second language inside and outside of the classroom. This correlates to the comprehensible input that Krashen (1981) tells us is so important for language learning—being a participant in a community where one’s second language is used not just for survival, but for social situations and personal interactions, as well.

**Lack of Study Groups**

Inmates are housed in different buildings according to their job status—kitchen workers live in one building, maintenance and shop workers in another, and school students are also housed separately in one building. Each building has two wings, or tiers, an east side and a west side. There is some overlap in building and tier assignments, for example, some of the students are housed in two other buildings in addition to the school building. The housing process is organized and overseen by the Department of Public Safety and Correctional Services for facility of movement, safety, and control. The arrangement serves the students well when help with homework is needed because there is always someone in the same class on the tier. However, Adalberto reported that there was an aura of idleness that was pervasive throughout the tier, “Nobody wants to study together. I don’t know why.” Inmates watched T.V., played videos, cards, and checkers, used the phone, and talked with their friends. Although there was some interest with GED students, Adalberto was unable to form a regular group for study and
language played an important part in Adalberto’s education, and this fact was not always acknowledged by instructors and administrators who had no or limited ESL or language training.

Literacy, defined by NCTE (2013) as the skills necessary for problem solving, independent thought, and managing and synthesizing information, differs from English language learning, which is defined as the skills necessary for proficiency in the domain of listening, speaking, reading, and writing (MSDE, 2014). Although they overlap in a learning context, there is a clear distinction between the two, and it is necessary to include both literacy and language learning in the class curriculum, especially at the lower ABE levels. Adalberto was in the process of learning English and his fluency increased each year. Oral conversations with him beginning in 2012 revealed correct question formation and sentence structure, varied vocabulary, and fluency. At this time, he was also learning history, social studies, and science along with native speakers in the ABE classes, students who had more years of school and more familiarity with print literacy and U.S. culture. Among these English-speaking students, Adalberto said he felt like the minority language student that he was—not quite knowledgeable enough, and not able to recognize meaning in basic historical vocabulary concerning U.S. history and culture. During one interview, Adalberto responded with frustration, “I don’t know the words. I don’t know the history. I don’t know anything that’s going on.” He was in language and cognitive overload as he struggled to catch up on the new linguistic terms covered in his classes, such as colonists, Confederate, Yankee, and Continental Congress. Since the implementation of the Common Core standards in 2014, instructors at MCI-J have realized that they must introduce contextual and historical vocabulary to ELLs at the lower levels in order to prepare students for Common Core instruction at the higher levels. This has helped
to alleviate the problem that Adalberto had, not understanding historical vocabulary and content. To support the Common Core standards, there are several good textbooks on the market today that teach history, content language, and civics for beginning-level ELLs.

**Burnout**

After studying and being in school for four years (and no summers off in correctional education), Adalberto experienced frustration and burnout after failing the GED exam for the second time. Although the majority of students try to remain in school to attain their goals (if their sentences permit completion), frustration is a common factor for students who struggle to make progress. At this point in his life, Adalberto had feelings similar to those described in LeCompte & Dworkin’s (1991) description of alienated students—personal isolation from the success so close at hand, cultural estrangement because he was one of only two Spanish-speakers testing at that time, and entrapment—he was tired of reading and studying, but he did not want to quit because he had come so far. “It’s hard,” he reported to me, “but I’m sticking with it; what other choice do I have?”

Adalberto’s GED scores were close, but not close enough. His GED instructor recognized his frustration and analyzed the problem as difficulty with Reading and higher level thinking skills—differentiating, comparing, hypothesizing, synthesizing, and proving. For example she reported that he had difficulty describing the mood of a story or describing a character if no concrete descriptions were stated in the text. He struggled with implications—what was implied versus what was stated. Because he had not attended high school in his first language and had not developed a cognitive awareness for abstract and analytical thought processes while reading, Adalberto struggled with the English and Reading parts of the GED exam. His secondary adult ed instructor encouraged him and allowed him to take some time off from school before resuming more practice. At that time, he had one more chance to pass in December 2013 before the GED testing process would become computerized in January 2014, and the actual test content would change, based on the new Common Core standards. When Adalberto returned to school, the secondary ABE instructor eventually placed Adalberto with an English-speaking inmate tutor who worked with him one-on-one, day after day. They read the material together and discussed the information, looking for contextual clue words and phrases in order to understand it thoroughly. This was the first time Adalberto had worked closely with a tutor on GED preparation.

**Findings**

It takes approximately five to seven years for ELLs to learn English proficiently (Collier 1992; Cummins, 1981). Although conversational English can be acquired in a relatively shorter timeframe, academic English takes extensively longer to master. Because Adalberto was able to successfully learn English and pass his GED exam in four and a half years, it is wise to see how this was accomplished, and look at what strategies he and his teachers determined to be important ingredients in his success.

**Reading in English Was Essential**

Learning to read in English, and then actually reading every day in his second language, was the most important factor in Adalberto’s success, as reported by Adalberto himself. He began school at MCI-J with a good phonemic awareness of sound/symbol relationships because he had attended primary school in Guatemala. At MCI-J he studied vocabulary in highly meaningful contexts, which gave him a good start for fluency and comprehension in his reading and language. Reading is what set
Adalberto apart from other students—he was, and still is, an avid reader of current events, books, magazines, and other print material. This is in stark contrast to many CE students who do no reading outside of the classroom. Adalberto read everything and anything, always asking the ESL instructor to borrow books and magazines from the classroom library. When asked how often he read material in English, he replied, “I read every night in my cell. Even if I don’t have homework, I read something, anything.” In the ESL class, students worked on vocabulary development and deliberate comprehension activities while reading in class, focusing on answering discovery questions of who, what, when, where, and why while reading. Thus, Adalberto read both in the classroom and in his cell. This extended reading time played an important function for Adalberto and his reading progress. It is well researched that this time element (how much time is actually spent reading) is an important factor for reading comprehension and higher test scores with children (Padak & Bardine, 2004; Postlethwaite & Ross, 1992); in the studies mentioned therein the more time children spent reading, the better they performed on assessments. This time element is also important for adult students learning a second language as reading develops comprehension, fluency, community, and literacy, which in Adalberto’s case, lead to progress and promotions in his classes. “I really feel like the reading, you know, put me way ahead. That's why I always came in to get magazines,” reported Adalberto.

Classroom reading becomes an important function in adult education when adults may not have time to read outside of school, or they may not be motivated to read once they leave the classroom. In CE environments, there is plenty of “extra time” to read when students are locked in their cells. For students who take advantage of this time, it can mean the difference between progress and failure.

Adalberto had not read for pleasure as a child, as “there were no books in my house” in Guatemala, but he developed a new love for reading and finding out true information while in school at MCI-J. His favorite books were nonfiction, true stories about people, places, and animals. He especially liked the National Geographic and Sports Illustrated magazines which had been donated to the ESL classroom. Students were allowed to check them out and take them to their cells to read and look at the pictures. The MCI-J school library did not allow magazines to leave the premises, so taking magazines back from the classroom became an important factor for Adalberto in order to have more time for independent reading. Adalberto actually became a prolific reader and by the time he finished his adult secondary 4 class, he scored a 11.3 on his Reading TABE exam (level D), and he was able to read many styles and forms of print English. Padak & Bardine (2004) discuss the concept of adult literacy and how it is more than just acquiring skills in reading and writing; literacy develops when students choose to read as an activity outside of school, and see the benefits of it. Adalberto had become such a student at MCI-J; he found pleasure in reading and understood the benefits as they related to his goals.

Tools Were Critical

Learning vocabulary in the context of reading played a vital role in Adalberto’s English education. Research reveals that word knowledge is essential in second language acquisition and forms the basis for all communicative response (August, Carlo, Dressler, & Snow, 2005; Coady & Huckin, 1997). It is this individual word knowledge that supports rapid language development in both oral and written form. From the beginning of his time in the ESL class to his GED completion, new words were isolated and defined, emphasized, and used in accordance with the goals and benchmarks for each of his classes.
Cognates (similar words in both languages) were explained and idioms were taught. Learning about suffixes and prefixes increased his depth of word knowledge. In the ESL class, he was given a Merriam-Webster’s bilingual English/Spanish dictionary (with more than 80,000 entry words) and taught how to use it. He kept that dictionary with him and used it faithfully as he progressed through the various classes at MCI-J. It became an important tool and coveted item for classroom learning and homework according to Adalberto, “It’s just fantastic, you know, that everyone [in the ESL class] gets a dictionary. We use them, like fifty times a day!”

Adalberto reported that in his down time when he was locked in the cell, many times he would spend hours reading his dictionary, which also contained grammar points about the English language. As he studied and read new words in the dictionary, he would mentally make short sentences in English and practice saying them over and over. This process allowed him to internalize new phrases and thoughts. In addition to the bilingual dictionary, vocabulary workbooks such as the *Oxford Picture Dictionary* (2009) by Oxford University Press, bilingual series, were used to increase common vocabulary knowledge. The words in these books are categorized according to subject matter and content, and Adalberto learned new vocabulary by writing words in sentences, using them in conversations, reading articles or stories containing the same words, and practicing them orally in question and answer format and spontaneous conversation. Vocabulary development was essential for Adalberto as the cumulative effect of increased word knowledge assisted him in all four skill areas of language, and he continued to express himself and comprehend new material more fully with each class that he took.

**Motivation and Goals**

Motivation in second language acquisition has been widely studied with many factors affecting one’s desire to study and learn a second language (Dornyei, 2002; Gardner, 1985; Oxford & Shearin, 1994). Some of these factors influencing motivation include teaching methods, student learning styles, environment, cognitive ability, self-confidence, goals, and employment opportunities, among others. Adalberto’s motivation to succeed in school was a result of clearly stated goals formulated during the first six months of school. Once he realized that he was, indeed, a student capable of progress, he told his ESL teacher and classmates on more than one occasion that, “I want to get my GED diploma, I really do.” He articulated this goal often and made everyone, including all of his teachers, aware of his objectives. These objectives included a desire to: obtain a GED and become bilingual; secure a better job after returning home to Guatemala; and be a role model for his family and the MCI-J ESL community.

Adalberto’s clearly-stated goals gave him motivation as he developed good study skills for learning--he came regularly to class, listened to the teachers, asked questions for clarity, took notes in his black and white marbled composition book—and devoted a lot of time and effort to academic lessons and practicing English. These study skills were taught and practiced in the ESL class, and Adalberto continued to use them throughout his time in school. His clearly-stated goals allowed others to help him because they were aware of his objectives. Adalberto also became a motivational speaker among other ELLs and his family—he emphasized the importance of education and repeated his goals for the future.

**Cooperative Learning**

Cooperative learning has proven to be successful with English language learners in elementary and secondary schools (Calderón & Carreón, 1994; Calderón, Slavin, & Sánchez, 2011). It can also be effective in adult education where students are
grouped according to same or different abilities, and students take turns serving as facilitator for the group. Cooperative learning allows students to accomplish goals through interaction with each other and through a positive interdependence (Ovando et al., 2006). Cooperative learning began for Adalberto in the ESL classroom where small groups were formed to discuss (in both English and Spanish) specific reading material in class. Questions and problems were addressed as a group before asking the teacher for clarification; these discussions promoted critical thinking and problem-solving skills. Small groups were also used for conversation practice and question and answer format. These small groups allowed Adalberto and the other language students to practice English using targeted academic language. Initially put together in groups of four by the ESL instructor, the students were eventually allowed to sit and work with other students of their own choosing. Later, in the adult secondary education class, the instructor grouped the Hispanic students together, separate from the English-speaking students, so they could explain concepts to each other in Spanish, if necessary. This worked because Adalberto’s group studied well together and they all had GED diplomas as their goals. In this way, they served as each other’s cheerleaders and support group, encouraging one another and persevering as they worked through problems. Frequently, Adalberto’s study partners would come by the ESL classroom and proudly declare, “Adalberto is going to get his GED, and I want to, too.” They asked questions of one another and shared their knowledge, teaching each other what they were each individually able to understand in the target language, supporting each other in Spanish, if necessary.

Later, when the secondary instructor assigned a tutor to Adalberto, it was this personalized assistance that played an important role in helping Adalberto pass the GED exam on his third attempt. The cooperative relationship between student and tutor allowed for the give-and-take of information not formerly understood.

**Role Modeling**

During the time Adalberto was a student in the adult secondary classes, he also returned to the ESL class to volunteer as a tutor in the morning. He volunteered, he said, because “I want to help my people.” Consequently, while other afternoon students with mornings off slept late, went to yard or pod recreation, watched T.V. or went to the gym, Adalberto got up every morning and came to my class at 7:30 to assist with preliterate and beginning ESL students. Then after lunch he would proceed to his own class to continue his work in reading comprehension and GED practice. He did this five days a week, Monday through Friday. About this time, I noticed a difference in Adalberto, the former ESL student, and Adalberto, the GED student and tutor. His English fluency had improved; he easily had conversations with native English speakers; and there was an air of assurance with his demeanor. Another teacher noticed a confidence in his walk. He had also developed many skills for teaching students by observing his teachers and remembering his own struggles. I heard him mimic my own instructions on more than one occasion, and I appreciated the fact that he was very patient with my students, especially the older learners. Students looked up to him because they knew he had been in the ESL class years ago, and they recognized that he had worked hard to achieve his education. Through peer tutoring, Adalberto was able to practice summarizing, clarifying, evaluating, and application, all of which were good practice for the GED exam. Inmate tutors are used successfully in correctional education programs, and the social benefits of peer tutoring—positive attitudes, self-confidence, self-esteem—are well documented (Alsup, Conard-Salvo, & Peters, 2008; Imel, 1994; Osguthorpe & Scruggs, 1986). Maryland correctional institutions use the nationally-recognized Peer
Tutoring Program, wherein inmate tutors are under the direct supervision of ABE instructors in the classroom. These tutors assist fellow classmates with schoolwork, including GED practice. Tutors are an asset to the correctional education classroom and serve as assistants to the teachers. At MCI-J, academic and occupational classes have between one and three tutors per classroom. In Adalberto’s case, the respect and adulation from other students gave him additional motivation to finish his studies and obtain a GED diploma, which confirmed his status as a leader in the school.

Adalberto’s adult secondary instructor summed up Adalberto’s character by saying, “He is resilient.” He never gave up in his quest to achieve a GED, and his dedication to school never waivered. He also practiced what he had learned—English sentence construction, reading for meaning, U.S. history, and scientific concepts—by teaching others in the ESL class. Adalberto’s educational status among the Hispanic students was well known; on the tier many students came to him for assistance and clarity with homework. “I didn’t understand it, but Berto helped me,” many students admitted. When he finally passed his GED exam, it was just a confirmation of what the MCI-J school community already knew—Adalberto was a successful English language learner and student, and he served as a role model for others in a caring and compassionate capacity.

Conclusion

Adalberto spent four and a half years at MCI-J studying to learn English and be a GED graduate. He succeeded because of five factors that overlapped and supported each other: reading and vocabulary development, clear and stated goals, cooperative learning, and becoming a role model for others. Combined with dedication and perseverance, these factors provided him with success for obtaining his GED diploma. For other adult ESL students like Adalberto who are studying for their GED requirements, certain tools are indicated for success: bilingual dictionaries and vocabulary textbooks, targeted vocabulary instruction, supplemental classroom and outside-classroom reading materials, classroom libraries, composition books for writing and note-taking, opportunities for English language practice and use, stated goals that are tied to an educational outcome, group or partner opportunities for learning and sharing, and using and practicing what has been learned in real-life scenarios such as tutoring and mentoring others.

Adalberto was released in 2015, and because he had a federal detainer, he was deported back to his home country. He had expressed a strong interest in teaching in his community in Guatemala to help empower other Guatemalans to seek out education as a solution to poverty, unemployment, and gang activity. I feel confident that his educational and personal journeys at MCI-J provided him with the needed skills to be an agent of change, and I hope that he is able to realize his goals. After obtaining his GED, Adalberto continued his desire for learning and enrolled in the Desktop Publishing program offered at MCI-J for high school and GED graduates. He learned basic computer skills such as Microsoft Word, Power Point, Excel, and Web Design, among others. These skills could only enhance his desirability as a successful bilingual student, worker, teacher, and parent when he returned to his community.

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References


In January of this year, I started a new job as the Executive Director of Physicians for Social Responsibility, a national public health advocacy organization, after working almost 20 years in a variety of roles in the adult education system. I worked in areas ranging from program support, professional development, coalition building, executive management, policy, and advocacy. I never served as a classroom teacher, although my first exposure to adult literacy was as a volunteer tutor. My career in adult education did provide me with some potentially useful policy and programmatic perspectives on the use of technology in adult education.\(^1\) Sometimes, in fact, technology was the main focus of my work; in 2014-15, for example, I served as the initial director of Digital Promise’s adult education initiative.

I mention my background at the outset to acknowledge that my observations on the promise and challenges presented by technology in the adult education field are not informed by hands-on experience in the classroom (as a teacher or as a learner). My work was focused on exploring the issue from a systemic perspective: studying how programs and communities support adult learning through technology, and thinking about how technology might improve our adult education system and provide more learning opportunities for adult learners, both in our communities and in the framework of national adult education policy.

With that by way of introduction, I would like to share with you some of my observations—and, more importantly—some of my still-unanswered questions—about the use of technology in adult education, especially in light of the enthusiasm in recent years for using mobile technology (smartphones in particular) to expand learning opportunities for adult learners as an adjunct or even as an alternative to participation in a formal program.\(^2\) These observations are by no means exhaustive. I also expect there will be areas of disagreement with some of what I write, but my hope here is to stimulate further discussion.

From the outset of my career in adult education 20 years ago, teachers, program directors, and policymakers were touting the use of technology to improve student learning (and professional development for teachers as well). Unfortunately, however, despite islands of excellence here and there, the introduction of computers and digital technology into adult education has often failed to live up to the loftier expectations proponents anticipated. I

\(^1\)That career is not entirely in the rear-view mirror, by the way: I still serve in a volunteer policy and advocacy role with the National Coalition for Literacy.

\(^2\)The $7 million Adult Literacy XPRIZE competition being the most prominent example: http://adultliteracy.xprize.org
think that one of the reasons we have often been disappointed is that we often set our hopes too high. We expect technology to overcome the pervasive lack of investment in our adult education system, or the significant barriers facing our learners when it comes to accessing and using technology—or that somehow the technology itself will make those problems go away. We also tend to underestimate the investments (in teachers, professional development, technical support, and basic infrastructure) that are needed to support the use of technology. We should not let those challenges dissuade us from developing these tools, but we should we be more discerning about the tools we use and more realistic about the challenges we face when deploying them.

Examples of Challenges

Access to Broadband

Digital learning tools usually require Internet access, and many learning tools employ audio and video resources and other bandwidth-heavy technologies that require broadband Internet access. While access to broadband is growing, only about three-quarters of American adults have broadband Internet at home, and those with lower levels of education and income are less likely to have it (Smith, 2017). Slow connection rates are concentrated in nonwhite and low-income communities.

It is true that an increasing number of Americans now use smartphones as their primary means of Internet access, even at home: one in 10 American adults accesses the Internet via a smartphone but don’t have home broadband service (Smith, 2017). This is an important trend that bears watching, but for now that is too small a number to obviate the need for home broadband access for many adult learners, which is still quite limited in some parts of the country, even when you can afford it. For lower income adults, even when smartphones and home Internet are technically available where they live, these services may be financially out of reach. Public institutions (such as libraries) in low-income communities are not necessarily capable of providing adequate access either.

I have often heard stories about classrooms full of students with smartphones, which is supposed to indicate that access is not the issue it once was. I agree these anecdotes sound promising, but the statistics I cite above suggest that the despite the growth in ownership of mobile devices, robust internet access remains a significant challenge for many adults, particularly low-income adults (and many of our learners fall into this category). While some learning technologies attempt to get around this limitation (by not requiring Internet access, for example), many of the most promising uses of technology require some combination of broadband access and computing horsepower (whether its embedded in an actual computer, or in a tablet or mobile phone).

Device Access

Another thing that is striking in the research is how often the most successful examples of technology use for learning depend not only on adequate hardware and bandwidth access generally but also on student access to one-to-one computing opportunities. In the classroom, this means environments where there is one device available for each student, and the devices are readily available for multiple uses by the student throughout the school day. Research in K-12 contexts cites this as particularly important for lower-income students’ ability to gain fluency in using the technology, since they are less likely to have computers at home (Grimes & Warschauer, 2008).

As a result, there was a big push in K-12 several years ago to provide one-to-one device access for all learners. Maine’s statewide one-laptop-per-student program was an early and famous example of this. Many schools and school districts have adopted “bring your own device” (BYOD) policies, encouraging students to bring their own personal computers, tablets, mobile phones, and other Internet-compatible devices to class instead of relying on devices provided by the school. This shift, however, which appears most often to be driven by financial considerations
Expanding Access to Learning with Mobile Digital Devices

Forum

Expanding Access to Learning with Mobile Digital Devices

(technology investments are expensive, especially given that new devices are likely to become obsolete every few years), has been subject to criticism — the biggest being that BYOD tends to put students from lower-income families at a disadvantage. Services have emerged to address this problem, but this gap remains an issue.

There was never a program to provide adult education students with devices on the scale of something like Maine’s one laptop per child program. However, the growth of mobile device ownership among adult learners has led some to jump to the conclusion that we'll be able to skip the stage of needing to provide these devices for learners and go directly to the BYOD model. The assumption is that eventually all of our learners will obtain the devices they need on their own, that these devices will all be adequate for the kinds of learning technologies that we hope to provide them, and that teachers will be properly trained to use the devices students will bring in.

I think it is important to consider that the BYOD movement in K-12 is being built on top of an infrastructure that (in general, though not everywhere) had already invested far more in the one-to-one model than the adult education system. While it may continue to be unrealistic to expect the equivalent of a “one laptop per child” program in adult education, is it realistic to expect to scale up the use of technology for adult learners (including mobile technology) without such an effort, or without fully subsidizing students to acquire devices?

The Role of Schools and Programs

Proponents argue that we can expand access to learning for adults not enrolled in programs via learning apps directly accessed on mobile devices. This may turn out to be true for a subset of adult learners, but it is worth taking into consideration the important role that physical schools and classrooms play for many adult learners.

Space and Time for Learning

For one, such institutions can offer learners quiet and productive spaces for learning (both in terms of time and physical space). For many learners, these quiet, focus-enhancing spaces may be unavailable elsewhere in their busy and crowded lives. (More than once, I have heard developers tout the advantages of being able to practice literacy skills while riding the bus. I often wonder how many of these developers actually ride the bus, let alone try to get work done while riding one.) Mobile learning app developers also seem to have a persistent belief that these apps can be transformative because learners can access them anytime, as well as anywhere. However, the structure that is associated with being enrolled in a program with set class times may be helpful for adults who lack the self-discipline to learn independently.

Secondly, those institutions provide important human resources. Students who are connected to programs have access to teachers, tutors, and perhaps counselors and other professionals. They provide opportunities for social interactions among students, and learning activities that are enhanced by working with others. I know that digital devices can and do provide remote access to all of these kinds of resources, but the personal touch of working with someone in a face-to-face setting is of particular importance to many adult learners who may lack confidence or have difficulty expressing their needs. Schools can also offer diverse learning environments using a variety of devices (one-to-one devices, stationary computer labs, mobile computer labs, and BYOD programs) and a variety of materials—including those that are geared toward content creation by students themselves. A well-equipped school can thus provide appropriate learning

3The Adult Literacy XPRIZE Web site, for example, notes that “[e]xisting programs… are often under-funded, small in size, not accessible to all and unable to scale to meet the needs of our country’s 36 million low-literate adults… We need a radical new approach to adult literacy learning. A solution that is relevant, scalable and accessible – anytime, anywhere.” (my emphasis) http://adultliteracy.xprize.org/about/overview
opportunities that are specific to the needs of each student. However, mobile apps are more limited in the number and variety of learning environments and delivery mechanisms they can provide.

Indeed, while research has revealed that independent learning is prevalent among adult learners, self-study and program participation appear to be complementary approaches, with many adults seeking support from tutors or teachers at certain points even if they are mainly working on their own.4 I am not arguing that mobile devices do not open up learning opportunities outside traditional program settings, but I think that many learners will struggle to succeed with them unless those opportunities are tethered, at least to some extent, to programs that can play a supportive role.

Meaningful Interactivity

There appears to be fairly widespread agreement among educational experts that interactive learning tools (including adaptive tools that can diagnose students’ levels of understanding and customize the material they engage with) show greater promise than the use of “drill and practice” tools. The best digital learning tools support deeper interactions between learners and the material they are studying—think of digital tools that offer different visualizations of concepts, for example, or that provide opportunities to actively work with data or express individual ideas.

But some of the adult learning tools I have seen that claim to provide some degree of adaptability or interactivity—including new tools being developed for mobile devices—are really just slightly more sophisticated versions of the old basic drill and practice tools, offering just rudimentary feedback for the learner on areas where further practice may be necessary.

Creativity and Agency

Another area where there appears to be widespread agreement among educators and researchers is that when students use technology to create their own content, rather than just being the recipients of content designed by others, they become more motivated and develop stronger skills. Creating content includes activities like making charts and graphs of data, which students have researched or developed; building websites; creating presentations; and making videos, multimedia content, or engaging in digital storytelling. These activities not only strengthen skill development but also often increase learner self-efficacy and agency—they offer students a chance to think about and take control of their own learning. Yet, in my experience, the most popular learning tools used in adult education offer little in terms of this kind of creative experience.

Technology as a Compensatory Tool

Technology has improved the lives of people with disabilities in profound ways, helping those with physical disabilities become more mobile, and providing those with visual and auditory disabilities with access to information that they might otherwise miss out on.

Many adult learners have disabilities that can be compensated for using assistive technologies. I have never understood why there is not more of an emphasis in adult education on helping students with learning disabilities gain access to and master these technologies as a way to compensate for their reading and writing difficulties. I am not sure, in fact, why we do not do this for anyone struggling with literacy, whether due to a disability or not.

As one adult learner put it, back in 2009, in testimony before Congress:

For a lot of us, we do have learning disabilities. I cannot spell. Regardless of how long you sit me in a class, I cannot spell. I can comprehend. I can do a lot of stuff. I can plan a lot of things. But I can’t spell. With the new technologies

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4The Longitudinal Study of Adult Learning project is a key resource that has helped us understand the multitude of pathways adult learners take to improve their literacy skills, both in and out of programs. http://www.lsal.pdx.edu/
out there for the blind and deaf, my workload would double. (New Innovations and Best Practices Under the Workforce Investment Act, 2009, p. 10)

I have not seen a lot of movement in this direction in the years since, despite the fact that assistive technologies are now more integrated into mainstream devices than ever before. Apple, Amazon, and Google have all invested in speech recognition technology that enables people to access information and perform tasks on digital devices without needing to type. These products are not even marketed as assistive technologies.

Every feature of an Apple iPhone is completely accessible regardless of whether you are able to see or read via a feature called VoiceOver. Once you turn this feature on, a voice describes for you anything that you touch on the screen—icons, words, and even status icons at the top. Gestures (tapping and swiping) can be used to control every aspect of the device.\(^3\)

However, we employ technology as a learning tool, I cannot understand why we do not help adult learners take advantage of these kinds of technologies if their use will help them compensate for the reading and writing challenges they have.

**Recommendations**

We should continue to take the issue of access to broadband seriously. We need to be realistic about this issue and invest in solutions.

We need to ratchet up our advocacy for new investment in strong anchor institutions (in teachers, professional development, technical support, and basic infrastructure) to support the most promising technologies. I believe that if we seriously invested in our institutional capacity, the use of mobile technology to extend opportunities would develop more fluidly and effectively than by trying to support mobile learning opportunities outside of those institutions. Instead of thinking about technology as a way to work around program scarcity, why not expand adult education programs so that they all can support self-study in addition to classroom-based work?

We should concentrate or technology investments in tools and approaches that have demonstrated the greatest success, such as those that involve meaningful interactivity or involve students in the opportunity to use technology to create their own content.

We should consider reframing our investments in technology by asking how technology can help us enhance and scale what we do well, rather than to remediate for what we do not do well. In those instances where we are good, how is technology already contributing to that success? How might it extend that success further?

We should also look beyond instruction and fully support any technology that will improve adult learners’ lives. We should encourage teachers and programs to learn about assistive technologies and help adults to take advantage of these tools if it will help them compensate for the reading and writing challenges they have—whether or not they ultimately decide to avail themselves of reading and writing instruction.

**Conclusion**

The U.S. adult education system is very small, serving just a fraction of the adults in this country who need help with basic skills. Within this tiny system we have examples of excellent schools and programs. The problem has been how to take this system to a scale that adequately meets the need.

Some see the emergence of mobile devices as our best opportunity to accomplish this. I believe that the development of learning apps for these devices (and other kinds of digital learning tools) will be useful for many adult learners. Ultimately, however, I doubt we will be able to scale up our system to any significant degree unless we are willing to make investments in

\(^3\)See this article for a great summary of VoiceOver features: http://finance.yahoo.com/news/david-pogue-on-iphone-voiceover-163733668.html
strong brick and mortar adult learning programs in every community. The reason we do not have them is not because programs don’t work, but because we invest so little in adult education in this country, and what little we do invest at the federal level (our largest source of funding for adult education) has been dropping dramatically over the last 15 years. Federally funded programs serve only 1.5 million of the estimated 36 million adults in the U.S. with low literacy and numeracy skills—significantly fewer students than the system's highest enrollment year of 2002, when it served almost 2.8 million students. Taking inflation into account, funding has been reduced by almost 25% since the systems’ peak funding year of 2002. It should not be surprising that program closures and cutbacks have followed over this same period.

It seems unlikely that mobile learning apps alone can compensate for this level of disinvestment. In fact, as I argue above, I think that making investments in these technologies without accompanying them with significant new investments in “anchor” adult learning institutions will prevent them from meeting expectations. Our fascination with new technologies should not blind us to the fact that our adult education system has been slowly eroding away for the better part of a decade. Adult education in this country is facing a truly existential crisis that has no technological cure.

One of the things I enjoy about discussing the promise of technology in adult education is that it is an area in which people are encouraged to think big, and often do. It is considered visionary to talk about doubling or tripling the number of adult learners accessing learning opportunities via mobile devices. But if you talk about doubling or tripling our investment in existing adult education institutions in order to have robust, high-quality adult education services in every community, you are often met with the response that such thinking is “unrealistic.” However unrealistic, I remain convinced that there is no technology that will obviate the need for those investments.

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References


Leveraging Technology in Adult Education

Diane C. Inverso
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At the Office of Adult Education (formerly the Mayor’s Commission on Literacy), we are excited about technology and its potential to advance our field, although we have seen the challenges firsthand. We are pleased to add to the discussion by sharing the lessons we have learned from hanging out, messing around, and geeking around with tech. (https://mitpress.mit.edu/books/hanging-out-messing-around-and-geeking-out)

Our perspective on technology in adult education is based on the lessons we have learned from the programs we have developed and supported, and, from our own experiences as lifelong learners. Many of us began our journey to adult education as teachers, volunteer tutors, students, and English language learners. We have rich and multi-faceted experiences with technology in settings like the classroom, ESL programs, at home, and at our jobs. All of this has greatly informed our perspective on the incredible potential—and challenges—of technology in adult education.

As a city agency, our office works with over 100 adult education and ESL providers across Philadelphia. While some adult education providers have been reluctant to adopt education technology, we were one of the first organizations in the U.S. to bring facilitated online learning to adults reading at a low to intermediate level. We also currently offer several online courses. OAE’s myPLACESM Online is contextualized in three high priority jobs in the City, available to residents of Philadelphia and incarcerated adults. Our Digital Skills, Bicycle Thrills course is a collaboration with Philadelphia’s Indego bike share, combining digital literacy with urban biking skills. myPREPSTM is for adults at an 8th grade level looking to brush up their skills to help them take standardized assessment tests for job training, apprenticeship programs, and college. These programs have helped learners improve their skills on their own time, while offering the support of online facilitators, who provide feedback and motivation.

As an organization, OAE has a long history of working with constantly evolving technology. Since 1988, we have produced a Technology in Adult Education Conference, where hundreds of practitioners convene to discover best practices. In November 1992, we began The Power Learning Project. This tested the potential of home-based computer assisted instruction coupled with classroom instruction for adults, and was funded by the National Institute for Literacy. Since 2013, OAE has led KEYSPT, a network of public access technology centers in low-income communities in Philadelphia. KEYSPT has given us an on-the-ground perspective about the necessity for digital literacy trainings as well as access to technology. OAE also offers online and blended, cohort-based, tutor trainings. Our tutor trainings leverage the flexibility of online learning.
and the chance to help volunteers understand technology as a tool for instruction.

**Access to the Internet**

As we advocate at a local, state, and national level for more affordable Broadband, we must also explore online learning options that do not assume learners have an internet connection readily available. We know that those who stand to benefit the most from access to broadband often are left behind due to barriers such as cost and location. While nearly three-quarters of Americans have home broadband service today, seniors, racial minorities, low-income households and those with lower levels of education are less likely to have broadband at home (Pew, “Internet/Broadband,” 2017). Through OAE’s management of the KEYSPOT Network, we support organizations that provide unrestricted open access to the Internet while promoting programs that provide low-cost, in-home Internet or technology equipment. Adult educators must continue to build awareness about the digital divide, and push for more affordable options for adult learners.

While advocating for more affordable Broadband is critical, a small and growing number of tech companies, public institutions, and non-profits are developing programs that circumvent this barrier. The company Cell-Ed provides offline lessons on literacy, language and job skills for cell phones, allowing students to listen to pre-recorded lessons and assessments by dialing a number to which they can text answers back. Community Action, Inc. of Central Texas integrated Cell-Ed into their ESL course with great success for learners like Albina Herrera, a bus driver who used the Cell-Ed product during spare time on the job to improve her English writing skills (Digital Promise, “A developer,” 2015).

In 2013, Providence Community Library (PCL) utilized Mobile Beacon’s 4G device donation program to lend out mobile hotspots to patrons who lived in neighborhoods with low rates of home broadband. Other libraries have offered similar services, and in April of 2017, Philadelphia City Council proposed hearings on the feasibility of the Free Library of Philadelphia “lending out” mobile hot spots to their patrons. It is with certainty that this trend will continue, and not just here in Philadelphia.

**One-to-One Device Access**

Combined with options that do not assume internet access will always be readily available, low-cost mobile devices are a powerful tool for adult learners and can serve as affordable one-to-one devices.

Walk into orientations for any OAE online class, and the first question from our learners is always the same: “Can I do this on my smartphone?” In fact, our learners express the most interest in receiving mobile devices through programs like Federal Lifeline Assistance, as opposed to opportunities for laptops or desktop computers.

Low-cost smartphones are becoming more available as the market shifts and software improves. At costs as low as $39.99, smartphones are becoming increasingly attainable for adult learners. While infrastructure that allows K-12 programs to provide one-to-one devices such as iPads or laptops for all learners is out of reach for many adult education programs, it is also reasonable to assume that many adult learners own a smartphone—and that this trend will only increase.

What we observe locally echoes a growing national trend. Mobile usage continues to grow at an astronomical pace, with last year marking the first time in history that smartphone and tablet Internet usage surpassed desktop or notebook usage (Heisler, 2016). Faster network speeds and greater mobile capability will add to this shift in Internet consumption, and there is no denying that mobile is an important part of the future. Each year the barrier of smartphone capabilities is lowered as smartphone screens get larger and mobile app development companies grow.

Of course, for adults to benefit from mobile learning tools, there must be a range of high-quality products on the market. While thousands of education apps are available for download in the Android and Apple stores, only a fraction of these...
are geared at adult learners.

The Adult Literacy XPRIZE is a global competition, funded by the Barbara Bush Foundation and sponsored by Dollar General, challenging teams to create mobile learning apps designed to improve the literacy skills of adult learners. OAE is coordinating efforts in Philadelphia to have over 3,500 adult learners test the apps. A key goal for XPRIZE is encouraging more developers to create apps for the adult learner market—and to win, the apps will most likely need to work on low-cost devices without relying on a constant internet connection.

In addition to the over 50 apps worldwide competing for the Adult Literacy XPRIZE, Digital Promise is also committed to encouraging more developers of mobile apps break into the adult learning market. Digital Promise identifies adult literacy beacons across the U.S. that serve as best practices for technology in adult education, while providing resources and support to developers and entrepreneurs interested in entering the untapped adult literacy market. We need more organizations like XPRIZE and Digital Promise to join the small but promising intersection between adult education and mobile applications.

The Role of Schools and Programs

We do not believe that education technology will negate the role that physical schools and classrooms play in adult education. As practitioners, we know that learning is a social process that flourishes through interaction with others. In-person adult education centers have staff such as learning coaches, job developers, and caseworkers that can provide a more holistic approach to addressing needs like employment, housing, and emotional and physical well-being. Technology will never replace face-to-face interactions with teachers or caseworkers, just as emoji will never replace a hug.

At the same time, research shows that a combination of face-to-face and online instruction can be more effective than either alone. One meta-analysis found that students in blended instructional programs performed better than those taking the same courses as face-to-face or online only (Lloyd-Smith, 2010). Successful blended models were found to accommodate the active schedules of learners through the flexibility of asynchronous learning while providing ‘live’ interactive discussions. The development of relationships between students and instructors was crucial to retention and achievement in these blended courses. Instructors ensured the success of students who had little to no experience with prior online learning by outlining and modeling the technology that would be used throughout the course.

Whether through a mobile app or in another format such as a Learning Management System like Canvas or Blackboard, technology undeniably allows teachers to do more for students outside of office hours. These tools can also foster new forms of learner interaction, as learners engage in online discussion posts or chat forums to mimic classroom interactions. Some learners may carry negative connotations to their past classroom experiences and may find communicating online more comfortable. Most of our learners juggle family lives and careers with their education, making online learning ideal for the spare moments they can find in their daily lives.

Meaningful Interactivity

Making technology successful as a learning tool is tantamount to the best traditional classroom learning: meaningful, relevant experiences that require learners to focus on higher order thinking skills. In our myPLACE℠ Online courses, students learn basic math skills and apply them to complex, real-world situations such as packing a truck with the ideal quantities and load of materials, or giving the right concentration of medicine to patients. Students also research and analyze information, which is then used to develop a personal career and educational pathway. Our Digital Skills, Bicycle Thrills course helps learners apply digital skills such as navigating with online maps, to creating a route through Philadelphia using the safest and fastest bike routes, and testing the route they chose during a bike ride.
Conclusion

As educators, we grapple with how technology impacts our work and the lives of our learners. We are adult education practitioners who—like many reading this—are increasingly tech-dependent. We struggle with how to use the latest mobile phones and how to best incorporate technology into the lives of adult learners. We have experienced the evolution of technology in our field for more than two decades. At the same time, barriers such as lack of affordable internet and the scarcity of online educational products geared at adult learners serve as continual reminders of how far we must go. We hope that when we look back 10 years from now, we can celebrate the progress and investment that has been made in the exciting field of adult education and technology.

We know that large-scale investments into the adult education system are needed, yet programs must be willing to experiment with different online learning options and mobile technologies that stretch our dollars in the meantime. Research and successful examples of the use of technology in adult education will draw attention to a need that is often overlooked. Just as we adapt to new learning theories and instructional techniques, we must adapt to innovations in educational technology. We are determined to make the case that investing in adult education pays.

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Jennifer Kobrin joined the Office of Adult Education in September of 2013, where she is Director of myPLACE℠ and Digital Initiatives. As lead on the myPLACE℠ program, she manages a city-wide system of adult education. In her current role, she also focuses on issues relating to the digital divide in Philadelphia. She manages the KEYSPOT program for OAE, which consists of a network of 50 public access computing centers. Jennifer also directs myPLACE℠ Online, a series of online courses for adult learners.

Shazia Hashmi joined the Office of Adult Education in May 2016 as the Program Coordinator of Digital Initiatives, supporting OAE’s myPLACE℠ Online and KEYSPOT programs. Shazia’s background in education includes working for a tech startup in South Africa, a campaign for universal Pre-K in Pennsylvania, and a youth development non-profit in Philadelphia.

References


Response to "Expanding Access to Learning with Mobile Digital Devices"

Jen Vanek
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In the very near future, the semi-finalists for the Barbara Bush Foundation Adult Literacy XPRIZE will be announced. The competition has motivated teams of collaborating developers and educators to produce mobile learning apps on a range of subjects covered by the umbrella of adult literacy and learning. The $7 million investment likely represents one of the largest ever in adult literacy and, I hope, can provide a much-needed surge in quality mobile learning resources providing opportunities to learn anywhere, anytime. Though the XPRIZE competition was not directly mentioned in Jeff Carter's article, "Expanding Access to Learning with Mobile Digital Devices," I cannot help but think he was thinking about it as he wrote, and, given the excitement with which the field is awaiting the release of these apps, the timing of this forum could not have been more perfect.

Those of you who have worked with me know that I have spent much of the last 10 years (or more!) thinking about digital inclusion, digital literacy, and how to support ABE teachers with technology integration and using online/distance learning, including my early work with the Learner Web and the Northstar Digital Literacy Assessment. In my current work as the Director of the IDEAL Consortium for the Ed Tech Center at World Education, Inc., I support ABE technology and professional development leaders and practitioners from across the US, helping them create and implement quality distance and blended learning programming. In most of my academic research, I have tried to better understand what it takes to support learner persistence in online learning and digital literacy skill development for adult English language learners. I have always been excited about the potential of technology to make learning more relevant and about the opportunity of leveraging digital literacy skill development in ABE to prepare learners for daily life. So, as digital technology and information communication technologies, specifically, have become increasingly more prevalent in our society, I have generally gladly embraced the challenge of digital literacy skill development and classroom technology integration.

In the early years of this work, I might have been accused of what Virginia Eubanks, in her excellent book *Digital Deadend* (2011), referred to as magical thinking, “the belief that merely thinking about an event in the external world can cause it to occur” (p. xv). In the book, Eubanks provided a vivid example of an economic development program in upstate New York centered on investments in technology and job creation actually created gentrification and poverty. These programs had been endorsed by community leaders based on the fantasy that investments in technology would uniformly benefit communities. Eubanks’ argument was that policies reflecting this magical thinking often, inadvertently,
exacerbated current inequality or, worse, created new opportunities for inequality to be manifested in the current system by piling privilege on privilege.

Similarly, and on a more personal level, I recall having read the Obama administration’s 2010 education technology plan (Transforming American education: Learning powered by technology, 2010) and thinking that at last we had a clue about how to make adult learning more relevant and flexible for the many learners who could not or would not enroll in ABE programs. My magical thinking involved the potential of online learning to expand learning opportunities to learners who were not attending classroom instruction. I remember diving headfirst into online curriculum development projects that, as it turned out, failed to take into account some very real challenges present in the early days of online learning in ABE. For example, YouTube at the school was blocked because of limited bandwidth, Facebook was blocked because it was too social (!?), and classroom teachers were (literally) walking around with floppy discs (yes, there were still computers onsite that accommodated them) though flash drives were increasingly the norm. The result was online learning that fell short of our expectations. As in the Eubanks example, we had created inequity—only students who had regular access to computers and broadband out of school could make use of the most interesting and multimedia learning resources, and only students in classrooms with teachers willing to think creatively about technology integration got exposure at all. It was very frustrating to see what I had thought might be a tool for helping learners reach goals more quickly become a barrier for many of them.

Toward the end of Jeff Carter’s paper, he commented about the danger of looking to technology to solve persistent problems in our ABE systems. This critical stance is important and it is one that I share. In a sense, in the example I provided above, we were doing exactly what Jeff said could happen. We were hoping to solve problems begging for larger systematic solutions (like offering an onsite teacher or more class hours) by using technology as a sort of programmatic triage. For example, to reach more learners we developed a Moodle course on basic skills for adults at the workforce center but were not able to support its use more than a few hours a week. We also created an online ESL class for newly arrived refugees, for whom we could not meet mandated education hours because of programmatic limitations. In both case, we offered online work that was good for only a handful of the many learners we had hoped to reach rather than investing in staffing that could have provided more equitable learning opportunities.

In his article, Carter recommended a balanced perspective when measuring the potential of mobile learning to redefine teaching and learning for adults with basic skills needs. We need investments in systems that are already in place AND support for use of these new learning technologies. We cannot afford to ignore resource, policy, or institutional challenges that limit the capacity and efficacy of our programs, nor can we hope that shiny new objects (apps) can make up for these limitations. At the same time, we cannot ignore the very real need to make use of digital technologies, mobile learning and otherwise, work in ABE. Our learners cannot afford for us to NOT bring tech into the classroom and to push them to use it out of class. ABE classrooms are an ideal place for exposure to mobile devices and apps because there are trained teachers there to ensure that learners can develop digital literacy while they are building basic skills. Here are some recommendations that I think will make the promise of mobile learning less ‘magical thinking’ and more a reality for the broadest range of programs possible.

Firstly, we need continuous infrastructure investment to boost bandwidth, update computers and work toward providing one-to-one devices to extend the reach of ABE programs. Successful models for one-to-one device use exist across the United States. In class, access is often made available using Computers on Wheels (COWs), carts filled with laptops, that provide a flexible option to programs that cannot devote permanent space to a computer
Similarly, programs can use class sets of iPads or Chromebooks. For example, a tech-forward teacher in Fremont, California made use of a state grant (OTAN’s Access to Learning Through Online Education grant) to do just that.

Adult education providers have also found the means to provide access out of class. An interesting example is a lending program from Rhode Island, the RI Family Literacy Initiative (RIFLI). RIFLI lends tablets and mobile hotspots to enrolled learners who do not have home access. Another interesting example is English Innovations (EI), a promising model that blends face to face instruction with self-paced learning. The model operates at six sites across the US and integrates English communication skills, digital skills and community engagement. Formerly funded by the Bill and Melinda Gates Foundation, the project now receives municipal and foundation funding. The approach emphasizes social learning and peer to peer interaction. Students receive loaner Galaxy tablets and use Duolingo in class and out of class for anytime anywhere learning. The project is led by OneAmerica, a CBO in Seattle seeking to empower communities through advocacy.

Understanding that the capacity of our ABE programs falls far short of our needs in the US, we can to look to supported use of technology to help fill the gap. There are promising examples of such programming in the work done by English Now! and the MOBILE UP Project.

English Now! is a project of World Education’s EdTech Center, with a grant from Dollar General Literacy Foundation and in collaboration with Peer 2 Peer University (P2PU), supporting ELLs on waiting lists in five New England adult education programs. Adults on waitlists meet weekly in study groups (learning circles) where they work through online English courses together. The EdTech Center and P2PU staff train program staff, who turn train volunteer’s to run the lightly-facilitated learning circles.

The MOBILE UP Project of the California Labor Federation uses interactive cellphone lessons and coaching to instruct immigrant service workers who cannot attend regular classes in English as a Second Language and career technical training. Bilingual mobile coaches monitor and support the mobile learning of union janitors, hotel, long-term care and other service workers on Cell-Ed and other mobile programs. Through texting and phone calls with students, the coaches at Cell-Ed and three union-based training programs also refer students to further education or career opportunities.

Carter was right when he wrote that access to out of school learning is a benefit of technology but that programs should also rely on schools as productive spaces for learning where affective and academic support happens in person. Indeed, none of the examples above would have resulted in meaningful learning opportunities without the support of educational institutions and teachers or coaches. Further, to ensure synergy between the strengths of both in class and mobile learning, I would add that we need to better understand how learners are already using technology and build on that access and associated digital literacy skills when trying to integrate learning technologies to our classrooms or establishing a blended approach to teaching. For example, if you know that learners use a particular social media app to communicate with friends and family, think of ways to use it to extend classroom interaction or the discussion environment for online learning. If know that students can access YouTube playlists, create libraries or playlists in support of the academic skills you teach, linking learners to instructional videos they might watch anytime. Further, students are more likely to succeed using Apps designed for use on devices that they already know how to use.

I think that to make best use of the new apps headed our way through the XPRIZE and mobile learning opportunities more generally, learners need access, devices, AND trained facilitators. I agree with Carter that just releasing new apps in the world will not make more engaging ABE or guarantee that those who come across them will persist with their
use. Indeed, I have some fear that without a balanced perspective of the promise of mobile learning, that, down the road, XPRIZE competition funders will be disappointed with impact of the project. I worry that new interest in ABE from funders and developers will not be met by gains in literacy skills aligned with their expectations and that the shortfall will discourage further investment.

This is the risk of magical thinking about mobile learning. We need to understand that supporting learner success and persistence likely requires more than launching new apps. Based on my reading and my work as a researcher, teacher educator, and adult ESL teacher, I think the task for us now is not to just make mobile learning available—but to make sure that is it part of **quality educational programming**. When learners make use of an online learning resource and cannot persist or get the help they need, their future investments in their own learning are negatively impacted, as is their sense of agency in digital world. They might just quit, feeling like computers are not for them. This is hugely problematic given the technological ubiquity in our society.

So, what does quality programming look like? I agree with Carter that it requires engaging, highly interactive online resources that require use of creativity and critical thinking. I would add that classroom or labs that provide differentiated instruction through use of online resources and adequate support for use of these resources work well. Because learners show up with such a wide range of computer skills and experience AND other supporting proficiencies like shared language and literacy, models that provide self-paced, learner driven learning are likely to have more success than instructional programming were learners work in isolation or in large cohorts. I think an ideal learning situation would be a flexible classroom space or open-access lab, stocked with culturally relevant and easy to navigate curricula (including mobile apps!) and plenty of helpers to interact with and guide learners when they get stuck. Because we know that current ABE programming falls short of reaching many potential learners, I have high hopes that learning apps accessed on mobile devices and creative programming provided outside of the current system, like the examples shared above, will help mitigate the problem. These efforts, alongside advocacy for resources (more funding!) that we need to expand the reach of the ABE system are both needed. I don’t think this is magical thinking!

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**References**


A
ction Research to Improve Youth and Adult Literacy: Empowering Learners in a Multilingual World discusses the use of action research as a mechanism to address issues affecting education initiatives to improve the lives of people in multilingual, multicultural societies in Africa. It provides “guidance for those who train people in the field of youth and adult education and who manage the implementation of non-formal education and curriculum” (p. 20). Social justice issues are stressed with the belief that human beings shape their own personas and that lifelong learning helps individuals transform their own reality.

The book is very well organized and is easy to read. Rather than giving us a definition, the authors present examples of action research from a theoretical perspective. After reviewing three case studies of action research initiatives in Niger, Ethiopia, and Senegal, we are shown a framework for action research, five guiding principles intended to “inspire [us] to improve the quality of [our] own practice” (p. 126), and quality criteria. Each chapter includes points for reflection designed to “take [readers] through a reflection process about possible action research in [our] own context” (p. 27).

What is Action Research?

Using action research, people get to define their own problems and find their own solutions through a truly participatory process aimed at developing the practical knowledge needed to succeed in pursuits
required to improve participants’ lives. An idea repeated throughout is that action research is a participatory and democratic process, based on critical philosophy, open to diversity, and concerned with social justice. Action research reflects Paulo Freire’s belief that education can lead social transformation and democracy fostering individual empowerment. The authors argue action research is knowledge in action rather than knowledge about action and that the resulting pragmatic knowledge is the product of a “joint effort of all the people involved” (p. 112). Because it has to fit the needs of the people, there are different ways of conducting action research but no single definition, model, or explanation. That’s why the book is, itself, necessary. As readers, we are invited to assess the three case studies, we are asked numerous questions for critical reflection, and then we are presented with common guiding principles and criteria for quality drawn from each of those studies. By the time we consider the quality criteria derived from each context, we understand those criteria may—or may not—be useful in our context; that’s for us to decide.

The Case Studies

Each case study is presented in a clear, detailed manner that starts with historical and demographic information about the three countries, an exposition of the problem, a description of the people involved, and a well-articulated explication of the lessons learned. The book accomplishes its objective of teaching about action research by immersing the reader in well-written comprehensive scenarios.

The case studies illustrate how the principles of action research were used in different contexts to support the development of literacy programs in multilingual contexts and we come to understand how literacy “gains its significance and social meaning from the particular sociocultural context in which it is used for communication.” (p. 194)

In Niger, action researchers tackled the creation of a multilingual literate environment to support formal and non-formal education addressing the problem of lack of materials written in national languages. In Ethiopia, action research was used to develop a curriculum to teach literacy to multilingual and multicultural rural coffee-growing communities. In Senegal, the principles of action research were applied to the training of trainers in multilingual and multicultural environments. The community needed to develop a curriculum to teach how to manage natural resources and, then, train teachers on how to use it.

Analysis and Application

An analysis of the three case studies leads the authors to propose a framework for conducting action research and suggest a set of five guiding
principles and quality criteria. The framework is conceived to “inspire [educators] to ask questions for [their] own action research in the field of youth and adult literacy” (p. 194). The values that are core to action research are social justice, participation, and equality. Two beliefs are central to this action research framework: first, education helps adults participate in democratic spaces that, in turn, generate spaces for education and learning that contribute to all aspects of social justice. Second, there is no action research if the project does not integrate cultural diversity. Educational practices must reflect the sociocultural and linguistic diversity of learners and must generate learning opportunities for youth and adults that “recognize the diversity of their interests, needs, and possibilities” (p. 129).

The book includes an additional nine brief instances of action research in Africa, Asia, and Oceania, illustrating how the principles drawn from the first three case studies are, in turn, applied in other contexts. An analysis of these studies leads us to the understanding that while the guiding principles are overarching values, the context and the purpose of the specific action research project dictate the shape of the quality indicators in each instance.

Conclusion

Action Research to Improve Youth and Adult Literacy not only teaches about action research; it also engages readers directly into a critical reflection exercise guiding us to consider important questions as they may pertain to the context of our own practice. Youth and adult literacy instructors and planners interested in deepening their understanding of their own contexts should read this well-written and highly didactic book, which makes critical literacy accessible and presents the principles of action research in a well-organized manner. It is difficult to read the book without being motivated to engage in action research in our communities.

Federico Salas-Isnardi, currently serving as Director of Information Resources and Publications for the Texas Center for the Advancement of Literacy and Learning at Texas A&M University, has worked in the field of adult education for nearly 30 years. He has developed and presented over 80 workshops specializing in ESL, literacy, citizenship, cultural diversity, and social justice. Federico coauthored the adult ESL series Future English for Results and has served on the boards of COABE, AAACE, and AALPD.
From Digital Literacies to Digital Problem Solving: Expanding Technology-rich Learning Opportunities for Adults

A window into an adult basic education (ABE) class shows several learners typing essays on laptops. Suddenly one student throws her hands up in the air loudly exclaiming, “I didn't do anything! The computer just erased everything! It wasn't me, it was the computer!” This scenario is all too familiar with new-to-computer users. Over time, this learner has developed more confidence and digital literacies, and has since passed the Language Arts GED test. However the technology skills needed in the workplace and in daily life go beyond those needed for test taking. Yet computers in adult education classrooms are most often used for test preparation and drill activities. If adults are going to be truly college and career ready, they need to be prepared to skillfully use digital tools and develop a discovery and risk-taking mindset toward navigating online. This column reviews four online articles that provide essential background and useful instructional approaches for teaching digital literacy and digital problem solving in ABE classrooms and beyond (see Harris, n.d.; Quann, 2015; Rosen, 2014; Vanek, 2017).

Basic Digital Literacies vs. Digital Problem Solving

Harris (n.d.) defines basic digital literacy skills as the physical ability to (1) use digital devices, (2) create and use computer files, and (3) choose appropriate digital applications for different purposes. Digital problem solving, on the other hand, includes navigating a range of digital resources to locate, evaluate, create, and communicate information (Harris, n.d.; PIAAC Expert Group, 2009). U.S. adults lag behind their international
peers in digital problem solving according to an international survey made up of a nationally representative sample ages 16 to 65 called Program for the International Assessment of Adult Competencies (PIAAC). The Problem Solving in Technology Rich Environments (PS-TRE) component of PIAAC involves using digital technologies in a novel online environment to acquire and evaluate information, communicate with others and perform practical tasks in personal, workplace, and civic settings (PIAAC Expert Group, 2009). Therefore, basic digital literacy skills alone are not sufficient for meeting the needs of adults today. They also need to develop the problem solving skills necessary for discerning accurate and reliable information, interacting with public services, communicating with friends, engaging in political activities, gaining employment, and participating in ongoing education.

**Review of the Literature**

From a search for openly accessible online articles that address teaching digital literacy and digital problem solving to adult learners, four important and complementary resources surfaced (see reference list). Each author considers ways to integrate digital technology in the classroom. Specifically, all four articles strongly emphasized teaching adults more than just basic digital literacy skills and called for application of digital skills across a wider set of experiences than testing, drill and practice activities. A brief summary of each resource follows.

Rosen (2014) introduces important background to interpret the range and scope of these essentials skills. The resource paints a vision for the future of a population capable of not only using digital tools, but of being able to problem solve in technology rich environments, such as searching and applying for jobs online, to thrive in their daily lives. After articulating goals for teaching these vital skills, Rosen summarizes recommendations for how those goals can be achieved. Both instructional and policy implications are addressed.

Vanek (2017) extensively reviews the construct of PS-TRE and describes how the principles of PS-TRE can be used to inform instruction. In order to focus on the most important aspects of problem solving, she describes three core dimensions of PS-TRE, the task, the technology being used to accomplish that task, and the cognitive dimensions the learner is tapping into while problem solving. She then expands on the cognitive dimensions of the framework by proposing a step-by-step problem-solving process, which she suggests be taught explicitly to learners.

Harris (n.d.) argues for the inclusion of digital literacies in classes for
English language learners (ELLs) in four categories: basic skills, creating and communicating digitally, finding and evaluating information online, and problem solving in technology rich environments. She emphasizes that those basic skills do not need to be learned before ELLs can begin creating and communicating or finding and evaluating online information. She advocates for designing activities that allow for a realistic use of English for ELLs in a digital setting. As an example, Harris points out that many schools are switching to digital forms of communication requiring ELL parents to be comfortable problem solving in technology rich environments in order to participate in their children's education.

Quann (2015) supports practitioners in helping learners digitally problem solve by giving practical, and immediately applicable, instructional examples. This resource offers a variety of lesson plans focused on helping adult learners use technology to engage in solving different kinds of real world problems. Five common threads cut across these four resources. These themes, taken together, can help guide practitioners in designing impactful learning experiences.

All of the authors agree that tasks for teaching digital problem solving should be authentic. In other words, they should be relevant to learners’ needs and contexts for use outside of the classroom. For example, Vanek (2017) proposes an activity where students search for low-cost housing. Quann (2015) connects multiple lessons to learners’ everyday needs as well, suggesting students conduct online research to find places where they can access free Internet or low-cost hardware. Thus, they are finding important information for their own lives at the same time that they practice digital problem solving and develop their online research abilities.

In addition, all four authors agree that basic digital literacy skills are not some type of gatekeeping skill for more advanced skills such as problem solving. Instead, basic digital literacies can be learned in the context of digital problem solving. Vanek (2017) points out that teachers can use “simple problem solving scenarios as the context for practicing new computer skills” (p.17). Harris (n.d.) suggests having ELL learners investigate banking practices and create a pdf that explains them to their peers. As a result, learners are not only practicing language skills but are also developing basic digital literacies in real-world settings. Quann's (2015) example of researching low cost hardware or finding places to access free Internet allows students to learn basic digital literacies contextualized within a task in ways that benefit them personally – often working in pairs to take advantage of peer support.
Not All Tasks Are Created Equal
The idea that basic digital literacies can be embedded within problem solving is a departure from progressions that begin with easy tasks and move into more complex skills. This does not mean however that tasks should not vary in their complexity. Vanek (2017) addresses “complexity factors” (p. 24) which can be adjusted, thus creating a better match for what will best support the student. For example, visual complexity theories suggest that some websites are visually simpler than others and therefore are more easily interpreted and navigated. Another complexity issue involves the number of potential steps a user might go through to accomplish the task. Can the task be completed on one webpage, or must the user navigate through multiple linked locations? By varying the complexity with tasks, learners acquire a range of skills in the act of problem solving.

The Task Decides the Tool
The time to decide on the appropriate digital tool to use is after the task has been developed. A digital tool is exactly that, a means to achieve a greater goal. Educators should choose tools that students can utilize flexibly to accomplish a variety of tasks. Vanek (2017) adds that “true digital literacy” (p. 22) is when students are able to choose which tools might best help them complete a task. This provides added complexity yet offers greater personal empowerment, leaving open-ended which tools a student might use to accomplish a given goal.

Flexibility in the Teacher’s Role
The digital age we live in necessitates a non-traditional role for teachers regarding introduction of digital tools in the classroom. The four papers reviewed characterize the teacher’s role in various ways: facilitating learning, orchestrating learning, and asking questions (instead of just giving answers). The teacher’s role must necessarily shift based on the context and learners’ comfort navigating online—at times offering responsive support and guidance and at other times providing space for learners to find their own way.

Digital Problem Solving in the Classroom
The opening scenario focused on a learner who throws up her hands because the computer erased her writing. This learner might seem like a prime candidate for basic digital literacies instruction. And while she would clearly benefit from more knowledge about word processing programs, the articles reviewed suggest that teaching basic digital literacies is far too narrow and
limiting of a goal. Transformative learning is more likely to occur when those basic skills are nested within authentic practices of digital problem solving where learners locate resources, navigate, create, and communicate across a range of digital tasks that are situated in meaningful, real-world contexts.

**More to Explore**

- Networked Communities of Practice (https://lincs.ed.gov/)
- Open Education Resources (https://lincs.ed.gov/sites/default/files/OER_Fact_Sheet_508.pdf)
- Tools and technologies to explore (https://cooltoolz.tumblr.com/)

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**Jill Castek** is an Associate Professor in the Department of Teaching, Learning and Sociocultural Studies at the University of Arizona.

**References**


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Lesson Plan Building and Sharing Tools

These free website tools are for teachers who want to efficiently create high-quality lesson plans, and share lessons or learning activities with their students or with other teachers. Some of these tools were specifically designed for teachers of adult basic skills, including English for immigrants; others were designed for K-12 teachers, but may also be useful for adult basic skills teachers.

The Lesson Plan Builder

OTAN, the adult education and technology professional development organization for California, offers this document on how to use its Lesson Plan Builder tool at https://www.otan.us/training/pdfs/2007CreatingLessonsOnline.pdf. Any teacher or tutor, not only those in California, can use it by registering on the OTAN website (free) www.otan.us/, then going to http://lessonplanbuilder.org. The Lesson Plan Builder is based on the WIPPEA model, which includes these parts: Warm-up, Introduction, Presentation, Practice, Evaluation, and Application.
PBS Learning Media Lesson Builder

This simple, free lesson plan creation tool includes an introduction for students, a sequence of content slides from PBS Learning Media or content of one's own, and a formative assessment with true/false, multiple choice, short answer, fill in the blank, or essay questions: http://pbslearningmedia.org/tools/lessonbuilder/. Lessons are saved to the PBS Learning Media website. A short “how-to” video will be found at http://pbslearningmedia.org/tools/lessonbuilder/new/#

Activity Circle

https://www.activitycircle.com/

With this free tool teachers can create activities and differentiate them for individual students’ needs; they can search the Activity Circle database for others’ lesson plans, and adapt them using the Pro feature; they can assign lessons to students for desktop or laptop computers, or through an iPad app; and they can share with other teachers the lesson plans they have created. Teachers are provided with regular updates on their students’ progress. The website provides video assistance throughout the process.

OER Commons

OER Commons, an extensive free, searchable database of Open Education Resource (OER) lesson plans and learning resources, offers two lesson-building templates:

Open Author. Teachers can build and share open educational resources (OER) such as courses, units, lessons, activities and presentations. They can combine text, pictures, sound, files and video. They can save these as openly licensed educational resources, and share them with their colleagues or with other teachers from around the world.

https://www.oercommons.org/authoring/3159-open-author/view

Lesson Builder. Teachers can create learning resources that are viewable by students as lessons, and by teachers as lesson plans, and that are saved to the OER Commons server. They can use Lesson Builder to
make an OER textbook of lessons for their students. OER Commons offers a simple video explaining how to use this tool at http://www.oercommons.org/courses/open-textbooks-using-oer-commons-lesson-builder-tool/view

**CAST UDL Exchange**
http://udlexchange.cast.org/home

UDL Exchange offers a free tool for creating and sharing lessons that include Universal Design for Learning (UDL) principles. CAST describes UDL as “a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn.” Using the tool, teachers can attach resources from UDL Exchange, as well as other resources they may choose to create or find for the lesson. In addition to sections including a description of the lesson, prerequisites, and estimated time; the lesson’s potential use, including its purpose, content area(s), and alignment to common core standards; instructional goals and objectives; instructional methods and materials; and formative and summative assessments, the tool includes a section for the author’s reflections where a teacher can consider how the lesson realizes hoped-for universal design or other purposes and goals. Video tutorials for using UDL Exchange can be found at http://udlexchange.cast.org/lesson/3363619

**David J. Rosen** is an education consultant in the areas of adult education, technology, and blended learning.
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**Continuum of Workforce Skill Development**

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<th>Instruction</th>
<th>Practice</th>
<th>Integration</th>
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<tr>
<td>• Instruction in Career Readiness Preparation Series is organized by applied academic skills.</td>
<td>• Skill practice is organized by applied academic skills.</td>
<td>• Applied, academic skills are integrated into instruction, following the Integrated Basic Education and Skills Training (i-BEST) model.</td>
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<tr>
<td>• Instruction in Essential Skills for the Workplace Series is organized by essential skills.</td>
<td>• Workplace Skills Practice Workbooks are aligned to the College and Career Readiness Standards.</td>
<td>• Instruction is organized by industry-wide technical competencies.</td>
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<td>• All instruction, examples, and problems are presented within various authentic workplace contexts.</td>
<td>• All instruction, examples, and practice problems in the Career Companion Series are presented within the context of a specific industry.</td>
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