



# JOURNAL OF RESEARCH AND PRACTICE FOR ADULT LITERACY, SECONDARY, AND BASIC EDUCATION

Published Jointly by The Commission on Adult Basic Education and Western Kentucky University

## RESEARCH

### Literacy Skill Differences Between Adult Native English and Native Spanish Speakers

*By Julie Herman, Nicole Gilbert Cote,  
Lenore Reilly, Katherine Binder*

### Post-GED-Credential Employment Experiences of Adults with Special Needs

*By Dr. Margaret Patterson*

### A Study of Culturally Responsive Teaching Practices of Adult ESOL and EAP Teachers

*By Dr. Christy M. Rhodes*

## PRACTICE

### PRACTITIONER PERSPECTIVE

#### Economics in Detention

*By Michael Elonge*

## RESOURCE REVIEW

### Improving Adult Literacy Instruction: Options for Practice and Research

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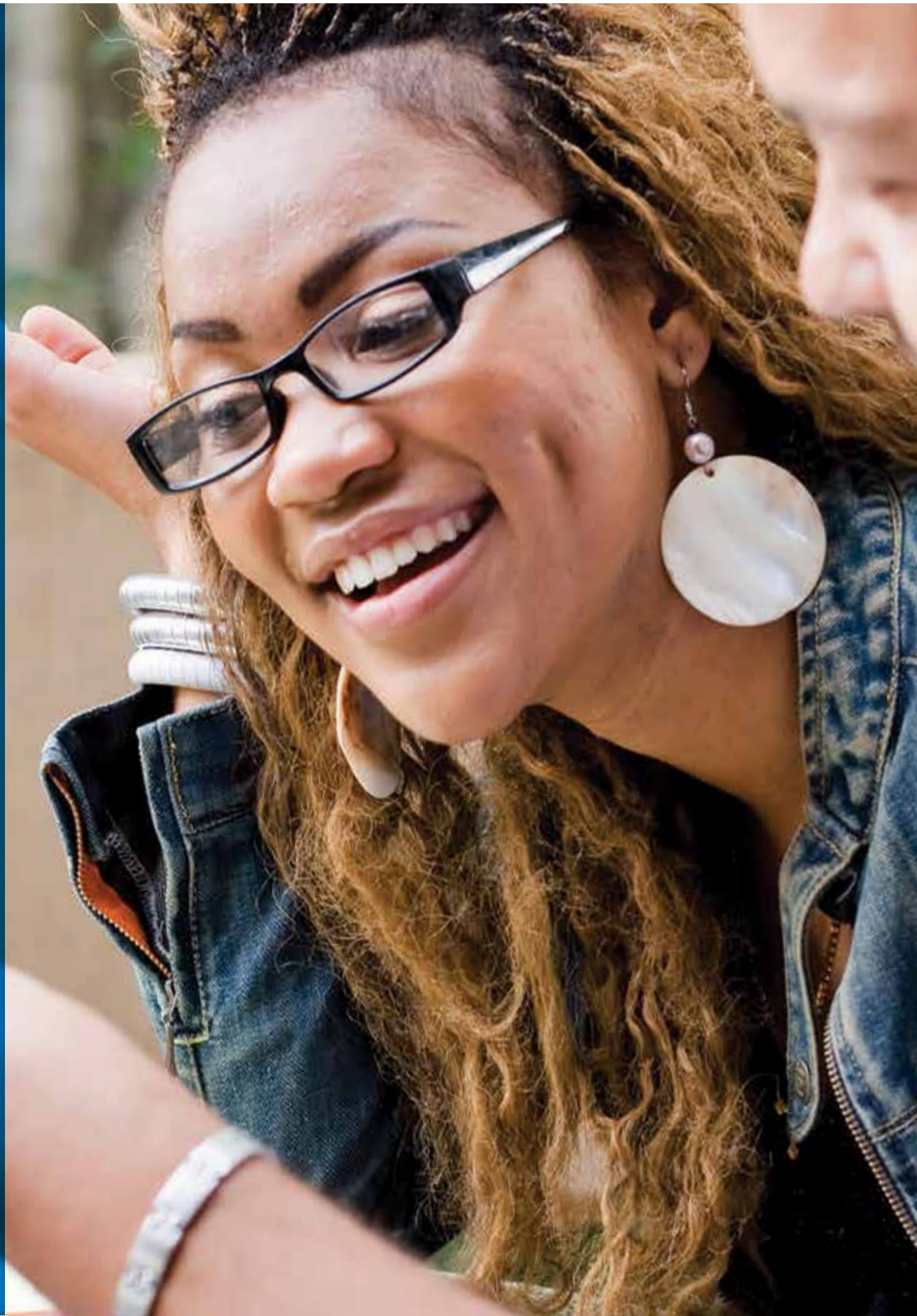
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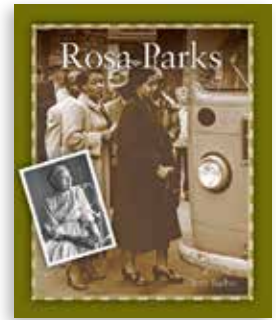


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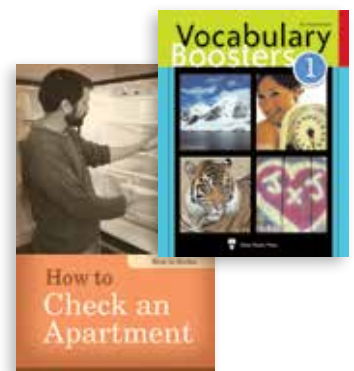


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### The COABE Journal, Celebrating 35 Years as a Major Voice in Adult Education

Dear Readers,

We are pleased to release our third issue of the second volume of the Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education. In this issue you will find three research articles focused on GED® Instruction for adults with special needs, use of culturally responsive teaching practices and their importance for ESOL learners, and lifelong learners as they acquire literacy and other essential skills. Each of these articles provides a unique insight into the learning and literacy needs of adults as they work to address various basic skills.

In “Literacy Skill Differences Between Adult Native English and Native Spanish Speakers,” Herman, Cote, Reilly, and Binder examine 169 native English speakers and 124 native Spanish speakers for similarity and differences in their language skills within their respective languages. While the authors did not find any significant differences between the two groups in decoding ability, there were significant differences between the groups on morphology skills and comprehension skills. The authors provide a number of implications for programs and make recommendations for future research.

In “Post-GED-Credential Employment Experiences of Adults with Special Needs,” Patterson examines the needs of adults with learning disabilities as they attempt to transition from completing the GED® to employment; conducting interviews with 20 individuals with special needs from around the country. She found that the interviewees have a variety of disabilities/needs, faced a variety of challenges in addition to the ones people face in acquiring the GED®, and experienced difficulties in the workplace. Patterson concluded with a discussion about limitations and future research.

In “A Study of Culturally Responsive Teaching Practices of Adult ESOL and EAP Teachers,” Rhodes explores the use of culturally responsive teaching practices with adults who are learning English as a speaker of other languages. Using culturally responsive teaching as her foundation, she developed a survey of teaching practices and received 134 responses from Florida instructors. She found that a five-factor solution best captured the results: Engendering Competence, Establishing Inclusion, Enhancing Meaning, Developing Attitude, and Perceived Importance. Additional frequency of the use of Culturally Responsive Teaching approaches is included.

I encourage you to read through these articles and the practitioner article by Elonge, which describes the program for working with inmates on understanding economics, and its application in starting a small business once they leave the institution. In addition, enjoy our Web Scan and the Resource Reviews. If there is something you would like to see in the journal, please feel free to contact me at [journal@coabe.org](mailto:journal@coabe.org).

Enjoy!

Jim Berger,  
Editor



# JOURNAL OF RESEARCH AND PRACTICE FOR ADULT LITERACY, SECONDARY, AND BASIC EDUCATION

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## MISSION STATEMENT

The Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education is published jointly three times a year by the Commission on Adult Basic Education and Western Kentucky University. The journal's mission is to provide a forum for sharing research, information, theory, commentary, and practical experiences that will improve the quality of services for adult basic education, literacy, and numeracy learners. These learners are found in publicly funded ABE, ESL, and GED programs; volunteer-based literacy programs; community-based literacy programs; family literacy programs; workplace literacy programs; correctional literacy programs; and many other places.

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## CONTRIBUTORS

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- Massachusetts Department of Elementary and Secondary Education to develop a state adult basic education technology plan
- Massachusetts Central SABES RSC to create professional development workshops and modules on integrating technology in the classroom
- McDonald's Corporation's distance education ESOL program for immigrant restaurant workers
- Health Care Learning Network, a distance education workplace basic skills and college preparation program for health care workers.

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## Literacy Skill Differences Between Adult Native English and Native Spanish Speakers

Julia Herman, Nicole Gilbert Cote, Lenore Reilly, and Katherine S. Binder  
Mt. Holyoke College

### ABSTRACT

The goal of this study was to compare the literacy skills of adult native English and native Spanish ABE speakers. Participants were 169 native English speakers and 124 native Spanish speakers recruited from five prior research projects. The results showed that the native Spanish speakers were less skilled on morphology and passage comprehension tasks but were equally skilled on the phonology and vocabulary tasks. Morphology, coupled with phonology, was a stronger predictor of vocabulary and comprehension abilities for the native Spanish speakers, which suggests that instruction focused on morphology is likely to have a greater impact on this group.

### INTRODUCTION

According to the U.S. Department of Education, approximately 40 million adults have limited literacy capabilities, meaning they do not have a high school diploma or equivalent (Lasater & Elliott, 2005). Thirty-three percent of these adults report that English is not their first language. The employment statistics for this group of low literate, nonnative English speakers are particularly troubling: 57% are not in the labor force or are unemployed. Adult Basic Education (ABE) programs offer hope to those

whose employment potential is limited by poor literacy skills.

Based on these statistics, it is not surprising that students enrolled in ABE programs come from diverse backgrounds with varying English proficiency. What is surprising, however, is that research on literacy skill acquisition has often neglected adult learners, with even less attention paid to adult nonnative English speakers' acquisition of English literacy skills. The aim of the current investigation is to compare the literacy skills of native English and native Spanish ABE speakers and propose targeted instruction for these distinct groups of learners. The literacy skills we were specifically interested in were phonological and morphological awareness, vocabulary, and how these skills relate to higher-level literacy skills.

### Phonological Awareness

Phonological awareness, the understanding that different sounds form words, is an essential component of literacy acquisition, and an important predictor of children's reading comprehension (Adams, 1990; National Reading Panel, 2000). The smallest units of sound within a language are called phonemes. While research on phonological awareness in adults is relatively limited, studies that have focused on

adults show a strong link between phonological ability and reading skill; adults who are less skilled readers also have limited phonological awareness (Pratt & Brady, 1988). In studies where children and adults are matched by reading grade level, children outperform adults on phoneme recognition (Thompkins & Binder, 2003) and other phonologically complex tasks such as non-word decoding, phoneme deletion and phoneme segmentation (Greenberg, Ehri & Perin, 1997). Phonological awareness is also a predictor of reading comprehension abilities in adults (Binder, Snyder, Ardoin, & Morris, 2011). Additionally, research has found that some adult learners can compensate for poor phonological skills by relying on other skills (e.g. spelling patterns and context) (Binder & Lee, 2012; Greenberg, Ehri & Perin, 2002).

While research has shed some light on phonological skill among the ABE population, there is still much we do not know about the large subset of nonnative English speakers enrolled in these programs. Davidson and Strucker's (2002) study, one of few to compare native and nonnative English speakers' literacy skills, found that performance on Word Attack, a decoding task, was nearly identical for the two groups. However, when the researchers conducted an error analysis of the decoding abilities of the two groups, they found that the nonnative English speakers made fewer real-word substitutions than the native English speakers. The researchers believe this is because the nonnative English speakers know the meanings of fewer English words. Additionally, those whose first language has a transparent phonology, meaning there is a one-to-one correspondence between letters and sounds, are using a skill that helped them acquire their native language but results in phonetically plausible

errors rather than real-word substitutions. Earlier research with Spanish-speaking children supports this cross-language transfer of phonological skill. Children who performed well on phonological awareness tasks in Spanish were more likely to be able to read English words and English-like pseudo-words in reading tasks than children with weaker phonological awareness (Durgunoglu, Nagy & Hancin-Bhatt, 1993). These studies suggest that phonological skill may be comparable for native and nonnative speakers of English, but the nonnative English speaker's native language, specifically whether it is alphabetic or not, may affect decoding skills differently.

### **Morphological Awareness**

Morphemes are the smallest units of meaning in words, and morphological awareness is the ability to reflect on and manipulate different morphemes to form more complex words (Carlisle, 1995). There are two main categories of morphologically complex words: inflected and derived. Inflected morphemes alter the tense or quantity of a word through the addition of suffixes while preserving the meaning of the root word. For example, adding *-ed* to the root *walk* changes the word's tense from present to past. Adding *-s* to the root *dog* changes the quantity. Derived morphemes typically alter a word's part of speech and/or meaning. For example, the word *quick* shifts from an adjective to an adverb with the addition of the morpheme *-ly*, making it *quickly*. Adding the prefix *un-* to the word *likely* makes it *unlikely*, which changes the meaning of the root to its opposite.

Because English is a morphophonemic language, many words are represented in writing according to the way they sound as well as their meanings, both phonological and morphological awareness are important contributors to

literacy acquisition. However, educators are typically more knowledgeable of phonemes than morphemes (Carlisle, 2003). Within the last decade, researchers have begun to focus more attention on morphological awareness and investigate its independent contribution to literacy skills. Research on children has found that morphological awareness is an important factor in single word reading among children of many ages, even after controlling for phonological awareness (e.g. Deacon & Kirby, 2004; Nagy, Berninger, Abbott, Vaughan & Vermeulen, 2003). Tighe and Binder's (2014) study of ABE adults also found that morphological awareness was a unique contributor to passage comprehension after controlling for phonological awareness. These and other investigations with children and adults suggest that morphological awareness plays an important role in contributing to reading skill separate from phonological awareness, though they are related.

Fewer studies have investigated the morphological skills of nonnative English speakers who are learning English (for a review of the literature on morphological awareness in children from a cross-linguistic perspective, please see Kuo & Anderson, 2006). One of the few studies to focus on Spanish-speaking children learning English followed a cohort from the fourth to fifth grade and found a significant and moderately large relationship between derivational morphological awareness and reading comprehension, and this relationship increased between the fourth and fifth grades (Kieffer & Lesaux, 2008). Despite the fact that Spanish is a phonologically transparent language, Ramirez, Chen, Geva and Kiefer (2010) studied a sample of Spanish-speaking children learning English and found that morphological awareness explained unique variance in word

reading in both Spanish and English. As with phonological awareness, there are also cross-language effects of morphological awareness on word reading from Spanish to English (Ramirez et al., 2010). Additionally, one study that compared third through fifth grade monolingual students and Spanish-speaking English language learners saw fluent English students outperforming Spanish-English language minority students on a morphology test (Goodwin et al., 2011). While this body of literature is growing, researchers are beginning to demonstrate the important links between morphology and higher-level literacy skills among nonnative English-speaking samples.

While some research has compared the reading skills of native and nonnative English-speaking low literate adults (e.g. MacArthur, Konold, Glutting & Alamprese, 2012), to the best of our knowledge, no studies have directly compared the morphological skills of native English and native Spanish speakers. Tighe and Binder's (2014) study included both native English speakers and English speakers of other languages, but limited power prevented them from further dividing their sample into these two groups, though their sample was representative of the U.S. adult ABE population (National Research Council, 2012). One goal of the current study was to compare morphological awareness and other important literacy skills between native English- and native Spanish-speaking adults.

### **Vocabulary Skill**

School-aged children learn an estimated 6,000 root word meanings by the end of their second grade year and about 10,000 by the end of their sixth grade year (e.g. Anglin, 1993; Biemiller, 2005). When students encounter unfamiliar words, having an awareness of word structure can assist in understanding these new word meanings. Anglin

(1993) calls this “morphological problem solving,” a skill that can increase both the size of one’s vocabulary and the rate of its growth. Vocabulary knowledge is an important component of literacy development (National Reading Panel, 2000) and numerous studies suggest that vocabulary skill is a major factor of text knowledge and reading comprehension in children (e.g. Nagy & Herman, 1987, Nelson & Stage, 2007, Ouellette, 2006; Verhoeven & Van Leeuwe, 2008), including children who are Spanish-English bilinguals (i.e., Proctor, Carlo, August & Snow, 2005).

Research specific to English language learners is limited (see August, Carlo, Dressler & Snow, 2005, for a review), but typically shows that nonnative English speaking children score well below their native English-speaking peers on receptive vocabulary (e.g. Umbel, Pearson, Fernandez & Oller, 1992) and vocabulary depth (e.g. Verhallen & Schoonen, 1993). Because nonnative English-speaking children know fewer English vocabulary words, and know less about the meaning of those words compared to monolingual peers, reading comprehension is likely to suffer (Carver, 1994). In fact, national reading test data of fourth-graders shows that children who lived in homes where a language other than English was always used scored 22-29 points lower than monolingual children (Developmental Associates, 2003).

One might expect low literate adult learners to have larger vocabularies than children because they have more experience with language, but recent research does not support this concept. Pae, Greenberg and Williams (2012) compared adult struggling readers with third-grade children using the Peabody Picture Vocabulary Test-IIIB, and found that the two groups had comparable correct raw scores. However, it should be noted that the adults performed poorly compared to

the PPVT-IIIB normative group and scored a mean age equivalency score of 11.40 years. After looking closer at the data, adults showed poorer performance compared to the children on the lower (i.e., easier) items while the children showed poorer performance compared to the adults on the higher (i.e., more difficult) items. Since the items are presented in sequential difficulty, these results were surprising. The researchers postulate that these differences could result from differential environmental exposure. For example, children scored better than adults on words like *archaeologist* and *amphibian*, words common to school texts. Pae et al. (2012) did not report the native languages of their sample and to the best of our knowledge no previous studies have directly compared the vocabulary skills of native and nonnative English speakers. Consequently, another aim of the current investigation was to compare the vocabulary skills of native English and native Spanish-speaking ABE learners.

### **Current Study**

There were two main goals of this study. First, we conducted a quantitative analysis of the literacy skill differences between native English and native Spanish speakers enrolled in ABE programs. The specific skills we were interested in were phonological awareness, morphological awareness, receptive vocabulary, and passage comprehension. Research has typically limited studies of Spanish speaker’s literacy achievement to school-aged learners. Given the unique needs of adult learners, we wanted to understand how adult Spanish speakers compared to their native English-speaking peers.

The second aim was to propose how skill differences could be addressed in the classroom setting. Research-based papers on literacy

acquisition often fail to provide concrete classroom applications. This study attempted to bridge the gap between research and practical application by providing specific teaching recommendations.

The present study addressed four research questions:

1. Are there skill differences between native English and native Spanish speakers?
2. Are literacy skills correlated differently for the native English speakers and the native Spanish speakers?
3. What variables predict higher-level reading abilities?
4. How can classroom instruction best support the needs of different ABE populations?

Because Spanish is a phonologically transparent language, and previous research shows cross-language transfer of phonological skill from Spanish to English in children (Durgunoglu, et al., 1993), we hypothesized that, of all the literacy skills we tested for, phonological awareness might be better for the native Spanish-speaking adults compared to their native English-speaking peers. Next, we hypothesized that native English speakers would outperform the native Spanish speakers on the morphology tasks and that native Spanish speakers would also have a weaker receptive vocabulary than native English speakers as is shown in previous research with children (Umbel et al., 1992). Also, we predicted that performance on the passage comprehension task would be weaker for the native Spanish speakers.

## METHOD

### Participants

The study included 293 adult learners from Adult Basic Education (ABE) programs in western Massachusetts. Participants were recruited between 2009 and the spring of 2013 for five different research projects. In order to be selected for this study, participants needed to be either native English speakers or adult learners whose native language was Spanish. We limited our nonnative English speaker group to Spanish speakers because very few adults were speakers of a language other than Spanish. A total of 169 native English speakers and 124 native Spanish speakers were included in this study. All participants received monetary compensation for their time.

Participants in the native English speaker group included 52 females and 30 males (we did not have information about gender for 51% of the participants in this group). The racial and ethnic breakdown was as follows: Black/African American 46%, White 23%, Hispanic 20%, Multiracial 8%, Asian 2%, Native American < 1%. The mean age for the native English speakers was 32 ( $SD = 14$ , range 17 to 69).

Participants in the native Spanish speaker group included 39 females and 19 males (we did not have information about gender for 53% of the participants in this group). Eighty-six percent of the group was Hispanic, 6% Black/African American, 3% White, 2% Asian and 2% Multiracial. The mean age for the native Spanish speakers was 30 ( $SD = 10$ , range 16 to 58). An independent samples t-test determined that there was no statistically significant difference in age between the native Spanish and native English speakers,  $t(281.97) = 1.11, p > .05^1$ .

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<sup>1</sup>The homogeneity of variances assumption was not met and therefore we are reporting the corrected  $t$ .

A limited amount of demographic information was available for this study due to differences in data collection procedures between the five research projects. However, the demographic information for these participants should be similar to that reported in Binder et al. (2011).

## MATERIALS

### Phonological Awareness Test

All of the studies included Word Attack, a subtest of the Woodcock-Johnson III achievement test (Woodcock, McGrew & Mather, 2001), to assess phonological decoding skill. Specifically, word attack assesses an individual's ability to decode nonsense words (e.g. *nat* and *ib*). Participants read the nonsense words of increasing difficulty aloud. Testing is discontinued after a participant pronounces six total words incorrectly. Their score is the total number of correctly pronounced words.

### Morphological Awareness Tests

Three tests were used to assess morphological skill and were included in four of the five studies. These tests were the Test of Morphological Structure: Derivation, the Test of Morphological Structure: Production and the Derivational Suffix Choice Test of Pseudowords. These tasks were chosen because they are consistently found in the morphological literature and correlate well with each other.

*The Test of Morphological Structure: Derivation* was adapted from Carlisle (2000). During this task, an individual is asked to transform a base word into a derived word; for example, when the experimenter reads, "Farm. My uncle is a \_\_\_\_\_ (blank)," the participant is expected to fill in the blank with the word *farmer*. The entire test is administered orally and is discontinued after a participant answers six items incorrectly. As previously mentioned, four of the five studies included this task; however, the

total number of items administered varied from 30 to 35. Therefore, for this study, a proportion of correct items was computed for each participant's final score on this test.

*The Test of Morphological Structure: Production* was also adapted from Carlisle (2000) and assesses an individual's ability to decompose words; for example, when the experimenter reads, "Driver. Children are too young to \_\_\_\_\_ (blank)," the participant is expected to fill in the blank with the word *drive*. As with the derivation test described above, this test is administered orally and discontinued after an individual gives six incorrect answers. The total number of items administered varied from 30 to 35 for each of the four studies, so a proportion of correct items was computed for each participant's final score on this test as well.

The final test of morphological skill was the Derivational Suffix Choice Test of Pseudowords (Mahony, 1994; Singson, Mahony & Mann, 2000). This test assesses an individual's ability to manipulate morphemes using non-words. The inclusion of non-words is important because participants are not limited by their vocabulary, but instead are required to use syntactic and derivational knowledge. At the start of this test, the experimenter gives the participant a paper that displays sentences, each with a missing word. The sentences are followed by four answer choices (all non-words). The experimenter reads the sentence and answer choices aloud and then asks the participant to select the word that best fits the sentence. For example, "Our teacher taught us to \_\_\_\_\_ long words." The answer choices include *jittling, jittles, jittled, and jittle*. The correct response, *jittle*, would earn the participant one point. The test is discontinued after the participant makes six errors. Three of the four studies administered

the same version of this test ( $n = 161$ ), while the fourth administered a version where 50% of the items were the same as the other studies. Because the total number of items administered varied on this task for that one study, a proportion of correct items was computed for each participant's final score on this test.

Two sets of correlations were computed to compare the relationships between the three morphological awareness tests: one included participants in the three studies that used the same version of the Derivational Suffix Choice Test of Pseudowords and the other was limited to the participants in the study that used the different version. Although the two versions of this test were distinct, the pattern of relationships was the same. The Derivational Suffix Choice Test was positively and significantly correlated with the other two morphological awareness tests.<sup>2</sup>

### Vocabulary

Three of the studies included the Peabody Picture Vocabulary Test-Third Edition (PPVT, Dunn & Dunn, 1997) to measure a participant's receptive vocabulary. For this test, participants are shown a series of pages, each with four pictures on it. The experimenter reads a word and the participant must point to the picture that best represents that word. Testing continues until the participant makes eight or more errors within a set. Each set consists of twelve vocabulary words. Scores are calculated by subtracting the total number of errors (up until the stopping point) from the number of the last item in the last set they completed.

### Passage Comprehension

Three of the studies included the Passage Comprehension subtest of the Woodcock-Johnson III achievement test (Woodcock et al., 2001), to assess the individual's ability to rely on contextual clues to identify a missing word in a sentence. For example, "The drums were pounding in the distance. We could \_\_\_\_\_ them." The participant is expected to identify *hear* as the missing word. For this task the sentence is displayed on a page and the participant is expected to respond orally. This test is discontinued after a total of six errors.

## RESULTS

### Skill Differences

One of our primary goals was to compare the literacy skills of the native English and native Spanish speakers. We ran several independent-samples *t*-tests and, contrary to our hypotheses, found no difference in performance on the decoding task ( $p = .98$ ) and the vocabulary task ( $p = .46$ ). As hypothesized, there were significant differences between the groups on all three morphology tests. On the Derivation Test, the native English speakers ( $M = 64.90$ ,  $SD = 26.52$ ) scored higher than the native Spanish speakers ( $M = 44.12$ ,  $SD = 27.13$ ),  $t(188) = 5.14$ ,  $p < .001$ . The native English speakers ( $M = 87.15$ ,  $SD = 17.72$ ) also did significantly better than the native Spanish speakers ( $M = 76.13$ ,  $SD = 25.34$ ) on the Production Test,  $t(121.03) = 3.32$ ,  $p < .01$ <sup>3</sup>. Performance on the Suffix Choice Test yielded similar results: the native English speakers ( $M = 63.13$ ,  $SD = 23.96$ ) outperformed the native Spanish speakers ( $M = 49.12$ ,  $SD = 24.00$ ),  $t(191) = 3.94$ ,  $p < .001$ .

<sup>2</sup>For the single study, the correlations between the Suffix Choice Test and the Derivation and Production Tests were  $r = 0.37$  ( $p < 0.05$ ) and  $r = 0.56$  ( $p < 0.01$ ), respectively. For the three studies that used the same version of the Suffix Choice Test, the correlations were  $r = 0.60$  and  $r = 0.55$  respectively ( $p < 0.01$  for both).

<sup>3</sup>The homogeneity of variances assumption was not met and therefore we are reporting the corrected *t*.

**Table 1—Correlation Coefficients between Morphology, Phonology, Passage Comprehension and Receptive Vocabulary for Native English Speakers (above the diagonal) and Native Spanish Speakers (below the diagonal)**

Task	1	2	3	4	5	6
Production		.69**	.51**	.46**	.30**	.14
Derivation	.62**		.52**	.51**	.42**	.27*
Suffix Choice	.58**	.65**		.56**	.48**	.28**
Word Attack	.52**	.56**	.52**		.60**	.19
Passage Comprehension	.66**	.78**	.72**	.53**		.34*
Vocabulary	.24	.44**	.35*	.17	.65**	

Note: \* $p < .05$ , \*\* $p < .01$ . Morphological Awareness assessments: 1. Production, 2. Derivation, 3. Suffix Choice. Phoneme decoding efficiency: 4. Word Attack. Reading Skill assessments: 5. Passage Comprehension, Receptive Vocabulary: 6. Peabody Picture Vocabulary Test.

Also, in addition to the morphology tasks, the native English speakers ( $M = 29.98$ ,  $SD = 5.59$ ) scored significantly higher than the native Spanish speakers ( $M = 25.92$ ,  $SD = 6.37$ ) on the Passage Comprehension task,  $t(194.29) = 4.97$ ,  $p < .001^4$ .

## Correlations

We examined the patterns of correlations among the literacy skill assessments separately for the native English and native Spanish speakers. Based on past research, we expected that the morphology tasks would be highly correlated for both groups. As seen in Tighe and Binder (2014), morphological awareness was significantly correlated to all measures of phonological awareness, decoding and reading comprehension for adults enrolled in ABE courses. Also, we expected to get positive and moderate correlations overall, but did not have specific predictions about how the relationships might differ between the two groups.

For the native English speakers, all correlations between the three morphology tasks were positive and statistically significant, ranging from .51 to .70. Similarly, the morphology task correlations for the native Spanish speakers were positive and statistically significant and ranged from .58 to .65. (see Table 1 for these statistics).

When we compared the correlations between the morphology tasks and the other literacy tasks, differences between the native English and native Spanish speakers emerged. For the native English speakers, the correlations between the three morphology tasks and the Passage Comprehension task were positive and significant and ranged from .30 (for the Production task) to .48 (for the Suffix Choice task). The relationships between the morphology tasks and the Passage Comprehension task were also significant for the native Spanish speakers but were much stronger, ranging from .66 (for the production task) to .78

<sup>4</sup>The homogeneity of variances assumption was not met and therefore we are reporting the corrected  $t$ .

**Table 2—Regression Analysis for Vocabulary Ability and Reading Comprehension**

Tasks	$\beta$	$t$
Vocabulary		
Word Attack	-.35	-1.85
Production	.29	1.50
Derivation	.46	2.09*
Suffix Choice	-.11	-.58
Language Group	.16	2.08*
Word Attack X Group	.31	1.58
Production X Group	-.06	-.31
Derivation X Group	-.14	-.66
Suffix X Group	-.04	-.19
Reading Comprehension		
Word Attack	.04	.23
Production	.24	1.26
Derivation	.41	2.31*
Suffix Choice	.17	1.54
Language Group	.03	.35
Word Attack X Group	.09	.57
Production X Group	.05	.31
Derivation X Group	-.14	-.85
Suffix X Group	-.07	-.63

Note: \* $p < .05$

(for the derivation task).

Because the two groups had very different correlations, we used the Fisher's  $Z$  transformation to compare them and found that all the correlations were indeed significantly different. The relationships between the morphology variables and Passage Comprehension were significantly stronger for the native Spanish speakers than the native English speakers.

### Regressions

We conducted regression analyses to decipher which variables predicted higher-level skills and reading abilities. For the first analysis,

vocabulary skill was the outcome variable. Passage comprehension was the outcome variable for the second analysis. In both analyses, the phonology task, the three morphology tasks, language group, and the interaction between language group and the other variables were the predictor variables. For vocabulary abilities, the  $R^2$  (.17) was significant,  $F(9, 125) = 2.76, p = .006$ . The derived morphology task and language group were unique significant predictors. (See Table 2 for *Beta* weights). When passage comprehension was the outcome variable, the  $R^2$  (.44) was also significant,  $F(9, 112) = 11.39, p < .001$ . The derived morphology task was the only unique predictor in this model (see Table 2).

## DISCUSSION

The purpose of this study was to combine information from several data sets to examine the literacy skills of native English and native Spanish ABE learners and explore how any differences could be addressed within the instructional setting. We first wanted to compare these two groups because past research has typically limited studies of Spanish speaker's literacy skill acquisition to school-aged learners. The differences we found were striking. When compared to their native English-speaking peers, native Spanish-speaking ABE learners were significantly less skilled on the morphology and passage comprehension tasks. One may attribute this to the fact that the native Spanish speakers were tested in English, but if this did put them at a testing disadvantage, we would expect to see poorer performance on the other tasks as well and this was not the case; both groups were equally skilled on the phonology and vocabulary tasks. Prior studies of adult second language learners indicate they are less sensitive to morphological structure and rely more on lexical storage (for a review of this literature, see Clahsen, Felser, Neubauer, Sato & Silva, 2010), which is one potential explanation for the difference in morphological awareness between the groups.

An additional goal of this study was to investigate how reading skills were correlated for the native English and native Spanish speakers. Here again group differences emerged. The relationships between each of the morphology tasks and the Passage Comprehension task were significantly stronger for the native Spanish speakers than the native English speakers. Overall, those who did well on the morphology tasks also did well on our measure of comprehension, but this connection was more pronounced for the native Spanish-speaking group. Researchers

propose that nonnative speakers are more likely to process morphologically complex English words as whole units rather than individual parts or pieces (Ullman, 2005); therefore, as morphological skills improve, one would expect comprehension and vocabulary skills to improve as well.

Finally, we tested the morphology and phonology measures as predictors of vocabulary and comprehension skill. We discovered that morphological awareness is a strong predictor of vocabulary and passage comprehension abilities, but more of the variance is accounted for with the native Spanish-speaking group than the native English speakers (this was found when each regression was run on each group, not in the combined analysis). Previous research has begun to describe the importance of morphological awareness in reading, both Spanish and English, for Spanish-speaking English language learners (e.g. Kieffer & Lesaux, 2007; Ramirez et. al, 2010), but to the best of our knowledge this is the first study comparing the relationship between morphological awareness and other literacy skills for these specific groups of adult learners.

Overall, these findings suggest that Spanish-speakers in ABE programs have a limited knowledge of morphology, which is related to their poor performance on the comprehension task, and therefore, they would benefit from classroom instruction specific to morphology. Additionally, since morphology (coupled with phonology) is more strongly correlated with vocabulary and comprehension abilities for the native Spanish speakers, the impact of such focused instruction is likely to be greater for them and influence higher-level cognitive tasks. A recent study assessing the effects of a decoding curriculum on the development of reading skills supports this hypothesis. Nonnative English speakers showed

greater reading skill gains than native speakers on 7 of the 11 reading measures, which suggests that helping nonnative speakers learn the patterns of English vocabulary bolsters their word recognition (Alamprese, MacArthur, Price & Knight, 2011).

### **Program Implications**

For all ABE learners, direct instruction in morphological awareness would be beneficial. However, it's important to note that the trajectory for acquiring this information may be different for adults than it is for children. For example, children acquire knowledge concerning inflected morphemes (affixes that change the number or tense of a word) very early in development (e.g., Anglin, 1993; Carlisle, 2003). However, some research with adults has demonstrated that ABE learners often leave these inflected endings off when spelling these words (e.g., Worthy & Viise, 1996). In our lab, we have noticed that ABE learners often leave off word endings during oral reading behavior as well. Thus, explicit instruction in these endings would be beneficial to all ABE learners.

The best ordering of words within a morphological intervention for native Spanish speakers has not been addressed specifically in the research, but we do know that morphological awareness becomes increasingly important in decoding during the elementary and middle school years. So lessons on morphemes should not be for beginning adult readers, but rather be targeted to those with a higher English reading grade equivalent. When introducing morphemes, Moats (2011) recommends starting with transparent or obvious morphemes with stable meanings and spellings (e.g. *ex* means out of and *tract* means to pull, so *extract* means to pull out of), focusing on the more common morphemes (e.g. *ject*, which

is in words like subject, project, interject), and sticking with words where the addition of the morpheme or morphemes maintains the root word spelling and pronunciation (e.g. unbreakable, with the prefix *un* and the suffix *able*), before moving on to more complicated morphemes. Also, research suggests that ABE instructors should not shy away from using linguistic terms like morpheme, suffix and prefix because adult learners are interested in learning about how the English language works (Alamprese et al., 2011).

Adult learners also benefit from the use of real-life literacy activities and materials. Purcell-Gates, Degener, Jacobson, and Soler's (2002) analysis of literacy outcomes for ABE students showed a greater change in daily literacy practices for learners who were taught using real life materials than those who were taught using non-authentic texts and writing activities. Therefore, nonnative adult learners who are studying for U.S. Citizenship might benefit from an analysis of key vocabulary that appears with morphological variations within study guides. The word *nation*, and its derivatives *national*, *nationalistic*, and *nationalism* would support both contextualized needs and morphological awareness aimed at developing vocabulary depth.

### **Study Limitations**

While the current study included a large number of participants from multiple programs, both of which we consider strengths, there were some challenges that limited our analyses. Because not all data collection procedures across the five studies were exact, we were missing a significant amount of demographic and additional task information. Also, we did not have enough information on each native Spanish speaker's reading proficiency in Spanish, which prevented us from doing a more

detailed analysis in which Spanish literacy skill was a factor. Because past research has shown that literacy in one's native language plays a significant role in contributing to second language acquisition (Goldenberg, 2010), future research should look at this variable more closely.

Additionally, while we can contribute to the literature on the differences between native English and native Spanish-speaking adult learners, we cannot explain why such differences exist or assume these differences are similar for native speakers of languages other than Spanish. We can only speculate why the relationships between morphology and other variables is stronger for the native Spanish speakers compared to the native English speakers. Research on adult literacy would benefit from studies that attempt to answer these questions.

### **CONCLUSION**

Adult Basic Education programs have the challenging task of instructing a diverse group of learners. Time is limited, attrition rates are high, engaging and age-appropriate materials are often difficult to obtain, and classes are comprised of learners with a wide range of needs and abilities. In order for instructors to optimize their time in

the classroom, lessons on morphology should follow the above recommendations and avoid a one-size-fits-all approach.

Despite an increased interest in morphological awareness in the adult basic education population, there is still much we do not know about the best ways to introduce morphological awareness for native and nonnative English speakers. The present study takes a first step in understanding the literacy skill differences of native English and native Spanish ABE learners, but future studies need to explore possible explanations for such differences.

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## Post-GED-Credential Employment Experiences of Adults with Special Needs

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### INTRODUCTION AND BACKGROUND

When transitioning to employment, students with disabilities who do not complete high school face multiple challenges; beyond which those who later complete a GED® credential face, especially in times of economic downturn and job instability. They cope with sometimes overwhelming struggles from disabling conditions. Thus GED passers with disabilities or other special needs likely need transitional support, perhaps even more than typical GED passers do.

This paper considers a subset of interviewee data from seven states and DC through the *Perceptions and Pathways* project of American Council on Education and GED® Testing Service in 2011. This study constituted the first nationwide follow-up study of GED credential recipients conducted to explore major questions on adult transitions. *Perceptions and Pathways* resulted from research recommendations made after the quantitative study of two national cohorts of GED test-takers who transitioned to postsecondary education (Zhang, Guison-Dowdy, Patterson, & Song, 2011). *Perceptions and Pathways* interviewees were selected so that their characteristics would reflect the population of U.S. GED credential recipients in 2006, approximately

five years after GED testing.

In a rich dataset of qualitative interviews, researchers observed that transitions involved not only education, but also employment, and that nearly one-fourth of interviewees described themselves as having special needs. These observations inspired the analysis leading to this paper.

### Transitional Challenges for Adults with Special Needs

Approximately 40% of students who do not finish high school have special needs (Higgins, Patterson, Bozman, & Katz, 2010); more young adults with learning disabilities may leave high school without graduating than stay (Payne, 2010). Many, but not all, students with special needs have learning or sensory disabilities. Disabilities are typically defined as physical or mental impairments (USDOE, 2013). Learning disabilities (LD), defined as a “broad array of disorders in information processing” (Corley & Taymans, 2002, p. 46), represent certain types of disability that affect learning basic skills. “Special needs” incorporates disabilities, and more broadly includes people with health conditions facing life barriers without meeting the narrower definition of disability.

Special needs remain with adults when they enter adult education (AE) programs. The national percentage of adults with disabilities in AE programs is not collected consistently (National Research Council, 2012); yet, adults with special learning needs may be overrepresented (Corley & Taymans, 2002), perhaps comprising at least half of adult learners (Mellard, Patterson, & Prewett, 2007). Sixty-two percent of programs reportedly serve adults with sensory disabilities and 80% report serving adults with LD (Tamassia, Lennon, Yamamoto, & Kirsch, 2007). Indeed, a recent study of 4,500 adult learners in 13 states indicated 90% visual stress syndrome, 48% visual function problems, 41% hearing loss, as well as 78% attention difficulties and 40% diagnosed LD (KET, 2008).

What these figures tell us is many, if not the majority, of adult learners in AE programs may have special needs. Whether their special needs have been identified in childhood is less relevant than the actual presence of special needs. Are adult educators fully prepared to recognize the signs of special needs, to refer adult learners for appropriate screenings, and to help them learn the basics they came to learn (KET, 2008)? As adult learners master basic skills, AE programs are charged with preparing learners with special needs for the continuing challenges they face after the AE program as well.

What challenges do adults with disabilities face? Research reports have consistently found that many adults with disabilities not completing high school lacked confidence, motivation, or persistence to continue education or get a job (Duquette & Fullarton, 2009; Payne, 2010; Roffman, 2000). Additionally, working-age adults with disabilities are less likely to be employed or more apt to be underemployed; consequently,

they tend to earn less than their peers without disabilities (Corley & Taymans, 2002; Duquette & Fullarton, 2009; Hsu & George-Ezzelle, 2008; Mellard & Patterson, 2008). Corley and Taymans (2002) highlighted underemployment of adults with LD in their review explaining “they also worked substantially fewer weeks per year, for lower wages, and in lower-status jobs” (pp. 50-51). Adults may resist disclosing a disability to an employer for accommodations; they may also struggle with on-the-job training (Duquette & Fullarton, 2009; Roffman, 2000).

Furthermore, Payne (2010) points out that adults with LD rarely have access in GED® preparation programs to transition planning, an avenue to employment. She argues that adult learners with LD who miss transition planning may not gain adequate self-advocacy skills, which could in turn affect living and working independently.

### **Skills and Characteristics of Adults with Special Needs**

The literature on adults with special needs offers limited information on their skills and characteristics. Adults with disabilities, who obtain a GED credential, appear to have literacy skills (measured via National Assessment of Adult Literacy assessments) comparable to high school graduates with disabilities (Hsu & George-Ezzelle, 2008). Among GED candidates with disabilities, 41% of adults with LD and 59% of adults with physical disabilities passed the GED test, close to the national pass rate of 60% (Lohman, Lyons, & Dunham, 2008).

Payne’s (2010) study carefully described characteristics of 10 Washington adults with LD who transitioned to college. Seven interviewees participated in AE; three chose to go directly to GED testing. Payne noted a lack of targeted

interviewing and transition services in the AE programs the seven interviewees attended. Four interviewees were employed (Payne, 2010).

### **Supports and Attributes of Transitioning Adults with Special Needs**

What supports and attributes do adults with special needs have who transition successfully to jobs? A potential theory that may provide a framework for this question is resilience (Quigley, Patterson, & Zhang, 2011), a greater chance for success in “life accomplishments despite environmental adversities brought about by early traits, conditions, and experiences” (Wang, Haertel, & Walberg, 1997, p. 46). Numerous life events and circumstances, as well as an individual’s personal strengths and weaknesses, may affect psychosocial development from childhood into adulthood (Ou & Reynolds, 2008). Factors strengthening resilience include social and academic competence, problem-solving skills, and autonomy. Other factors are the adult’s goals, self-efficacy, locus of control, and sense of purpose (Waxman, Gray, & Pardron, 2003). While these authors did not address adults with special needs specifically, the role of resilience in their transitions is worth investigating.

Resilience implies action and self-advocacy on the part of the adult with special needs. Successful adults with disabilities from the studies Corley and Taymans (2002) reviewed not only exhibited the ability to plan, but the capacity to act on their plans. They demonstrated an ability to learn from experiences and capitalize on strengths. Roffman (2000) found that adults with LD, who experienced job success, showed self-advocacy as well as tenacity.

Response to the support of others is another component of resilience. Corley and Taymans (2002) reviewed several studies that pointed to

the emotional or financial support of significant others, family, and mentors as contributors to adult success. Personal support from “intimate or work relationships” (p. 51) boosted resilience.

### **Purpose and Research Questions**

The paper’s purpose is to describe the employment experiences of adults with a GED credential and with special needs, in terms of challenges, supports, attributes, and characteristics.

From the literature review, four research questions were developed for this paper. These questions were developed to further investigate experiences of adults with special needs and with GED® credentials in the workplace. These questions seek to add more information about the attributes and supports for adults with special needs as they transition.

1. What are the demographic characteristics and educational background of adults with special needs?
2. What challenges do adults with special needs face as they consider their post-GED-credential future?
3. Were they employed when interviewed? How did their special needs reportedly affect their job, or their prospects for a job? Who encouraged them during their employment experiences?
4. What attributes of resilience on the job were evident among adults with special needs?

## **DATA AND METHODS**

### **Research Sample, Locations, and Participants**

After piloting in DC and West Virginia, researchers selected six additional states to represent diverse

geographic regions, primary AE program type, and statewide postsecondary enrollment. Interviewees from those six states were sampled from GED® Testing Service's database via a multi-stage sampling process including stratification to ensure an even distribution of age (16-24 years vs. 25 years and older), gender (female and male), and ethnicity (African-American, Hispanic, and white). Adults in each category were then selected randomly; local GED® testing centers recruited interviewees from the randomly selected list. Seven state agencies for GED testing and 13 testing centers participated.

In spring 2011, researchers visited six states to conduct one-on-one interviews: California, Connecticut, Kansas, North Carolina, Texas, and Wyoming. In addition to the author of this paper, the interviewer team consisted of Canadian researchers Sue Follinsbee and Allan Quigley, and former GED Testing Service researchers Wei Song and Jizhi Zhang. Open-ended interviews lasted 1-2 hours, and participants were offered a \$40 giftcard as an incentive for interviewing.

The 85 interviewees participating ranged in age from 21 to 79 years when interviewed. Interviewees included 52 females and 33 males; 62 interviewees were native speakers of English and 23 were immigrants from eight countries. Approximately one fourth each were African American or Hispanic, and half were white. The median total GED test score for the full sample was 2,570. Further detail on the sample and general participant characteristics is available in Quigley, Patterson, and Zhang (2011). Of the 85 adults interviewed, 20 adult learners indicated having a health, learning, or other special need.

### **Context of Interviews and Coding**

To maximize interview findings, *Perceptions and*

*Pathways* researchers approached interviews as an open conversation with follow-up questions rather than following a structured interview protocol with standardized questions. Each interview began with the interviewer showing a sample "life map" (McPherson, Wang, Hsu, & Tsuei, 2007). The interviewer then asked the interviewee to draw a one-page life map of educational events and situations leading the interviewee to take the GED® test, and either go on to postsecondary education or choose not to go. The life map started the story of the interviewee's education and framed the interview conversation. Some life maps consisted of boxes and arrows in chronological order; others included non-sequential circles or phrases representing life events of importance to the interviewee. Interviewers followed up on life map drawings with clarifying questions to ensure the interviewer had a clear understanding of interviewee pathways taken since secondary school and perceptions that evolved.

While drawing the life map, interviewees were not initially asked about employment or special needs; rather, if the interviewee disclosed his or her employment or disability status to the interviewer voluntarily during the conversation. The interviewee had the opportunity to continue speaking about the status if desired. Interviewee statuses were identified during the subsequent coding process.

Recorded interviews were transcribed and reviewed for accuracy. Researchers established a framework for coding qualitative data inductively (Onwuegbuzie & Collins, 2011), resulting in 71 themes revealed from interviews. To enhance trustworthiness of coding, pairs of researchers coded the data manually. These data and codes were then entered in NVivo 9 software, and the pair analyzed the data independently. Coders were

asked to reach full agreement in order to further ensure inter-researcher reliability in coding for each transcript. Any discrepancies between coders were resolved by a third researcher.

## Research Approach

As noted earlier, the purpose of this paper is to qualitatively describe employment experiences of transitioning adults with a GED® credential and with special needs, and do so in terms of four criteria: characteristics, challenges, supports, and attributes. Using qualitative content analysis (Mayring, 2009), initial analysis categories were created following coding, with successively higher ordered categories ultimately identifying abstract themes. A recent article on the experiences of adult learners in AE programs (Zacharakis, Steichen, Diaz de Sabates, & Glass, 2011) thoughtfully explained the value of “recursive strategies” (p. 86) to refine traditional content analysis. An iterative process guides the analyst from initial categorization through to the final abstract theme as inductively as possible.

## RESULTS

Four research questions were presented earlier in this paper and are addressed in the results sections that follow. The research questions are:

1. What are the demographic characteristics and educational background of adults with special needs?
2. What challenges do adults with special needs face as they consider their post-GED-credential future?
3. Were they employed when interviewed? How did their special needs reportedly affect their job, or their prospects for a job?

4. Who encouraged them during their employment experiences? What attributes of resilience on the job were evident among adults with special needs?

## Demographic Characteristics and Educational Experiences

The first research question was concerned with interviewee demographics and educational background. The 20 interviewees with special needs reflect diverse backgrounds, geographic locations, and educational experiences. Interviewees ranged in age from 22 to 56 years when interviewed in 2011. All selected states except Kansas were represented; one each came from California and Connecticut, nine from North Carolina, two from Texas, one from DC, three from West Virginia, and three from Wyoming. Eleven were women and nine were men. Six were African American, one was Hispanic, and 13 were white. Eighteen were native speakers of English.

The 20 interviewees voluntarily disclosed the following special needs: physical disabilities, such as vision impairments and disabilities resulting from injuries or accidents; learning disabilities, such as dyslexia, attention disorder, and memory impairment; chronic health conditions, including lupus, cancer, migraines, and asthma. Five interviewees reported more than one disability or special need.

Educationally most interviewees went to high school and had some exposure to college, with eight graduating from postsecondary programs. On average interviewees completed 9th grade\*. Nineteen dropped out of high school; four were homeschooled\*. Nine were employed when interviewed, and three were employed during their high school years.

Many indicators of interviewees' educational experiences were collected at the time of GED® testing. The most frequently reported reason (from five interviewees) for not finishing high school was "trouble with math"; also commonly reported were poor grades, poor test scores, emotional problems, being absent too much, or not enough money for school\*. Six took the GED® test for a better job\*. Nine had learned about GED testing from a family member or friend, and 14 studied before GED testing. Total GED test scores\* ranged from 2,260 to 3,560 (median = 2,660).

## Challenges

Challenges facing adults with special needs in employment settings inform the second research question. Like other GED® passers, those with special needs may grapple with balancing work and family needs, with securing a job in a tough economy, and with transportation to work. Most interviewees with special needs described their choices about employment positively or neutrally, despite commonly having experiences that could overwhelm an adult without special needs. Challenges they dealt with were perceived forced choices in employment, responses to the effects of disabilities, and inter-generational caregiving despite their own health concerns.

In some instances, circumstances forced an interviewee to take a job rather than attend college; sometimes interviewees with special needs could do neither. A young male interviewee related a difficult choice he made while caring for his seriously ill father:

"My dad ended up getting a disease where his immune system attacked his nerv[ous] system. So I returned home to help out with the house...On my winter break, I was

asked to be promoted to assistant manager at the same [fast-food restaurant], and I took it. I took that, pushing off college."

This young man perceived needing to work rather than continue education; because of his special needs as well as his father's, he felt obligated to remain in the fast-food industry.

Some adults with special needs experienced disabling conditions that they felt barred them from work or college. Two middle-aged male interviewees were challenged with vision impairments that dramatically affected their lives. One stated:

"If I wanted something, I could study and learn it, but since I was colorblind, I never really thought I could get any further in life than this. Yes, that [being color blind] stopped me from all kinds of... lots of money, lots of good jobs."

The other described how a degenerating vision impairment sidelined him from the construction trade after more than three decades:

"I was born with just one eye. I was born blind in my left eye. So, I've just got one eye to see with...[From] '72 till 2006 [I worked construction]. That's when my vision started going bad. I guess I can still drive. But I can't see enough to work. There's a big difference, especially in construction because it's a dangerous job."

Both men described a direct connection between their visual impairments and the perception that they could not work.

Not surprisingly, the challenge most often faced

is dealing with the effects of illness or a disabling condition. These effects frequently include chronic pain and inability to drive. A female interviewee described how she needed to overcome the painful effects of long-term depression for herself and her children:

“I have [had] depression for years. For years, I couldn’t even wake up. I couldn’t even wake up for my child[ren] because I had to feed them, take them to school, their activities after school. ‘Oh my God, I have to wake up!’...”

Like this woman and the young man (above) who remained in the fast-food industry, several interviewees had to cope with inter-generational health or caregiving challenges. They felt pressed to care for families – such as parents, siblings, or children – on top of their own special needs. Four interviewees had a parent who was hospitalized. One young female interviewee explained her caregiving role for her younger siblings:

“[When my mother was in the hospital,] I had to make sure my sisters did their homework and ate and had clean clothes. I basically took over my mother’s role...”

While many GED passers experience caregiving responsibilities, this young woman did so while dealing with “uncontrollable diabetes and hypertension”; for those with special needs, the caregiving role becomes even more intense and potentially debilitating.

Transportation was another frequent challenge for interviewees with special needs who could not drive. A few interviewees had never driven or could no longer drive because of physical

impairments. Many relied on family members or friends to get to work. The challenge was even more daunting for those in pain.

“[My mother] stayed in the hospital for two months. I was struggling because my mother was my main means of transportation. I didn’t have a dependable ride... I pushed myself and kept on going.”

The transportation barrier was not simply lack of a vehicle or gas money as experienced by many GED passers; these interviewees couldn’t have driven a vehicle even if one were available. Simply having a dependable ride was the only way they could keep going, literally.

## **Job Experiences**

Experiences in employment were addressed in the third research question. Nine adults with special needs were employed when interviewed, and two were volunteering. Five adults were unemployed. Four adults with special needs did not talk about employment during interviews.

Most interviewees talked about their work lives matter-of-factly, with each individual in different, but often negative, circumstances. Issues they raised included exploitation on the job, financial loss due to special needs, and empathy on the job.

Approximately half of employed interviewees described experiencing some form of exploitation on the job, the most frequent employment experience interviewees mentioned. Some interviewees perceived they could only work part time due to their special needs, while others were asked to work more than full time by employers who recognized they needed money. Several openly doubted their work skills or their eligibility for promotions and occasionally refused a promotion.

While only one interviewee allegedly experienced job discrimination—where a company refused to hire him because of his disability—interviewees did report feeling supervisors took advantage of them or paid them less than the job should be compensated.

One interviewee detailed a series of jobs where he perceived employers in a high-cost region taking unfair advantage:

“The reason I quit that [name of company 1] job is because I wasn’t getting paid enough, and my boss was using me to go out and pick up the wine, which I never did before... [Picking] up individual cases... kind of got to be back-breaking. (PAUSE)...He told me that was just going to be temporary, but he wasn’t hiring anybody, wasn’t even looking for anybody to replace me. I kind of figured he was taking advantage of me, and it wasn’t that much [pay]. It was, like, \$11.50 an hour... I met somebody ... [who] was working for [name of company 2]. He said, “[Name of interviewee], why don’t you come over and work with us?” I said okay. I went over, signed up, and they hired me. (PAUSE) I would have stayed with them. They were a good company, but they were making me work double shifts. I was working 18-hour days back to back. I’m getting, like, four hours of sleep a night. That’s not enough to stay alert.”

A middle-aged female interviewee working as a CNA replaced a temporary worker and was paid less for the same work. A young male interviewee relayed how he received a promotion to an assistant manager position that wasn’t as much of

a promotion as he’d thought:

“[It was] a lot more responsibility... a ploy to get me to work full-time... It was probably the worst summer working there because I worked 11 to 8, and most of the time, the manager after me who would close would always call out, so I would always be stuck doing 11 to 12, like 11 a.m. to [midnight].”

These interviewees described feeling not only underemployed but expected to do more than was reasonable. Even though the employers appeared to recognize their capabilities, the employees perceived exploitation due to their disabilities.

When a formerly healthy individual experiences an illness or accident that ends in permanent disability, the loss can also be financial – and devastating. A middle-aged interviewee described substantial loss of income after developing heart disease:

“I was ... in the same business [for 26 years]... HVAC, heating and air-conditioning. ...So, I had to go from making over a thousand dollars a week to drawing unemployment, which I was only making [\$]325. ...I even found out I can’t physically do that job no more.”

A nerve injury and injured shoulder barred a young male interviewee from continuing work. When asked if he still worked in construction, as drawn on his life map, the now homeless young man replied, “No. I got this nerve injury back in ‘06 and it kind of put a damper on things... I got into a motorcycle wreck. Head-on... I can’t move my hand enough [to do construction].”

His employment specialist from rehabilitative services had just resigned, so he was waiting for a new specialist to be hired to provide services. He lived day to day and interviewed in part to get the giftcard incentive to buy food and gas.

A few interviewees believed their special needs led to empathy for those they served. A school district employee who works with children with special needs told of her feelings about her job: "I like working with the kids that I work with. I don't always have the best patience, they wear me thin, but it's just the kids. I think, 'They all have disabilities and they don't act like that on purpose.'" An interviewee who was a CNA said: "I get attached [to the patients] though. That's the problem because they become a part of me. It's a job, but then it becomes a part of you, too. When you're in there [at work], you get to be grateful that you can walk, even if you're hurt. But you're walking, and you see someone who can't [walk] at all. You get to experience and know what life is about." Their perceptions of life with special needs made them more empathetic in the workplace.

### **Encouragers for Employment**

Interviewees with special needs who spoke about employment tended to have few encouragers in their lives. Two interviewees had no encouragers or close family and described themselves as self-reliant. The homeless young man (above) relayed a story of virtually no parental support growing up; his mother left and his alcoholic father had little positive involvement in his son's life. "My whole life, I've pretty much raised myself," the young man related matter-of-factly. When his interviewer empathized that raising himself must have been difficult, he replied confidently, "Yes, it was, but it made me who I am." When interviewed, he had no family to turn to for encouragement.

The middle-aged male interviewee with heart disease (above) who indicated his health no longer allowed him to pursue the HVAC trade recognized no encouragers in his life. He declared a hope to learn computer skills to work with computers professionally. He did not yet have a certainty that he was "good with" computers even though he knew how and where to learn more. Both men expressed hope, despite their uncertainties, for future employment. They both relied on state agency services, vocational rehabilitation, or career centers for transitional support.

Two additional middle-aged interviewees reported no encouragement from family nor awareness of employment-related resources. One interviewee considered himself unable to work in his previous trade, construction, because of genetic vision impairments and knee replacements. "I'm considered legally blind... I just can't work... I hate staying at the house. Housecleaning and cooking. I'd rather work." Though frustrated, he seemed resigned to not working.

### **Attributes and Resilience**

Interviewees with special needs discussed multiple attributes and aspects of resilience as they talked about work. They repeatedly brought up the topic of tenacity and spoke about positive attributes of the self: self-acceptance, self-reliance, and self-protection. Interviewees frequently had learned to accept themselves for who they were or were in the process of doing so. Some interviewees relied on themselves, often with an accompanying strong sense of self-efficacy. Other interviewees learned how to protect themselves and to persevere even when they felt discouraged or under attack.

The attribute most frequently mentioned in interviews was tenacity. Interviewees talking about tenacity emphatically described themselves as "not

quitters”, “determined”, “stubborn”, “a fighter”, and “persistent”. Interviewees discussing tenacity were a variety of ages, but tended to be college enrollees or graduates. Tenacity did not imply a lack of challenges; in fact, several interviewees talked about how they regrouped when their plans were derailed.

Interviewees with special needs also spoke about positive attributes of the self. The first theme was self-acceptance, particularly of learning styles and approaches to life challenges. A middle-aged male interviewee who reported dyslexia and a back injury considered himself “very stubborn” about his learning preferences and his way of coping. He remarked:

“I’m the type of person I have to do something before it sinks in... As long as I touch it and I do, I learn.... I have to work on me first before anything else. Instead of projecting what I feel toward people and situations, I need to do me first and then see... then everything else around you, like I said, it will fall into place.”

In accepting his own learning and coping styles, he could move toward his goals.

Self-reliance was a second theme among positive attributes of the self. Self-reliance was sometimes tied with self-efficacy in interviewee stories. An interviewee in nursing said: “I thought as I saw the other LPNs at work, I’m like, ‘I’m just as intelligent as they are. I know the charts like they do.’ I said that I can give the medicine to the patient and they could take it a whole lot better from me.” She clearly believed she could nurse patients effectively. A middle-aged male interviewee who felt barred from career advancement because of colorblindness had learned to rely on himself and

employment in a variety of low-paying jobs to get by.

A middle-aged female interviewee, who later became an accounting supervisor, related how she had learned self-reliance as a young girl in a family with an alcoholic father: “I had to pretty much... rely on myself to go in the right direction...” After passing the GED® test, she added, “I knew that I had the ability to make my own destiny.”

A final attribute of the self was self-protection. Some interviewees with special needs believed themselves to be under attack and felt the need to protect themselves or to develop a “thick skin”. For these interviewees, personal and emotional safety was a prerequisite to resilience.

## DISCUSSION

### Assistance with Challenges

Several types of challenges that adults with special needs reported—perceived forced job choices, inter-generational caregiving, and reliable transportation—are common to many adult learners considering employment. However, these challenges came on top of the effects of a disabling condition(s). Adult educators can provide assistance in accommodating learners when need is apparent.

A question asked earlier in this paper was whether adult educators were fully prepared to recognize the signs of special needs and to refer adult learners accordingly. Realistically, some AE programs may not have the wherewithal to train staff to screen adults. Adult learners may be reluctant to disclose special needs initially or to ask for accommodations (Duquette & Fullarton, 2009). While acknowledging these realities, adult educators can invite learners to confidentially share their needs in the context of setting goals for what brought them to AE. With a pencil and sheet

of paper, they can employ the life map technique described in this paper (sample life maps are in Quigley, Patterson, & Zhang, 2011) and begin a confidential one-on-one conversation with the adult.

Spending half an hour with a new adult learner, having them draw their education or employment “story”, and engaging them to describe what they have drawn helps to connect their experience to what they hope to gain from AE. It can be a powerful way to begin setting instructional goals and to inform the instructor on how to work with or accommodate them. It can also be a first step in transition planning (Payne, 2010) with objectives of boosting self-advocacy skills and the ability to live and work independently.

To participate in AE services, adult learners unable to drive may need an AE program’s assistance with identifying transportation vouchers or ride sharing. Flexible scheduling of classes and assignments would provide much-needed accommodations for learners who are not only in pain themselves, but caring for others who depend on them. Also, information on adult daycare for the elder generation would assist adult learners responsible for intergenerational care.

AE programs can also help by pointing adults with disabilities to low-cost or free healthcare providers or screening resources—such as psychiatrists who offer complimentary diagnostic services or optometrists who screen for vision difficulties as community service. If free or affordable services are not available locally, AE centers could offer information about time banks (the reader is referred to [timebanks.org](http://timebanks.org) for further information), through which adults from various walks of life “trade” hours of service. For example, an adult learner with many years of construction experience could bank three hours of construction

expertise toward a specialist offering three hours of diagnostic services. Adult learners may also benefit from referrals to rehabilitative service providers for assistance with identifying employment and training options. Providing accommodations and referrals not only reduces the burden on the transitioning adult learner but enables them to see AE as a go-to resource and a place to refer peers.

## **Employment Experiences**

About half of adults interviewed were employed, often while in college—this proportion was similar to what Payne (2010) found. They were capable adults with solid basic skills—all had passed the GED® test. When testing, adult interviewees with special needs demonstrated skill levels comparable to all adults, as found in earlier studies (Hsu and George-Ezzelle, 2008; Lohman, Lyons, & Dunham, 2008); the median total GED test score of 2,570 for the full sample was very close to the median 2,660 of the special needs sample. A few interviewees in the helping professions added empathy to capability in describing how special needs made them empathetic to patients or students in need at the workplace.

As capable as they are, some adults believed they could not work at all because of disabling conditions. Interviewees with special needs who spoke about employment tended to have few encouragers in their lives and described isolation. Only one adult reported being barred from a job because of a disability, although multiple employees described exploitation in the workplace, often from employers who recognized their capabilities. Descriptions of employers taking advantage of adults with disabilities—by offering demanding jobs for little pay and playing into employees’ fears about their skill levels and promotability—may help explain findings in previous studies where

adults with disabilities were underemployed (e.g., Corley & Taymans, 2002). While a general lack of discrimination and the matter-of-fact descriptions of their work lives were encouraging, employment experiences of adults with special needs were clearly not as positive as they could be.

Adults with special needs willing to disclose their status would benefit from opportunities to discuss minimizing workplace exploitation in a safe small-group setting and to learn how to advocate for themselves as employees. As Roffman (2000) found, enhancing the ability to advocate for themselves, along with the tenacity they clearly possess, would improve potential for success on the job. Those willing to participate in such discussions would gain not only information on curtailing exploitation, but also the realization that they are not alone in a negative work experience. They could gain much-needed encouragement and support, which could in turn increase resilience (Corley & Taymans, 2002).

Only one of four unemployed adults described in the Encouragers for Employment section had awareness of employment-related resources. A lack of transition services in AE programs was noted earlier (Payne, 2010). To begin to fill this gap, what connections can AE centers make to encourage adults with special needs toward employment resources? Adult educators could consider pairing adults with special needs with peer mentors or counselors for employment support and referrals. They could invite employers and rehabilitative services staff to the center to describe available jobs and services. Policymakers could ensure that AE centers that are not already working with rehabilitative services or one-stop employment centers are notified of employment-related events and services.

## Attributes and Resilience

Several attributes and aspects of resilience supported adults with special needs as they talked about employment. Persistence is particularly needed in times of high unemployment and pervasive reductions in job training. Interviewees frequently referenced positive attributes of the self that relate to resilience (Quigley, Patterson, & Zhang, 2011; Waxman, Gray, & Pardron, 2003): self-acceptance, self-reliance, and self-protection.

AE could encourage adult learners to use attributes of the self to their advantage. Open discussions about their understanding of themselves as employees could occur among groups of adult learners with special needs who are willing to participate and to encourage each other. Such discussions may guide them toward goals for the future as well as continuing toward self-acceptance. These group discussions can further develop problem-solving skills and sense of purpose (Waxman, Gray, & Pardron, 2003). Sharing excerpts from the stories of adults with special needs in this paper (additional interviewee quotes are online at [researchallies.org](http://researchallies.org)) and asking how each story relates to their strengths and needs could start the discussion. Asking what interviewees gained, how did this interviewee protect himself, or how was that interviewee resilient, may facilitate adult learners' self-understanding and goal setting as they see how interviewees' transitions compare with their own circumstances. Indeed, many interviewees participated with an expectation that discussions like these might benefit future learners.

Educators can also invite visits of employers, employment agency staff, or former adult learners who transitioned to the workplace. Employers and employment agency staff can share how they recruit, provide accommodations, and draw upon strengths of employees with disabilities. In return,

with permission of those involved, they could gain insights from the employment experiences of adults with special needs to improve employer practices. Former adult learners experiencing job success could be invited to the AE center to relate how they drew upon their attributes and were resilient in the workplace. They could “plant a seed” in the minds of current adult learners on what positive employment experiences could be. These potential role models might later become mentors to transitioning adults.

### **Limitations and Future Research**

One limitation of findings in this paper is the status of adults with special needs was not identified in advance; special needs were identified afterwards during coding, and some interviewees likely did not voluntarily disclose their status. A future study explicitly designed to understand the employment experiences of adults with known special needs could certainly contribute further insights.

Another limitation is that adults with LD appear to be under-represented in the broader study, especially given the suspected incidence of LD in previous studies (Corley & Taymans, 2002; Mellard, Patterson, & Prewett, 2007). Fewer adults with LD in this study may reflect interviewee reluctance to disclose, a lack of LD diagnosis, or lower GED test pass rates (Lohman, Lyons, & Dunham, 2008). Future researchers could consider Payne (2010)’s recommendation for further study comparing transition services for adults with and without LD, as well as comparing outcomes for adults with LD who do or do not receive AE transition services.

Also, the majority of interviewees came to share their successes and their joys as well as their trials, which tends to positively bias the findings. The workplace may potentially be even more

challenging for non-interviewees. Future research needs to acknowledge this reality and identify ways to be as inclusive as possible of participants with both positive and negative views. Clearly many challenges lie ahead for this subpopulation, and more resources are essential—both to continue research on this under-resourced, critical topic and to boost the chances of adults as they tackle challenges.

In considering the post-GED® credential experiences of adults with special needs, it is tempting to take a “glass half empty” view and conclude that employment experiences of adults with special needs have far to go. Yet, to do so would be disrespectful to the impressive energy and tenacity of many adults with special needs. Where these findings and recommendations can be applied, employment prospects are promising, and reflect the resilience of adults with special needs who persist in the workplace.

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\* Note: Three interviewees from West Virginia and one interviewee from Washington, DC, who participated in a pilot, lacked complete demographic and background data.

## A Study of Culturally Responsive Teaching Practices of Adult ESOL and EAP Teachers

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### ABSTRACT

The purpose of this study was to examine how frequently adult education English for Speakers of Other Languages (ESOL) and English for Academic Purposes (EAP) teachers in Florida used specific culturally responsive teaching practices and how important they believed those practices were to their teaching. Using Ginsberg and Wlodkowski's Motivational Framework for Culturally Responsive Teaching, an online survey of 17 teaching practices was developed, validated, and administered. This article describes the findings of this study, examining which practices were used with the highest and least frequency, as well as the practices described as most and least important to their teaching.

### INTRODUCTION

For many immigrants, the adult education English for Speakers of Other Languages (ESOL) or English for Academic Purposes (EAP) classroom is a primary source of information about the English language and American culture (Alfred, 2009). Amidst a diversity of cultures, ESOL and EAP teachers face many obstacles in the creation of a learning environment that addresses the needs and learning styles of learners from diverse backgrounds (Villegas & Lucas, 2002). According to multicultural education scholars,

the most effective learning environment is one which most closely reflects the students' learning preferences and ways of knowing (Collard & Stalker, 1991; Gay, 2000; Guy, 2009, 1999; Ladson-Billings, 1995). However, as the ethnic and racial backgrounds of these students often differ from the background of the teacher, it can be challenging for ESOL and EAP teachers to incorporate the learners' native cultures into the classroom environment (Collard & Stalker, 1991; Ladson-Billings, 1995).

The influence of culture on the classroom is a foundation of multicultural education (Banks, 2006; Bennett, 2001) and is exemplified by the assumption that both students and teachers bring their cultural identities into the classroom. As described by Guy (2009):

Adult learners bring to the learning environment a range of experiences grounded in communicative and interaction strategies. Given the cultural basis of these strategies, they may or may not serve learners well depending on the way in which the educational activity itself is framed. (p. 10)

In *Culturally Responsive Teaching*, Gay (2000) elaborates on this tenet and asserts that culture is "at the heart of all we do in the name of education, whether that is curriculum, instruction,

administration, or performance assessment” (p. 8).

Culturally responsive teaching places students’ cultures at the core of the learning process and utilizes the “cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students” (Gay, 2000, p. 29), enabling teachers to mitigate cultural mismatches. A growing body of literature has focused on the teaching practices which create culturally responsive learning environments for specific cultural groups such as African-Americans (Sealey-Ruiz, 2007) or Latinos (Gault, 2003). However, there have been limited studies of the teaching practices used to create a culturally responsive environment when ethnic and linguistic heterogeneity are the norm, such as the adult ESOL classroom. This void has presented a challenge to various stakeholders who want to assess and guide programs and practitioners toward the use of a culturally responsive approach with adult English language learners. It was the purpose of this study to add to this growing body of knowledge by describing the culturally responsive teaching practices of adult education ESOL and EAP teachers in the state of Florida.

### **Theoretical Framework**

Culturally responsive teaching is an equity pedagogy (Banks, 2006) that encompasses a variety of approaches such as culturally relevant, culturally sensitive, culturally congruent, and culturally contextualized pedagogies (Gay, 2000). Culturally responsive teaching places student culture at the center of the learning process in order to eradicate the differences, known as cultural mismatches, between the students’ home cultures and the culture of the school (Lee & Sheared, 2002). This approach is based on the four pillars of “teacher attitude and expectations, cultural communication

in the classroom, culturally diverse context in the curriculum, and culturally congruent instructional strategies” (Gay, 2000, p. 44).

Culturally responsive teaching can be identified by the following common characteristics:

- It acknowledges the legitimacy of the cultural heritages of different ethnic groups, both as legacies that affect students’ dispositions, attitudes, and approaches to learning and as worthy content to be taught in the formal curriculum.
- It builds meaningfulness between home and school experience as well as between academic abstractions and lived sociocultural realities.
- It uses a wide variety of instructional strategies that are connected to different learning styles.
- It teaches students to know and praise their own and each other’s cultural heritages.
- It incorporates multicultural information, resources, and materials in all the subjects and skills routinely taught in schools. (Gay, 2000, p. 29)

Thus, culturally responsive teaching:

validates, facilitates, liberates, and empowers ethnically diverse students by simultaneously cultivating their cultural integrity, individual abilities, and academic success. It is anchored on four foundational pillars of practice—teacher attitudes and expectations, cultural communication in the classroom, culturally diverse context in the curriculum, and culturally congruent instructional strategies. (Gay, 2000, p. 44)

**Motivational framework for culturally responsive teaching.** The Motivational Framework for Culturally Responsive Teaching (Ginsberg & Wlodkowski, 2009; Wlodkowski, 2004) is a model of culturally responsive teaching that was designed for the higher education classroom and does not specify practices specifically designed for the ethnic and linguistic diversity of the adult education ESOL and EAP classrooms. It describes norms and practices appropriate to an adult learning environment in which “inquiry, respect, and the opportunity for full participation by diverse adults is the norm” (Wlodkowski, 2004, p. 161) and is grounded in the assumption that culturally responsive teaching enhances the motivation of students from minority cultures. The model’s norms and practices are categorized by four elements: *establishing inclusion, developing attitude, enhancing meaning, and engendering competence* (Ginsberg & Wlodkowski, 2009; Wlodkowski, 2004).

Teaching practices that create an environment of respect and connectedness and that use cooperation and equitable treatment of all learners reflect the element of *establishing inclusion*. The element, *developing attitude*, includes norms and practices that help students develop a positive attitude toward the learning process by building on students’ personal experiences, knowledge, and by allowing learners to make choices throughout the learning process. The third element, *enhancing meaning*, includes norms and practices that encourage students to engage in deep reflection and critical inquiry, such as role-plays and simulations. The final element, *engendering competence*, are practices that show the learner evidence of his or her learning and proficiency and the use of assessments that are contextualized in the learners’ experiences (Ginsberg & Wlodkowski, 2009;

Wlodkowski, 2004). This four-element model served as the theoretical foundation for culturally responsive teaching practices applicable to the adult education ESOL and EAP classrooms.

## **LITERATURE REVIEW**

### **Culturally Responsive Teaching Of English Language Learners in Mainstream Classes**

There is a growing body of knowledge about creating a culturally responsive environment for English language learners. Prominent educational theorists such as Nieto (2002) and Cummins (1986) have chronicled the unique aspects of using culturally responsive teaching practices with English language learners; limited descriptive studies have been conducted in primary and secondary classrooms with English language learners, providing additional findings specific to working with this group. The principal theme throughout the literature has been the importance of incorporating and facilitating the development of students’ native languages in order to promote academic success in American schools (Irizarry, 2007; Lee, 2010; Nieto, 2002; Osborne, 1996).

In his early writings, Cummins (1986) proposed examining the interactions of English language learners and the school system to explain persistent lower academic achievement. His evaluative framework was based on the tenet that English language learners are either empowered or disabled through these interactions. Cummins’s framework operates from a critical standpoint and is often referred to as the springboard for further theorization of the culturally responsive approach with English language learners. Its influence is clear in Nieto’s (2002) work on how to prepare teachers to work with English language learners.

Nieto (2002) called on multicultural educators

to broaden their focus to include the needs of English language learners. Furthermore, she proposed changing how schools conceptualize the teaching of English language learners, calling for a “reconceptualization of language diversity” (Nieto, 2002, p. 81). The first tenet involved changing the deficit view of language diversity to that of bilingualism being seen as an addition or resource to the student and school community. Secondly, she strongly advocated schools’ participation in developing students’ native languages in addition to educating teachers about the discriminatory nature of English-only language policies. Thus, teachers of English language learners should be educated and knowledgeable about second and first language acquisition theories and linguistics. Moreover, they should hold additive, not deficit beliefs about language diversity, and actively foster students’ native language literacy. She noted that teachers can do so by “providing them (the students) the time and space to work with all their peers, or with tutors or mentors, who speak the same language” (Nieto, 2002, p. 95).

The limited studies of culturally responsive teaching practices used with English language learners support the importance of native language literacy and the positive relationship between fostering these native languages and academic achievement to English language learners (Lee, 2010; Osborne, 1996). Additionally, in a case study of a culturally responsive teacher of Hispanic secondary students, Irizarry (2007) reported a positive reaction of these English language learners to the informal English presented in hip-hop music, leading the author to suggest that a variety of styles and levels of English be presented in class.

In addition, studies of culturally responsive teachers of English language learners revealed findings, which duplicate studies conducted

with other minority group students. In terms of teacher characteristics, a teacher’s personal affirmative beliefs about diversity were found to be more important than the teacher’s ethnicity or race (Irizarry, 2010; Osborne, 1996). Similarly, culturally responsive teachers of English language learners were found to share a practice of holding high academic expectations of students (Lee, 2010; Osborne, 1996). Culturally responsive teachers of English language learners situated instruction in the students’ cultural contexts and utilized a variety of activities, specifically, group work (Lee, 2010; Osborne, 1996). One final characteristic shared by many culturally responsive teachers of English language learners was the valuing of the students’ native cultures and a tendency to create strong ties with parents and the ethnic community (Osborne, 1996).

### **Culturally Responsive Teaching of English Language Learners in Adult Education Classes**

There are limited studies of culturally responsive teaching with adult English language learners, such as the adult education ESOL or EAP classroom (Mathews-Aydinli, 2008). These limited studies can be classified into two areas: studies of cross-cultural aspects and various teaching strategies and practices. Shaw’s (2001) study of the intersection of culture and gender examined both students’ and teachers’ perceptions of these factors, concluding that culture and diversity played a significant role in the adult education ESOL classroom. Students noted an awareness of cultural differences and a tendency to make positive and negative generalizations of classmates from other backgrounds. Also, they reacted more positively to teachers from an Anglo/White American background, but paradoxically

felt more comfortable if their teacher was from their cultural background. Teachers were aware of cultural differences and made positive and negative generalizations about their students as well. Furthermore, teachers also noted utilization of various teaching strategies as dependent on the cultural backgrounds of students. In regard to handling cross-cultural conflict, teachers reported strategies such as giving a lesson on culturally appropriate behaviors and direct confrontation with the student(s). They also noted their expectation of students' conforming to U.S. values and behaviors, at times utilizing lessons that communicated this mono-cultural perspective. In order to prevent conflict, teachers used various strategies to create a sense of community such as consensus building and the exploration of cultural similarities and differences.

Studies of culturally responsive teaching strategies and practices cover a range of issues. Many adult education ESOL educators implement an English only policy in order to encourage communication and language development. However, Auerbach (1993) examined the assumptions and implications of this practice and concluded that this practice resulted in the privileging of students with higher native and English literacy skills, effectively discriminating against certain language and cultural groups. This critical stance was utilized in Griswold's (2010) critique of the narratives used in a citizenship preparation class. The predominant and persistent theme of individualism used by the teacher demonstrated cultural insensitivity, creating a direct conflict with the students' experiences as immigrants and cultural backgrounds. Rymes (2002) studied an innovative approach to an ESOL methods course. Throughout the course, pre-service teachers completed a practicum

requirement by teaching ESOL in the homes of a Spanish-speaking, largely Mexican community. Although the author noted some reservations about the long-term effectiveness of this approach, the pre-service teachers noted feeling transformed by the experience and being more apt to contextualize and include the students' native language in lessons (Rymes, 2002).

## METHODS

The purpose of this study was to describe the culturally responsive teaching practices of adult education ESOL and EAP teachers in the state of Florida. This study was guided by the following research questions:

1. To what extent do adult education ESOL and EAP teachers use specific culturally responsive teaching practices?
2. How do adult education ESOL and EAP teachers rank the importance of using specific culturally responsive teaching practices?

### Survey Design

The first stage of this study was the development of a survey of culturally responsive teaching practices relevant to the adult education ESOL and EAP classroom based on the Motivational Framework of Culturally Responsive Teaching (Ginsberg & Wlodkowski, 2009). The development, modification, and validation of the survey consisted of two phases: the generation and validation of an item pool and the validation of the draft survey.

**Item pool development.** The first phase of survey development was the generation of a pool of items which describe culturally responsive teaching practices in the adult education ESOL or EAP classroom. The goal of this phase was to

yield items that “every potential respondent will interpret in the same way, be able to respond to accurately, and be willing to answer” (Dillman, 2000, p. 32).

A list of culturally responsive teaching characteristics compiled during a literature review served as the theoretical foundation of this process. This search yielded findings from predominantly qualitative examinations of culturally responsive teachers in a variety of teaching environments. All characteristics were compiled into a master list, categorized by the four elements of the Motivational Framework for Culturally Responsive Teaching (Ginsberg & Wlodkowski, 2009). The list was then consolidated by eliminating redundant characteristics, resulting in a master list of 23 characteristics of culturally responsive teachers. These characteristics represented general beliefs and experiences of culturally responsive teachers and were used to develop items of specific teaching practices appropriate for an adult education ESOL or EAP classroom.

A sample of 34 Second Language Acquisition and Instructional Technology (SLAIT) graduate students at the University of South Florida comprised the item pool development panel. Each panel member received an email explaining the study objectives and a link to the online item pool development questionnaire. Panel members were asked to write one possible indicator of the application of each culturally responsive teaching characteristic in the adult education ESOL or EAP classroom. For example, “*A culturally responsive teacher is validating and affirming of all students. In the adult ESOL or EAP classroom, that teacher might . . .*” After eliminating duplicate and ambiguous items, the resulting item pool consisted of 27 culturally responsive teaching practices.

**Item pool validation.** In order to assess the

content validity of the item pool, this study utilized the expertise of 12 individuals with extensive academic and practical teaching experience in adult education ESOL or EAP and Teaching English to Speakers of Other Languages (TESOL) to evaluate the item pool for clarity and relevance (Rea & Parker, 2005). Each item pool validation panel member received an email containing a brief explanation of the study and a link to the online validation survey. Panel members were asked to rank the clarity of each item from 1-5, as well as ranking its relevance to the adult ESOL or EAP classroom (Rea & Parker, 2005). Also, panel members were asked to evaluate the total item pool and add any culturally responsive teaching practices missing from the overall list.

**Item pool verification.** In order to further support the content validity of the survey, this study utilized the expertise of 7 adult education professors with a background in culturally responsive teaching theory. The task was conducted through an online questionnaire, and consisted of rating the relevance of each item to the adult learning environment and culturally responsive teaching theory on a scale of 1-5. Panel members were asked to evaluate the total item pool and to add any culturally responsive teaching practices missing from the overall list.

**Item pool revision.** Results from the item validation task yielded mean scores of item clarity ranging from 3.36 to 4.64 and mean scores of item relevance to the adult ESOL classroom ranging from 2.45 to 4.64. Results from the item verification task yielded mean scores of relevance to the adult learning environment ranging from 1.38 to 4.63 and mean scores of item relevance to culturally responsive teaching theory ranging from 1.38 to 5. Based on these scores, 8 of the 27 items were deleted with mean scores of 3 or below,

while 2 items were reworded or combined based on feedback from the panels. At the conclusion of this stage, the draft survey included 17 culturally responsive teaching practices.

**Pilot test draft survey.** In the pilot phase of survey development, the researcher administers “the final draft form to a large sample of examinees representative for whom the test is designed” (Crocker & Algina, 1986, p. 83). A proportional sample of 100 adult education ESOL or EAP instructors in Florida (Dillman, 2000) was used to conduct a pilot study of the survey. Reminder emails were sent to non-respondents on a weekly basis resulting in an overall survey response rate for the pilot study of 29%. In order to assess the reliability, or consistency, of the pilot survey, Cronbach’s coefficient alpha values were calculated for both the 17 frequency-related items and the 17 perceived-importance items. Both demonstrated acceptable reliability with Cronbach’s coefficient alpha values of .752 and .824, respectively. Based on these data, all 17 items were retained for the administration phase.

## Survey Administration

The second stage of this study was the administration of the survey of culturally responsive teaching practices. First, the population and sampling steps are detailed, followed by a description of the instrumentation, data collection, and analysis steps.

**Study participants.** The target population for this study consisted of teachers in non-credit, adult education ESOL and EAP programs in Florida. There is no available statewide database of adult education ESOL and EAP educators. Therefore, an initial sampling frame was compiled using data from publicly-accessible adult education ESOL and EAP faculty directories from district school board

and college websites. Additionally, participants from Sunshine State TESOL (SSTESOL) and local SSTESOL affiliates were recruited through the SSTESOL list-serv.

There were 430 adult education ESOL and EAP teachers that comprised the sampling frame of this study. They came from 15 state or community colleges, 2 universities, 8 school districts, and Bay Area Regional TESOL (BART) and all received an email containing a brief explanation of the study, an Informed Consent Form, and a link to the online survey.

The survey was administered to 134 teachers for an overall survey response rate of 33.5%. The majority of respondents were female (78.38%), while males represented 19.82% of the sample, with 1.8% of unidentified gender. The overwhelming majority of respondents were from community or state colleges (92%), while individuals from school districts were only 6.3% of the respondents. Two respondents were from Bay Area Regional TESOL, representing 1.8% of the respondents.

**Survey format.** The survey included 34 items of culturally responsive teaching practices. Participants were presented with 17 items which they assessed by *how frequently* they used each teaching practice and *how important* they believed each practice was to their teaching. Examples of items include “*I ask students to compare their culture with American culture*”, “*I include lessons about the acculturation process*”, and “*I supplement the curriculum with lessons about international current events*”. Frequency of use was assessed through a 5-point frequency scale with levels of: *never, rarely, sometimes, usually, and always*, while perception of importance was assessed through a 5-point frequency scale with levels of: *not at all, somewhat, moderately, very, and extremely*.

## Data Collection and Analysis

All data were collected through the web-based survey at [www.surveygizmo.com](http://www.surveygizmo.com) and stored in a secure data file. Data were analyzed using descriptive and inferential statistics through the Statistics Package for Social Services (SPSS) software program.

**Reliability.** The Cronbach Alpha Coefficient of the two sub-groups of items related to *frequency of use* and *perception of importance* were calculated and high levels of internal reliability of .781 and .848, respectively.

**Validity.** Validity is an additional element to support inferences and interpretations made during the research process (Gall, Gall, & Borg, 2003). Validity is multi-faceted and includes content and construct validity, both of which were analyzed in this study.

**Content validity.** Content validity is “the extent to which inferences from a test’s scores accurately reflect the concept or conceptual domain that the test is claimed to measure” (Gall, Gall, & Borg, 2003, p. 621). The content validation process is generally conducted through feedback from content area experts during the survey development process (Crocker & Algina, 1986). In this study, panels of experts were used at various phases of survey development, specifically during the item pool validation and item pool verification stages.

**Construct validity.** Construct validity is “the extent to which inferences from a test’s scores accurately reflect the construct that the test is claimed to measure” (Gall, Gall, & Borg, 2003, p. 621). There are various ways to support construct validity. In this study, exploratory factor analysis was conducted to ascertain if certain items function as a group, or factor, of the construct of culturally responsive teaching practices (Worthington &

Whittaker, 2006).

**Frequency of use.** To support the factorability of the data, two criteria were examined. The Kaiser-Meyer-Olkin measure of sampling adequacy was .767, above the recommended value of .6. Additionally, the Bartlett’s test of sphericity was significant ( $\chi^2(136) = 473.19, p < .05$ ).

Principal components analysis was used because the primary purpose was to identify underlying factors of the items related to the frequency of use of the 17 culturally responsive teaching practices. The initial eigen values showed that the first factor explained 25% of the variance, the second factor 9% of the variance, the third factor 8% of the variance, the fourth and fifth factors both contributed 7% of the variance, for a cumulative total variance of 56%. Based on the four-element structure of the theoretical framework and the initial eigen values, four and five factor solutions were examined, using both varimax and oblimin rotations of the factor loading matrix. The five-factor solution using a varimax rotation solution was used for the final solution.

The factor pattern coefficients revealed some similarities to the Motivational Framework of Culturally Responsive Teaching. All three of the items categorized as *enhancing meaning* were related to each other with factor pattern coefficients of .711, .652, and .608, demonstrating a relationship among those items.

Additionally, 3 of the 5 items categorized as *establishing inclusion* demonstrated factor pattern coefficients of .690, .681, and .585 Factor II, while 1 of the remaining items demonstrated a closer relationship to Factor I with a coefficient of .559.

Of the 4 items categorized as *engendering competence*, 2 items demonstrated a relationship to Factor IV with pattern coefficients of .689 and .641. Of the 3 items categorized as the final element of the

Motivational Framework of Culturally Responsive Teaching, *developing attitude*, 2 demonstrated a relationship to Factor III with factor pattern coefficients of .691 and .740, while the third item categorized as *developing attitude* was found to have a stronger relationship to Factor I, with a factor pattern coefficient of .544.

**Perceived importance.** To support the factorability of the data, two criteria were examined. The Kaiser-Meyer-Olkin measure of sampling adequacy was .805, above the recommended value of .6. Additionally, the Bartlett's test of sphericity was significant ( $\chi^2(136) = 617.70, p < .05$ ).

Principal components analysis was used to identify underlying factors of the items related to the perceived importance of the 17 culturally responsive teaching practices. The initial eigen values showed that the first factor explained 30 % of the variance, the second factor 8 % of the variance, the third factor 7 % of the variance, the fourth and fifth factors both contributed 6% of the variance, for a cumulative total variance of 58%. Based on the four-element structure of the theoretical framework and the initial eigen values, four and five factor solutions were examined, using both varimax and oblimin rotations of the factor loading matrix. The five factor solution using a varimax rotation solution was used for the final solution.

The factor pattern coefficients revealed fewer similarities to the Motivational Framework of Culturally Responsive Teaching than the frequency of use items. However, the strongest relationship among items resulted from those classified as *engendering competence*, 3 of which were grouped in Factor III with factor pattern coefficients of .690, .747, and .653.

Additionally, 3 of the 7 items categorized as *establishing inclusion* had coefficients of .634,

.811, and .528 on Factor IV, while 2 items had coefficients of .771 and .511 on Factor II, and 1 item had a coefficient of .546 on Factor I.

The items categorized as *enhancing meaning* revealed a pattern for 2 of the 3 items loading on Factor I with coefficients of .715 and .775. Items categorized as *developing attitude*, did not reveal a discernible pattern. Only one item demonstrated a relationship to other survey items, with a coefficient of .731 on Factor II.

## ANALYSIS OF RESEARCH QUESTIONS

The following section describes the findings of the survey related to frequency of use and perception of importance of the items.

### Frequency of Use

The first section of the survey contained 17 items requiring respondents to indicate how frequently teachers used each culturally responsive teaching practice. Item means ranged from 2.51 to 4.26 with nine items falling in the moderate range of 3.02 to 3.91 corresponding to the frequency category of *sometimes*. There were four items with high mean scores between 4.0 and 4.5, as well as four items with mean scores ranging from 2.5 to 3.0 corresponding to the frequency level between *rarely* and *sometimes*.

**Most frequently used practices.** Results indicated that four teaching practices were used most frequently, with mean scores ranging from 4.1 to 4.26, corresponding to the levels of *always* and *usually*. The most frequently used practice was “provide rubrics and progress reports to students” ( $M = 4.26; SD = .98$ ), followed closely by “elicit students' experiences in pre-reading and pre-listening activities” ( $M = 4.24; SD = .748$ ). The items, “ask students to compare their culture with American culture” and “make an effort to get to

**Table 1—Descriptive Statistics of Responses to How Frequently Teachers Used Culturally Responsive Teaching Practices**

Survey Item	Mean	SD	Var <sup>a</sup>
Provide rubrics and progress reports to students	4.26	.980	.961
Elicit students' experiences in pre-reading and pre-listening activities	4.24	.748	.559
Ask students to compare their culture with American culture	4.16	.793	.559
Make an effort to get to know students' families and background	4.10	.892	.795
Use mixed-language and mixed-cultural pairings in group work	3.91	1.051	1.105
Examine class materials for appropriate images and themes	3.90	1.035	1.072
Encourage students to use cross-cultural comparisons when analyzing material	3.69	.853	.728
Spend time outside of class learning about the cultures and languages of students	3.40	.989	.978
Use peer tutors or student-led discussions	3.30	.910	.828
Learn words in students' native languages	3.29	1.068	1.140
Supplement the curriculum with lessons about international current events	3.27	.935	.875
Include lessons about the acculturation process	3.25	.963	.928
Encourage students to speak their native language with their children	3.02	1.443	2.082
Use student surveys to learn about students' classroom preferences	2.94	1.102	1.214
Ask for student input when planning lessons and activities	2.91	.921	.849
Students work independently, selecting their own learning activities	2.76	.860	.740
Include lessons about anti-immigrant discrimination or bias	2.51	1.107	1.034

Note:  $N = 134$ ; Var<sup>a</sup> = Variance

*know students' families and background*”, were also noted as being frequently used with means of 4.16 and 4.10, respectively. Based on their means, these practices can be described as being used by most teachers on a highly regular basis, falling between *usually* and *always* on the survey scale.

**Least frequently used practices.** Results indicated that four teaching practices were used least frequently, with mean scores ranging from 2.51 to 2.94, corresponding to the levels of rarely and sometimes. The least frequently used practice was “*include lessons about anti-immigrant discrimination or bias*” ( $M = 2.51$ ;  $SD = 1.017$ ), followed by “*students work independently, selecting*

*their own learning activities*” ( $M = 2.76$ ;  $SD = .860$ ). The items, “*ask for student input when planning lessons and activities*” and “*use student surveys to learn about students' classroom preferences*”, were also noted as being less frequently used with means of 2.91 and 2.94, respectively. Mean scores, standard deviations, and variances of all items related to frequency of use are detailed in Table 1.

### Perception of Importance

The second section of the survey contained 17 items requiring respondents to indicate how important they perceive each culturally responsive teaching practice to be to their teaching. The

**Table 2—Descriptive Statistics of Responses to Importance of Culturally Responsive Teaching Practices**

Survey Item	Mean	SD	Var <sup>a</sup>
Provide rubrics and progress reports to students	4.13	1.014	1.029
Elicit students' experiences in pre-reading and pre-listening activities	4.13	.857	.734
Ask students to compare their culture with American culture	3.76	.935	.875
Examine class materials for culturally appropriate image and themes	3.75	1.001	1.067
Use mixed-language and mixed-cultural appropriate image and themes	3.75	1.007	1.014
Make an effort to get to know students; families and background	3.70	1.041	1.083
Encourage students to use cross-cultural comparisons when analyzing material	3.54	.915	.836
Use peer tutors or student-led discussions	3.40	1.005	1.009
Include lessons about the acculturation process	3.34	1.033	1.067
Supplement the curriculum with lessons about international current events	3.31	1.036	1.074
Spend the time outside of class learning about the cultures and languages of students	3.22	1.059	1.122
Use student surveys to learn about students' classroom preferences	3.21	1.104	1.219
Encourage students to speak native language with children	2.96	1.461	2.133
Students work independently, selecting their own learning activities	2.91	1.065	1.135
Ask for student input when planning lessons and activities	2.90	1.130	1.276
Learn words in students' native languages	2.89	1.148	1.318
Include lessons about anti-immigrant discrimination or bias	2.58	1.126	1.268

Note:  $N = 134$ ;  $\text{Var}^a = \text{Variance}$

perception of importance is assessed through a 5-point frequency scale with levels of: *not at all*, *somewhat*, *moderately*, *very*, and *extremely* with respective score values ranging from one point to five points. Item means ranged from 2.58 to 4.13 with 10 items falling in the moderate range of 3.21 to 3.76 corresponding to the frequency category of *moderately* important.

**Most important practices.** Results indicated that the same two most frequently-used culturally responsive teaching practices were also perceived to be the most important with mean scores of 4.13, corresponding to the level of very important. These practices were “*provide rubrics and progress*

*reports to students*” ( $M = 4.13$ ;  $SD = 1.01$ ) and “*elicit students' experiences in pre-reading and pre-listening activities*” ( $M = 4.13$ ;  $SD = .857$ ). Mean scores, standard deviations, and variances of all items related to perceived importance are detailed in Table 2.

**Least important practices.** Results indicated that five culturally responsive teaching practices were perceived to be the least important with mean scores ranging from 2.58 to 2.96, corresponding to the higher range of *somewhat* and *moderately* important levels. These practices were the following: “*include lessons about anti-immigrant discrimination or bias*” ( $M = 2.58$ ;  $SD = 1.126$ ),

“learn words in students’ native languages” ( $M = 2.89$ ;  $SD = 1.148$ ), “ask for student input when planning lessons and activities” ( $M = 2.90$ ;  $SD = 1.130$ ), “students work independently, selecting their own learning activities” ( $M = 2.91$ ;  $SD = 1.065$ ), and “encourage students to speak their native language with their children” ( $M = 2.96$ ;  $SD = 1.461$ ). No practices were perceived to be *not at all* or in the lower range of *somewhat* important levels.

## DISCUSSION

This study revealed a trend of adult education ESOL and EAP teachers’ regular use and perceived importance of many culturally responsive teaching practices. These findings add to the limited knowledge of how teachers in ethnically and linguistically heterogeneous classrooms create and support a learning environment for adult learners. Furthermore, these findings reveal a heightened awareness of the importance of placing students’ cultural identities at the core of the learning process.

These teachers use a variety of practices to respond to the ethnically and linguistically heterogeneous learning environment by reaching out and incorporating students’ learning styles and ways of knowing into their teaching (Villegas & Lucas, 2002), instead of establishing classrooms which represent only mainstream American culture.

However, this study found that some culturally responsive teaching practices are not regularly used, nor are perceived to be important, and thus, provide an area of potential growth for the field. Three of the four least frequently used practices related to the teacher’s use of student input into the learning process. These practices “*students work independently, selecting their own learning activities*”, “*ask for student input when planning*

*lessons and activities*”, and “*use student surveys to learn about students’ classroom preferences*” share an emphasis on the individual and learner autonomy and self-directedness. An understanding of why these practices were used less frequently may lie in Hofstede’s 4-D Model of Cultural Differences (1986). One element of difference among cultures is an orientation toward individualism vs. collectivism. Students from highly individualistic cultures believe they are responsible for their own learning, while students from highly collectivist cultures place more responsibility for their learning on the teacher. Highly collectivist countries include Mexico, Brazil, and Colombia, while highly individualistic countries include the United States, Canada, and the Netherlands (Hofstede, 1986). Thus, it is more likely that ESOL and EAP students come from cultures of a less individualistic nature. These teachers who use student-centered teaching practices less frequently may be responding to their students’ discomfort with learner autonomy and self-direction of the learning process. Examinations of the teachers’ rationale behind these practices may provide a more complete understanding of this phenomenon.

Significantly, promoting critical inquiry and addressing real-world issues are tenets of culturally responsive teaching. However, this study found that adult education ESOL and EAP teachers did not support or include lessons about anti-immigrant discrimination or bias on a regular basis. The second element of Hofstede’s Model of Cultural Differences (1986), power distance, may explain some of the reticence to use critical inquiry in the ESOL or EAP classrooms. Power distance is defined as “the extent to which the less powerful persons in a society accept inequality in power and consider it normal” (Hofstede, 1986, p. 307). Individuals from large power distance

cultures tend not to criticize or contradict those in authority in any public manner. Many of the countries described as large power distance include those highly represented in the ESOL and EAP classrooms, such as Mexico, Colombia, Venezuela, Taiwan, and Thailand (Hofstede, 1986, p. 309). Thus, teachers may believe that they should refrain from asking students to criticize their adopted culture in order to prevent students' discomfort or unease. Better understanding of why ESOL and EAP teachers do not engage in lessons that examine bias and discrimination toward immigrants is necessary to improve or change this practice.

### Implications

The survey used in this study provides a tool for adult ESOL and EAP teachers to assess the cultural responsiveness of their own teaching. The survey of 17 practices developed for this study is an easy-to-use tool and can serve as a good point for practitioners to begin their professional growth. However, it is still in the early stages of development and should not be used prescriptively. Ginsberg and Wlodkowski (2009) recommend that practitioners engage in lesson study, a collaborative reflective process

described as a "process of planning, observing, and making sense of student learning with colleagues" (p. 353). Using this technique, teachers can share their experiences using these practices and gain a deeper understanding of how to incorporate them on a more frequent basis.

### CONCLUSION

In conclusion, the purpose of this study was to add to the body of knowledge of culturally responsive teaching by describing the practices of teachers in linguistically and ethnically heterogeneous environments of adult ESOL and EAP classrooms. By measuring the frequency and perceived importance of these practices, this study offers a limited, yet foundational depiction of a unique learning environment. However, there remains much left to explore in order to expand our understanding and practice of culturally responsive teaching.

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*Economics in  
Detention*

*Michael Elonge*

*University of  
Maryland*



**ABSTRACT**

Economics in Detention is a University of Maryland Extension program that teaches inmates essential principles of economics as a foundation to a spectrum of decision making. Also, the program includes an emphasis on starting a small business after incarceration. The idea of this program emanates from an invitation by the Baltimore City Detention Center to design a program that would engage and challenge inmates to learn and apply practical knowledge beyond General Education Development (GEDR). The program incorporates Microsoft Excel with the teaching of basic concepts in economics for inmates to acquire small business decision-making techniques. Evaluation results from the program indicate that business-minded inmates consider the program unique, practicable, and inspirational.

**INTRODUCTION**

Research on correctional education demonstrates a positive correlation between educational programs and recidivism (MacCormick, 1931; Downing, Stitt, & Murray, 1987; Zumpetta, 1988). According to Vacca (2004), inmates who participate in correctional education programs, such as Adult Basic Education (ABE), General Education Development

certificates (GEDR), and Vocational Education programs, are less likely to return to jail. By attending education programs in jail, inmates learn skills essential for stable employment, rebuilding self-esteem, developing a conventional lifestyle, and creating a sense of belonging to the community (Visser, Winterfield, & Coggeshall, 2005). When inmates place a high value in acquiring GEDR and attending vocational training this is an indication that they are looking forward to a brighter and better future after incarceration, not recidivism (Downing et al., 1987; Stephens, 1992; Hrabowski & Robbi, 2002). Despite the availability of correctional education programs for inmates, recidivism continues to increase in major urban cities such as Baltimore City. According to the Bureau of Labor Statistics, more than 59% of released prisoners in Baltimore City return to detention facilities, as compared to its neighboring counties (10% in Baltimore County, 2% in Harford County, and 1% in Carroll County). Yet, Baltimore City Detention Center provides a variety of correctional education programs to help inmates acquire a better lifestyle after incarceration and to avoid recidivism. This should not be a disappointment to educators, but a challenge to design innovative programs to teach inmates to become job creators, not job seekers.

### **The Rationale for Teaching Economics to Inmates**

Everyone lives in an economy, be it in the outside world or in lockup, and as such, everyone needs to have some understanding of principles guiding the economy. The importance of understanding basic economics has been widely documented. According to Tobin (1986), students in secondary education will need economics to make better decisions in their lifespan, regardless, if they plan to go to college or not. Understanding basic

principles of economics provides a foundation for financial literacy to help people avoid poor financial decisions that could take years to overcome (Greenspan, 2003). Research indicates that a comprehensive or succinct understanding of good decision-making starts from understanding basic principles of economics (Morton, 2005). Inmates will need economics whether or not they are in detention. Since research authenticates the practical relevance of basic principles of economics in a spectrum of decision-making, I consider teaching principles of economics in detention centers; transformation pedagogy that could gradually change the mindsets of inmates to productive adults with entrepreneurial skills. In addition, learning economics would help inmates acquire concrete understanding of the social, political, and economic contradictions of the outside world to avoid recidivism (Freire, 1994). The significance of GEDR in providing a foundation for further education cannot be overemphasized, and its equivalence to a high school diploma insinuates that holders of GEDR are ready to explore the economy to contribute to its productivity. Taking into consideration the work of Harrison and Hopkins (1967) on cross-cultural training and nontraditional education system, I approached the detention center as a transformational nontraditional institution with learning opportunities beyond GEDR. Economics in Detention is a program that goes beyond GEDR to create opportunities for inmates to learn and acquire skills on basic economics to start a small business after incarceration.

### **Research Review on Teaching Economics to Inmates**

Pearson (1988), demonstrated that economics (i.e. supply, demand, and market price factors; income and consumption; organizing a business; and

exposure to the use of economics and computer software) could be incorporated into the teaching of inmates. Brahmastre (2001) demonstrated that economics helps develop critical thinking abilities of inmates by using a cognitive problem-solving approach that leads to effective decision making. In addition, economics teaches rational consumer decision-making and marketplace alternatives crucial for inmate's reentry into the community (Brooks, 1980). Rudin (1998) demonstrated that teaching business economics to inmates is not challenging; similar to undergraduate students, inmates need to learn economics to make productive decisions in the economy.

### **Approach**

There is an overriding assumption in adult education literature that education of most inmates should be of elementary or middle school level. In most elementary or middle schools, economics is a separate course or an inclusion or "infusion" in other courses (Walstad, 2001). In the Baltimore City Detention Center, I did not find teaching economics through infusion feasible because not many courses are offered to accommodate such an option. I acknowledged that the class had to be a blend of concrete concepts, facts (which in essence is the practicality of economics) and visual perception as opposed to intuitive, and theoretical (Jung, 1971). It is crucial for educators to utilize these concepts to help inmates feel comfortable and inclusive in classroom learning (Lage, Platt, & Treglia, 2000). In addition, to enable inmates to perceive economics information and be actively involved in converting the information learned into knowledge, I adopted active experimentation and reflective observation learning (Kolb, 1984). These education models seem to work well even in nontraditional education settings.

### **Program Objective**

The objective of "Economics in Detention" is to teach business skills to inmates using basic, but essential, concepts in economics that would help to move the mindsets of inmates from incarceration to entrepreneurs. If inmates cannot find employment, they should be encouraged to take risks and start an authentic small business; opposed to taking risks on an illegal business that will land them back in jail.

### **Program Goal**

The goal is to provide inmates with a learning opportunity to enable them to start an authentic small business after incarceration. This opportunity, if successful, could help reduce the high recidivism rate in Baltimore City.

### **Targeted Audience**

Participation was voluntary. I designed a flyer, as an advertisement of the program to inmates, a month before the program started. The flyer detailed the program objective, "learning basic economics concepts using computer applications to start a small business after incarceration." Forty-four inmates registered into the program.

### **Program Activities**

The entire program duration was two months. There were two sections: The concept learning section (Topics 1–4) and the Microsoft Excel application section (Topics 5–6). Each section was a one-month program and met three days a week (Monday, Wednesday, and Friday), two-hour class sessions (10:00 a.m.–12:00 p.m.).

No doubt, these are abstract concepts and most people would think that these are difficult concepts for inmates with a GEDR to learn. However, the more these concepts are learned, the more familiarity is acquired; and when learned and

**Table 1—Topics and Content of the Program**

Topics	Content
1. Entrepreneurship	The Entrepreneur, Risk, Forms of business organizations, A Business Plan
2. Basic Principles of Economics	Scarcity, Choice, Opportunity Cost, and Allocation (Decision Making Tools)
3. Market Concepts	Supply and Demand and Price
4. Business Concepts	Cost, Total Cost, Revenue, Total Revenue, Profit, and Incentives (Cost Minimization and Profit Maximization)
5. Introduction to Microsoft Excel	Excel—Menu, Rows, Columns, Cells, Selecting or Highlighting, Functions and Formulas, and Goal Seek
6. Practical Application using Microsoft Excel	Tabulating Quantity and Cost (minimize cost). Determine Selling Price. Deriving Total Cost, Total Revenue, Profit (maximize profit). Basic Forecasting—business future

applied, it becomes evident that these concepts are the repository of concrete elements for business practices in the economy. In addition, almost all these topics are part of the Voluntary National Content Standards in Economics (CEE, 2010).

### Methodology

**Concepts:** Teaching concepts involve visual and verbal activities including word search puzzles, matching questions, reviewing concept definitions, and video lectures/discussions.

**Word search puzzle:** Every class started with a word search puzzle consisting of economic concepts created from [puzzlemaker.discoveryeducation.com](http://puzzlemaker.discoveryeducation.com). Due to time constraints, inmates are given limited time to work on the puzzle. I used familiar examples to explain the meaning and significance of each economic concept in the puzzle.

**Matching Questions:** There was a concept matching activity where concepts in one column are matched with an incomplete definition in another column. Inmates were asked to work first, individually, and then as a group, using five minutes to interact and compare their activities with that of their classmates. After completing concept-matching activities, I used the projector

to show a PowerPoint slide revealing the correct definitions.

**Reviewing the Concept Definitions:** In reviewing concept definitions, I asked volunteers to take turns reading each definition and to ask their classmates if they are familiar with the concept or not. If they are familiar with the concept, they may share their experience of the concept to the group.

**Video Lectures/Discussions:** I used video clips to demonstrate risk taking and the determination of becoming an entrepreneur from the success stories of business moguls, who had experienced failure or came from poor parents, but became successful entrepreneurs.

**Directions for Video Lectures:** I informed the inmates that the purpose of playing the video clip was to help them learn from the trajectories of some successful entrepreneurs. Also, I informed them of frequent interruptions of the video to get their feedback on peculiar or innovating business approaches from the clip. The videos I selected for the training exemplified the motivations of successful businessmen [*Business Ideas—Lessons from Milton Hershey, His Story a Self-made millionaire at age 14 (Dr. Farrah Gray), Magic Johnson launches Aspire Cable Television Network,*

*Diddy on CNBC's The Big Idea, His Story- Self-made millionaires Daymond John of Fubu and Shark Tank's Robert Herjavec Reveals Keys to Mega-Success. Daisy Cakes and Talbott Teas featured on ABC Shark Tank*]. The video clips generate discussions, which can sometimes lead to distractions as well. To dissolve any distractions, I placed the video on pause and then asked a question relating to the video. Playing video clips can be a great visual teaching technique and if used with caution its impact can be great on the learner.

**Figure 1—Inmates designing small business projects after acquiring skills from MS Excel.**



**Application of concepts:** The application class teaches the inmates to use Microsoft Excel, to list fixed and variable items for a potential business, assign expected cost of items, derive total cost, expected revenue, total revenue and profit; performing complex calculations just by clicking the mouse.

**Method of Participation:** I expected the inmates to contribute in classroom discussions, and work in small groups or pairs. Before the end of every class, inmates did reflective activities (what is your favorite concept from today's class, and how can you apply that in business or personal life?). First, I asked the inmates to reflect on the learned concept (e.g. scarcity, choice, opportunity cost, etc.) and make a list of how the concept could

affect a small business. Second, I asked them to form groups of four, share their ideas with their group members, and to elect a volunteer from their group to report to the class about the group's activity. This approach helped to create an active learning environment for the inmates.

## Outcome

Using the University of Maryland Extension end of class evaluation tool to capture the intent to change behavior (N=44):

- 95% indicated that they acquired new knowledge from the program.
- 99% indicated their determination to become small business owners after incarceration.
- 95% indicated that they would recommend the program to other inmates.

In addition, I received a letter of appreciation from Baltimore City Detention administrators indicating the need to continue with the program and a plan to collect and compile impact data.

## Conclusion

Although this program was a pilot program that started last year, the Baltimore City Detention Center is engaging University of Maryland Extension for the long term. Increasing numbers of inmates who heard about the program from previous attendees are requesting to attend "Economics in Detention".

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## BOOK REVIEW



### ***Improving Adult Literacy Instruction: Options for Practice and Research***

**National Research Council**

Washington, DC: The National Academies Press, 2012.

Cost: \$65.00

Recognizing the need for research and development in the area of adult literacy, the U.S. Department of Education recently commissioned the National Research Council (NRC) to the Committee of Learning Sciences to create a resource for adult literacy educators, policy makers, and researchers. In response to this request, *Improving Adult Literacy Instruction: Options for Practice and Research* was produced. The charge given to the committee of authors was to synthesize—identify—analyze—establish: synthesize available research (both quantitative and qualitative), identify factors impacting adult literacy development, analyze the implications, and establish recommendations for future practice and research. Because of the limited relevant research available in the area of adult literacy, the research synthesis was limited. However, by combining what research was available with that from the adolescent population, the committee was able to identify and analyze factors which influenced their recommendations. In fact, the strongest parts of this resource are the recommendations provided.

The information is organized into nine chapters, each of which addresses both the available research and that which is needed within the specific topics related to adult literacy, including technology in the classroom, the needs of English Language Learners, and motivational factors. Within this review, I will be focusing primarily on the conclusions and recommendations provided by the authoring committee in order to guide future research, instruction, and policy.

*Reviewed by*  
*Elena Nightingale*  
*Georgia State*  
*University*

The authors produced nine research-based conclusions to aid teachers and practitioners of this population based on the findings discussed in the chapter topics. These conclusions include an emphasis on the need to customize literacy instruction based on the cognitive and demographic diversity of adult learners. Through their conclusions, areas of language support, assessment design, and technology instruction are illuminated. The conclusions are presented in a clear and organized way so teachers and practitioners can easily transfer some of the presented ideas into their classrooms.

One of the most important conclusions which the authors draw from the synthesized research is aimed at informing researchers within this field. The committee highlights the need for relevant assessment measures for adult learners which 1) assess a range of literacy tasks, 2) are aligned to common learning goals, and 3) produce useful information at the individual, classroom, and program level. Recommendations are also provided for policy makers, and the authors primarily address the need for expansion of this area, including investment in the creation of a research-based adult literacy program structure, professional development and technical assistance for instructors, and nation-wide collaborative research and evaluation. One significant example is the call for additional investment of rigorous collaborative longitudinal research studies focused on sustainable and effective instructional approaches. The committee outlined the importance and relevance of detailed quantitative and qualitative research on all adult learner populations, which can be difficult to study due to high attrition rates and within-group diversity.

This text is cohesive and organized, remaining applicable throughout the sections to the three target audience groups: practitioners, researchers, and policy makers. The exhaustive nature of this resource sets it apart from many other resources which typically only address specific aspects of adult literacy. This resource provides two important contributions to the field of adult education and literacy. First, it presents a summary and interpretation of research relevant to adult literacy instruction within a single source. The nine chapters cover a multitude of often interrelated factors which can inform research on adult learners and allow the authors to effectively communicate the complexity of

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*The authors produced nine research-based conclusions to aid teachers and practitioners of this population based on the findings discussed in the chapter topics.*

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*The exhaustive nature of this resource sets it apart from many other resources which typically only address specific aspects of adult literacy.*

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*In addition to providing valuable information and direction to the target audience groups, this resource can be of use to future educators, policy makers, and researchers studying adult literacy.*

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this heterogeneous population of learners.

Second, the authors provide a call to action which goes beyond simply including a recommendation for the use of a given teaching methodology. Throughout the conclusions and recommendations, we find guidance for future research studies which focus on the gaps in the research of adult literacy education. Specific factors, such as a focus on attrition rates, and more general needs, such as the call for multidisciplinary and longitudinal research, are included here. The detailed and research-based recommendations to the three different groups are relevant and clear, and the value of these focused recommendations is high: it opens the door for collaborative, multi-disciplinary work, and it integrates the valuable input of all of those involved in the improvement of adult literacy instruction. Multi-disciplinary research and cross-content instructional approaches are critical in the attempts to improve the current state of adult literacy instruction.

In addition to providing valuable information and direction to the target audience groups, this resource can be of use to future educators/policy makers/researchers studying adult literacy. Because the National Research Council provides a current and accessible foundation to adult literacy instruction, this is a valuable tool in educating the future professional who may become an adult literacy practitioner, policy maker and/or researcher. Thus, in addition to recommending this resource to the targeted audience of researchers, policy makers, and practitioners, I also recommend this resource to anyone who is considering pursuing a career in any of these roles. In conclusion, it is my hope that this book is just the beginning, and that the National Research Council will periodically revisit the field of adult literacy to provide updated summaries and recommendations.

Reviewed by,

*Elena Nightingale*

Georgia State University


# LINCS—On-Demand Adult Education Opportunities


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- A collection of high-quality, multimedia resources in 16 topic areas;
- An online community connecting you with teachers and experts across the country;
- A learning portal with self-paced online courses in many subject areas; and
- Trainings coordinated by your state with the LINCS Regional Professional Development Centers.



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*LINCS is funded by the U.S. Department of Education, Office of Vocational and Adult Education. It is comprised of the Resource Collection and Technical contracts, and the Regional Professional Development Center grants.*

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## WEB SCAN



### ***Online Content Management Website: Create a web-accessible student learning system that dovetails with your class curriculum***

Edited by David J. Rosen

President

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**T**echnology offers teachers free digital tools to build a customized online learning system, one that fits their learners in approach, subject, content, level and learning style(s). Building your own online learning system is not quick or easy, but it may be what is needed. In this Web Scan you will find some free, online content management tools that you might find useful.

Before choosing a tool (or tools), first, figure out your learning objectives and how you want to structure your online learning system. If you already use a classroom curriculum that includes learning objectives (competencies or intended learning outcomes), this is easier, but you will still need to find online learning resources. There are lots of free online learning resources, but they all require your time to review before you assign them to your students. Here are some ideas of where to find them:

- Search YouTube <http://youtube.com> for instructional videos. You'll find lots!
- Check out the Literacy List, a free online review of instruction web pages for adult learners <http://xfin.tv/1evWHER> (Note especially the new video-based instruction page at <http://xfin.tv/1mUo0Nx>)
- If you teach numeracy or math, download a free list of math video web sites suitable for adult learners at <http://bit.ly/1fldBKl>
- If you teach adult secondary level or transition to college writing, download this free list of writing instruction video web sites at <http://bit.ly/1e5yOZX> and download reviews by ASE writing teachers of some of these videos at <http://bit.ly/L7mhYZ>



*Edited by  
David J. Rosen*

Once you have the objectives and the learning resources, you will need a way to organize and store them so your students can easily find and access them inside or outside class; wherever they can get web access (e.g. home, work, library, friend or family member's home, by smart phone, tablet, etc.)

Also, you might want to identify and store a formative assessment with each learning resource or unit of resources. Your students can take the assessment to indicate to them and you if they have mastered the content or skills. In some cases you can use a free or purchased online instructional management system (e.g. PLATO, Skills Tutor, Learner Web, USALearns, Khan Academy, Core Skills Mastery, and many others) to make this easier. The tradeoff is that these proprietary content management systems are built for you, not by you, and they may not exactly align with your curriculum or students' needs. If you want to design your own online learning system, perfectly aligned with your face-to-face curriculum, where you can assign individual learning objectives to your students, and have learning resources and assessments you have chosen or created, here are six free or inexpensive platforms that you could use to store your learning system:

### 1. Live Binders, "your 3-ring binder for the web"



<http://www.livebinders.com>

Think of this as an empty web-based curriculum binder that you can fill with units, lessons, assessments, and other curriculum resources which you and your students can access.

### 2. Net Texts



<http://www.net-texts.com>

Designed for educators, this is a content management website that allows teachers to select existing courses or to create new ones, and to mix and match content from the net-text library with a teacher's own. Students can access this through a computer, or an iPad or Android tablet.

### 3. Dropbox



<http://www.dropbox.com/home>

You'll find a review of dropbox and four other "online syncing services" at <http://bit.ly/1a04fnt> Dropbox is a huge filing cabinet with nothing in it. You add your own folders with your own material: units, lessons, assessments, or whatever aligns with your classroom curriculum.

### 4. Moodle



<http://moodle.com>

Moodle is a free learning management system, most often used for designing and delivering courses. It could, however, be used to store lessons. For programs that already use Moodle, for example for distance learning courses, this might be a good solution for building a blended learning curriculum.

### 5. Evernote



<https://evernote.com>

Evernote can be used to save anything you see on the web or can take a picture of. Not specifically designed for education purposes, it is widely used by educators, perhaps most often to save web pages or images or documents to return to later. It could also be used to store lessons, units or a whole curriculum, which a teacher and her students can privately access.

### 6. Pinterest



<http://pinterest.com>

Like Evernote, Pinterest can be used to save and organize many different things: lists, travels, events, projects, and for this purpose, collections. Many teachers find it comfortable to save curriculum units and lessons using Pinterest, and they can set up a Pinterest site which they and they students can privately access.



## Bringing nationwide expertise to focus on prevalent issues in Adult Education

### PRESENTERS INCLUDE

- Literacy Information and Communication System (LINCS)
- National Association for Adults with Special Learning Needs (NAASLN)
- National College Transition Network (NCTN)
- U.S. Department of Education's Office of Vocational and Adult Education (OVAE)
- Professionals from colleges, universities, and organizations across the country

### TRACK THEMES

- Adult Education
- Advocacy
- College & Career Readiness Instruction/Implementation
- College Transition/Career Pathways
- Distance Learning
- English as a Second Language
- Serving Native American Populations
- Technology in the Classroom
- Testing (BEST, GED, HiSET, TABE, TASC, etc.)
- Workforce Development & Training (including I-BEST)

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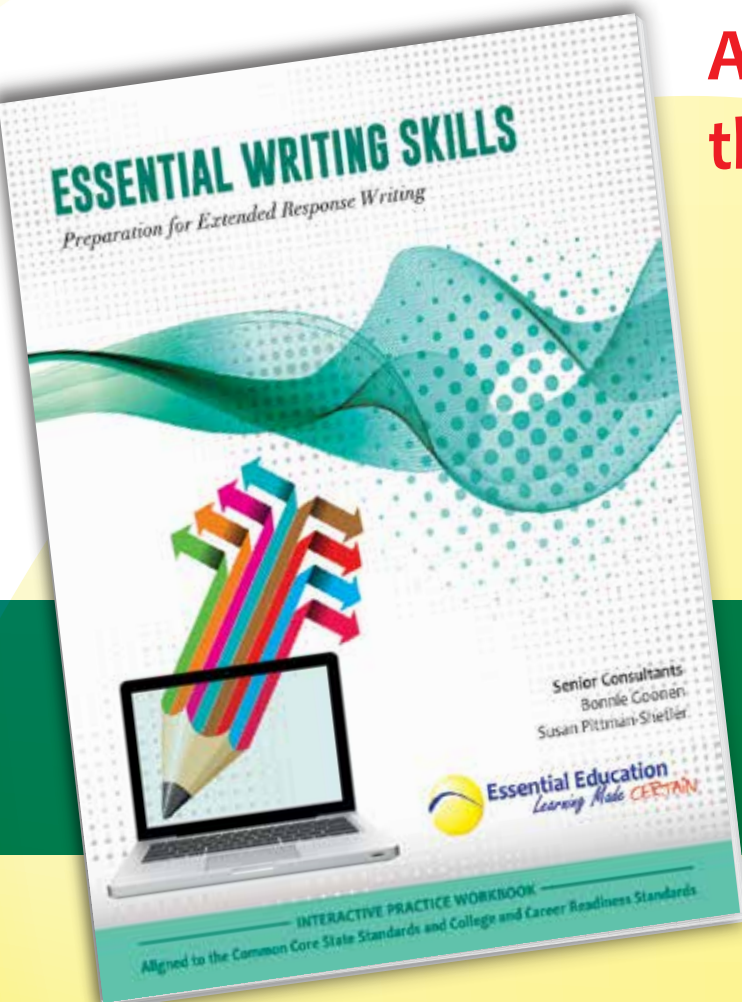


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