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# Adult Literacy Education:

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**Research Article**

# Psychological Stress in Adult Learners with Low Literacy

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## Abstract

Stress in adult learners is a neglected topic, despite practitioners observing that their adult learners often display psychological discomfort. We address the effects psychological stress has on learning, then define the constructs of stress, trauma, resilience, and psychological distress. Twenty-three adult learners reading at elementary levels completed measures of stress, trauma, resilience, and psychological distress. Procedural details for how we administered the measures to promote feasibility and acceptability in this population are provided. Results indicated that the sample's levels of stress, trauma, and psychological distress were disproportionately high, and levels of resilience were relatively low, compared with the general adult population. Limitations, lessons learned, and practical implications for instructors and administrators are provided.

***Keywords:*** psychological stress; adult learners; literacy; trauma; resilience

## Psychological Stress in Adult Learners with Low Literacy

As an adult, the path to improving one's literacy can include a variety of potentially stressful personal and interpersonal challenges. Persistently perceived stress can adversely affect academic learning and performance. Learning-related tasks require adequate working memory, which seems especially imperiled as a function of stress (Beilock, 2008). Strong performance and learning are predicated on effectively managing stress. All learners have the potential to perceive academic challenges as stressful, although some subgroups may encounter additional risk for stress and adverse outcomes. There is considerable evidence confirming the detrimental effects of psychological stress on learning for children, adolescents, and college students (Lantz et al., 2005). When instructors ignore stress, emotions, and mental health of their learners, it can be difficult for learners to benefit from instruction (Eccleston, 2023; Smith, 2010). Although anecdotally adult literacy practitioners share that many of their learners experience stress, anxiety, and depression due to past or current chaos, trauma, or violence in their lives (e.g., Chapman & McHardy, 2019; Horsman, 2000; Johnson, 2018), this group of learners has not been extensively studied in stress research. This article provides initial evidence to help address this gap.

One plausible reason for the dearth of stress research on adults with low literacy is the absence of information about how best to measure psychological stress and related factors with this population. Basic measurement

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information is needed prior to (a) assessing whether adults with low literacy are more psychologically stressed than adults with proficient literacy; and (b) implementing interventions aimed at stress management for adults who have low literacy skills. Without confidence in measuring key targets of interventions to reduce stress, it is impossible to draw inferences regarding their effectiveness.

Our review of the literature indicates that stress measures have been developed and validated with primarily proficient adult reader samples. Therefore, the current study is designed to provide some preliminary information based on popular stress measures when used with adult learners who have low literacy levels. We are particularly interested in the extent of stress, traumatic experiences, resilience and psychological distress that this population experiences. We provide practical information for administering stress-related questionnaires with adult literacy learners, attitudes and pitfalls to avoid, and preliminary analyses on the use of stress measures with this group. Thus, the present study serves to highlight challenges in assessing psychological stress in adult learners, as well as presenting preliminary findings on the degree of psychological stress found with adult learners to help inform interventions most appropriate for this population. In this study, several stress-related assessments were administered to adults who read at elementary levels. The article begins with a brief overview of the aspects of psychological stress of interest for this study, measures to assess each, with a special focus on literature on use of those measures with adults with low literacy, when possible.

## Aspects of Stress and Stress Measurement

### Perceived Stress

Perceived or psychological stress refers to the appraisal of events or experiences as threatening or challenging given the availability of one's resources to cope with the challenge (Lazarus & Folkman, 1984). For example, psychological stress could be present for an adult learner who has to complete an academic assignment but feels inadequately prepared to perform well on the task. One popular 10-item measure of perceived stress is the Perceived Stress Scale (PSS; Cohen et al., 1983; Cohen & Williamson, 1988). Sharp et al. (2007) examined the PSS with their sample of adults who read at diverse reading levels. Only four of the 10 PSS items could be identified that had at least a minimal association with a stress factor for adults reading at below the 9th grade reading levels, with internal consistency estimates in the marginally acceptable range for the four items. However, two of these four PSS items required 8-10th grade reading levels, meaning that those items might not be accessible to adults reading at lower levels.

Further limiting our understanding of stress measurement for those with low literacy is that a low literacy level has often been used as an exclusion criterion. For example, Shallcross et al. (2015) evaluated the original four-item version of the PSS (PSS-4; Cohen et al., 1983) after excluding adults reading below the 7-8th grade level. Similarly, Bottonari et al. (2010) evaluated the original four-item version of the PSS (PSS-4; Cohen et al., 1983) after excluding participants with less than 6th grade reading levels. Ignoring exclusion criteria and limited item adequacy, average stress scores tend to be one-fourth to one-half of a standard deviation (*SD*) higher for those with lower education levels compared with high school graduates (Bottonari et al., 2010; Cohen & Williamson, 1988).

### Trauma

Trauma is an extreme stress-related construct. "Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being" (Substance Abuse and Mental Health Services Administration, 2014, p. 7). Physical, sexual, or psychological abuse could be considered examples of traumatic experiences. Having some experience with trauma is unfortunately relatively common for all adults (Kilpatrik et al., 2013), although it is important to note that trauma exposure is not equivalent to a diagnosis of post-traumatic stress disorder. Miller-Roenigk and colleagues (2023) sampled 286 adult literacy/adult English language learners (no reading levels provided, average highest report level of education was 11th grade) and found that 56% had some exposure to a traumatic event.

The Post Traumatic Stress Disorder (PTSD) Checklist (PCL-5; Blevins et al., 2015) is a popular measure of psychological

issues associated with trauma. However, some reviewers have raised concerns that the reading level required for the PCL-5 may be above the ability of many adults, possibly requiring 10-13 years of education to comprehend (Wilkins et al., 2011); the Flesch-Kincaid Grade Level is 11.3 for the PCL-5. As best we could determine, the question of suitability of the PCL-5 for adults with low reading levels has not been empirically addressed.

## Resilience

The perception and effects of stress can be buffered by overall tendencies to be resilient in response to stress. Resilience refers to personal characteristics and typical coping strategies that help individuals manage difficulties and adversity. Resilience might be evident for a student who, after receiving a disappointing grade on an assignment, considers the situation a learning opportunity and responds by asking the teacher for assistance and additional guidance for improvement on the next assignment. The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is perhaps the most popular resilience measure. The CD-RISC manual indicates that items are at the 5th-grade reading level; the Flesch-Kincaid Grade Level is 5.1 (Davidson & Connor, 2018). There do not appear to have been published studies using the CD-RISC with adult learners with low literacy.

## Psychological Distress

According to the APA Dictionary of Psychology (n.d.), psychological distress refers to "a set of painful mental and physical symptoms that are associated with normal fluctuations of mood in most people...It is thought to be what is assessed by many putative self-report measures of depression and anxiety" (n.p.). Examples of depression include distressing and persistent sadness or loss of interest in usually pleasurable activities. Examples of anxiety could include distressed apprehension or worry as well as avoidance of potential anxiety "triggers." Sentell and Ratcliff-Baird (2003) supported the importance of the relationship between reading skill and accurately assessing psychological distress but acknowledged measurement challenges in doing so. They evaluated item content and comprehension of the Beck Depression Inventory (BDI; Beck et al., 1961) in a sample of adults who had reading difficulties; the BDI has items written at the 5th-6th grade level. They found that adults reading below the 6th grade level struggled understanding most BDI items. They noted that some of the same issues detected in item phrasing and content for the BDI also were evident in the more recent version, the BDI-II (Beck et al., 1996). The BDI scales are also relatively long measures of multiple factors, with each of the 21 items consisting of a brief term (e.g., Sadness) or phrase (e.g., Loss of pleasure) followed by four or more sentences to select to represent how one has been feeling over the past 2 weeks. Thus, in the present study, we used the much simpler Kessler Psychological Distress Scale (K6; Kessler et al., 2003), a brief scale tapping a single factor of psychological distress that uses the same response scale for each of its six items. Items also are written at the 4th grade reading level, a reading level suited for adults with low literacy skills.

## Purpose of the Study

This exploratory study used slightly revised approaches for measuring stress to determine the suitability of measures and procedures used with adults with low literacy skills. We initially explored the acceptability of completing such measures with adult learners, and the feasibility of administering them in small group settings. Next, we assessed the levels of stress, trauma, resilience, and psychological distress in the adult learners. As already described, previous researchers have referenced low literacy in their samples (e.g., Wisnivesky et al., 2010) or more directly assessed literacy levels (e.g., Sharp et al., 2007). However, prior research has presented very limited descriptions on the average levels of stress, trauma, resilience, and psychological distress in those samples. Therefore, the current study's results are compared to other studies of adults in the general population to determine whether adults with low literacy are more or less stressed compared to other adults described in studies of the general adult population.

Thus, the specific exploratory research questions are:

1. Is it feasible to administer stress-related scales to adult literacy learners?
2. What do the measures tell us about the levels of stress, trauma, resilience, and psychological distress in a sample of adult literacy learners?
3. How do the levels of the adult literacy learners' stress, trauma, resilience, and psychological distress compare to the levels reported in the literature?

# Method

## Participants

Twenty-three learners attending an adult literacy program in a large Southeastern city participated. Based on the literacy program's administration of the Test of Adult Basic Education (TABE 9/10; see https://www.kansasregents.org/resources/PDF/3088-TABECASASCrosswalk.pdf), they had 5th grade or lower reading levels (M = 419.14, SD = 64.07). Although modest, a sample size of 23 would be adequate to detect statistically significant correlations that were large in magnitude (Cohen, 1992). The learners were primarily female (N = 16, 69.6%) and ranged in age from 27 to 74 (M = 49.30, SD = 12.97). Ninety-six percent identified as Black or African American. Eight participants (34.8%) had graduated from high school and three of the participants (13.0%) reported having a full- or part-time job.

## Measures

We adapted instructions and included sample items (unrelated to study constructs) intended to help participants understand the scales, and in addition to providing written format, all items were read verbally (see Procedures).

### *Perceived Stress Scale*

There are different versions and scoring of the PSS that we considered before settling on the subset of items Taylor (2015) identified to measure Perceived Helplessness. Those items are all worded in the same "negative" direction that seem (a) closely aligned with our primary interest in measuring perceived psychological stress, and (b) less likely to be confusing for adult learners than the mixture of positive and negatively worded items comprising the full PSS. Items assess the degree to which respondents perceive stress over the past month (e.g., "How often have you felt nervous and 'stressed'?"). Several other items from the Perceived Helplessness subscale refer to feeling unable to control important things in one's life, difficulty coping with life's demands, and feeling overwhelmed by difficulties as they piled up. Participants respond to items using a five-point rating scale of 0 (Never), 1 (Almost never), 2 (Sometimes), 3 (Fairly often), and 4 (Very Often). Reliability and validity of the Perceived Helplessness scores have been supported in several studies with diverse samples. For example, Soria-Reyes et al. (2023) reported McDonald's Omega [ω] = 0.87 and Tay (2021) reported Cronbach's coefficient alpha = 0.87 as reliability estimates for the Perceived Helplessness subscale. However, some research also has raised questions about most of the PSS items when used with adults with low reading abilities (Sharp et al., 2007).

### *Post-Traumatic Stress Disorder Checklist- Civilian Version, Abbreviated*

The abbreviated PCL-C consists of two items that correspond to the dominant symptoms of PTSD: (1) "In the past month, how much have you been bothered by repeated disturbing memories, thoughts, or images of a stressful experience from the past?" and (2) "In the past month, how much have you been bothered by feeling very upset when something reminded you of a stressful experience from the past?" Items are rated from 1 (Not at all) to 5 (Extremely). Evidence supports high reliability and validity of PCL-C scores (Lang & Stein, 2005). As noted earlier, exposure to trauma and self-reported symptoms associated with PTSD are not equivalent to a PTSD diagnosis. Such information is useful in screening for further evaluation. Importantly, studies directly evaluating the PCL-C for adults with significant reading challenges have, to our knowledge, not been reported.

### *Connor-Davidson Resilience Scale*

The 10-item version of the CD-RISC contains items aimed at measuring "bounce-back" and adaptability over the past month (e.g., being "able to adapt to change"). Possible responses to items range from 0 (Not True at All) to 4 (True Nearly All of the Time). In general adult samples, scores have shown strong reliability and validity (e.g., Campbell-Sills & Stein, 2007). To date, studies using the CD-RISC with adults who have very low levels of literacy do not appear to have been published.

### *K6 Psychological Distress Scale*

The K6 is a 6-item inventory that measures global psychological distress, gauged by asking questions related to depressive and anxiety-related symptoms over the past 4 weeks (e.g., "During the past month, about how often did you feel nervous?"). The K6 can be used as a screening scale for "mental illness in health risk appraisal surveys and primary care screening batteries" (Kessler et al., 2002,

p. 974). Responses range from 1 ("None of the Time") to 5 ("All of the Time"). Research supports the reliability and validity of K6 scores across a variety of contexts and populations (Kessler et al., 2003). That said, we were unable to locate research in which the K6 was evaluated for use with adults who have significant reading difficulties.

### Procedure

After the study was approved by the university's institutional review board, learners were recruited from an adult literacy center in a large Southeastern city. Participants provided permission for investigators to access their TABE scores from the adult literacy program. Prior to the start of data collection, all research assistants received training in test administration, adult literacy sensitivity, how to monitor learners, and how to respond in a consistent fashion to participants' comments or questions. Forty-five-minute sessions were conducted with separate small groups of students (6-10 in a group) in classrooms within the center. Classrooms consisted of chairs and tables, and learners were seated in every other chair during the sessions to help protect privacy (i.e., there was one empty chair between each pair of learners). Each of the sessions involved oral administration of self-report questionnaires in one of three different sequences to control for order effects. Learners completed the questionnaires by circling their response ratings on hard copy versions of the questionnaires as they followed along with the oral administration. Depending on the session, there were 3-5 additional research assistants who monitored learners to ensure they were adequately following along and answering the right items. At the conclusion of a data collection session, each learner received $10 compensation for participation.

### Data Analysis

To explore the acceptability and feasibility of the measures, we critically considered the measures, administration adaptations, and participant responses (e.g., questions and related dialogue) and responsiveness (e.g., attentiveness, survey completion) to the procedures. To gauge acceptability in a more quantitative manner, we followed recommendations to evaluate the quality of the data (e.g., Curran, 2016). For example, we conducted long-string analysis on the 10-item CD-RISC to help locate possible identical response sequences for items (i.e., despite different item content, six or more of the responses to the 10 items were the same). To detect outliers, we followed Iglewicz and Hoaglin's (1993) recommendations and used a modified Z-score approach based on the median absolute deviation of scores for each of the scales or subscales. This approach is particularly useful with small sample data. Finally, descriptive analyses were conducted to describe participants' responses and sample descriptive statistics were compared with other larger scale studies of adults to determine the comparative levels of stress, trauma, resilience, and psychological distress with this sample.

## Results

### Research Question 1: Is it feasible and acceptable to administer stress-related assessments to adult literacy learners?

#### *Feasibility and Acceptability*

There were several considerations regarding feasibility to administer these assessments to adult literacy learners. All the scales used in the current study were adaptable for this population in part because they relied on minimal procedures typically used for self-report questionnaires (i.e., no strict standardization for administration). They also measured content familiar to the participants, such as stress and resilience, although the content of some measures posed challenges with the administration (e.g., difficulty understanding words). In short, feasibility was supported but required additional structures and supports for the learners.

Administering the questionnaires in small group settings required one researcher to lead each session and a small group of research assistants to respond to participants' questions. Adult learners seemed to respond well to our administration. Reading was not an issue for our participants because the session leader verbally explained all directions and read out loud each item and response option. Based on their attentiveness, task involvement, and questions, they seemed to benefit from the session leader reading the directions and items. They also seemed to benefit from having other research assistants in the room because they frequently raised their hands when they needed individual assistance with any questions or issues. They also acknowledged clearer understanding

when the research assistants provided assistance. All participants remained for the duration of their scheduled session, and none submitted an incomplete survey. These qualitative impressions suggested reasonable acceptability of the procedures. Due to a concern that some of our participants may not understand the different scales used on each measure before each assessment, we included example items that had been designed by the researchers to teach participants how to use the rating scales. An example item instructed participants to report how often they brushed their teeth, with item responses of "I never do this," "I do this a little," "I do this a medium amount," and "I do this a lot." To our surprise, instead of providing clarification, this seemed to confuse them with participants reporting misunderstanding why they were being asked these types of questions.

Quantitatively, our long-string analysis on the 10-item CD-RISC indicated that responses from only two participants revealed problematic response patterns. Because their responses were varied on the other questionnaires, their item responses for those measures were retained but responses on the CD-RISC were set to missing values. Based on Iglewicz and Hoaglin's (1993) criteria, none of the participants had additional outlier values for any of the questionnaires. In sum, based on behavioral observations and data quality, feasibility and acceptability were supported with most participants responding appropriately to the procedures and measures.

## Research Question 2: What do the assessments tell us about the levels of stress, trauma, resilience, and psychological distress in a sample of adult literacy learners?

Table 1 reports the sample means (*M*s), standard deviations (*SD*s), and correlations between the scores.

### *PSS Perceived Helplessness*

The possible range of scores was 0 to 24 and scores in this sample ranged from 3 to 22. The average score was 12.82 (*SD* = 5.60) and the median was 15.00. The scores tended to reflect moderate levels of perceived stress. The variability with scores (*SD*) was only slightly higher than reported in other studies (e.g., Taylor, 2015).

### *PCL-C Trauma*

The possible and actual range of scores were the same (2 to 10). The average was 6.18 (*SD* = 2.44) and the median was 6.50. Thus, there was a tendency in this group to report being bothered by memories and reminders of past stressful experiences.

### *CD-RISC Resilience*

The average score was 20.44 (*SD* = 8.80), with a median of 20. The sample range of scores was 1 to 36, generally consistent with the possible range of 0 to 40. Overall, there was a tendency for participants to report relatively low levels of coping resources and resilience to stress. Furthermore, there was more variation in scores compared to *SD*s reported in several other community samples (see Davidson & Connor, 2018).

### *K6 Psychological Distress*

The average score was 10.33 (*SD* = 6.58), with a median of 9.00. In this sample, scores ranged from 0 to 21, consistent with the possible range of 0 to 24. Overall sample results were consistent with acknowledging some modest extent of psychological distress. In general, the descriptive statistics indicated that, although the sample was relatively small, scores tended to represent nearly the full range of possible scores. Stress and resilience were relatively high whereas psychological distress was more modest,

**TABLE 1: Scale and Subscale Means, Standard Deviations, and Correlations**

| Scale/Subscale | M (SD) | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. PSS Perceived Helplessness | 12.82 (5.60) | 1.0 | | | |
| 2. PCL-C Trauma | 6.18 (2.44) | .56* | 1.0 | | |
| 3. CD-RISC Resilience | 20.44 (8.80) | .35 | .16 | 1.0 | |
| 4. K6 Psychological Distress | 10.33 (6.58) | .61* | .65** | -.04 | 1.0 |

*Note.* *N* = 23, pairwise *N* ranged from 19 to 22.
* p < .01; ** p < .001; one-tailed test.

possibly due to the mix of different psychological distress indicators on the K6.

### *Correlations*

Correlations between the scores also are displayed in Table 1. Several results were consistent with what would be expected. For example, relatively large correlations indicated that people who reported high levels of perceived stress (helplessness) also tended to report being troubled by past traumatic experiences ($p = .004$) and were likely to report higher levels of psychological distress ($p = .002$). Alternatively, those reporting low levels of stress were also likely to report low likelihood of past trauma and less psychological distress. Another strong and positive correlation indicated that those who reported a high likelihood of past trauma also reported relatively high levels of current psychological distress ($p < .001$). One curious correlation was the moderate but positive association between CD-RISC resilience and stress. Although that correlation was not statistically significant ($p = .082$), this trend effect could suggest that some participants who were reporting stress might also report having some degree of resilience to difficulties. A scatterplot confirmed that general trend. It is possible that participants in this sample could feel stressed, possibly from current life challenges as well as prior difficulties, and having reached the point of being in an adult education program, they also can attest to their coping and resilience resources. Again, however, the level of those resources was not high, and the correlation was medium in effect size but not statistically significant; the association simply suggests a possibility that people with high stress were also those in this sample who had relatively higher levels of resilience compared with others.

The correlation between CD-RISC (resilience) and K6 (psychological distress) was also curious. The scatterplot of scores suggested no clear pattern between resilience and psychological distress. Some of the participants reported relatively low resilience (e.g., *M* minus 1*SD*) and high psychological distress (e.g., *M* plus 1*SD*), but some others reported relatively high resilience (e.g., *M* plus 1*SD*) and high psychological distress. Among those who reported moderate (near average) resilience, some had high psychological distress but others in this sample had low psychological distress (e.g., *M* minus 1*SD*). There was simply no clear pattern in the association between the two scores.

## Research Question 3: How do the levels of the adult literacy learners' stress, trauma, resilience, and psychological distress compare to the levels reported in the literature?

Participants' average scores were compared with several other studies that had information about stress, trauma, resilience, and psychological distress.

### *Perceived Stress*

The current sample's average stress level as measured by the Perceived Helplessness items, and adjusted for item length for comparisons, was approximately 1*SD* higher than the average obtained from a large survey of adults (Cohen & Williamson, 1988). In that survey, results based on subsample analyses of participants with low income, education level, race, and gender were also reported. When converted to be on the same scale based on the number of items, the current sample's average Perceived Helplessness score was higher by about one-half *SD* compared to the highest average level of stress reported in those subsamples. In sum, the current sample was considerably more stressed than the other samples measured by Cohen and Williamson. Of course, it is possible that had Cohen and Williamson conducted their study today, they would also find higher average levels of stress in their samples. Further research is warranted.

### *Trauma*

Based on scoring recommendations (Lang et al., 2012), approximately 77% of the current study screened positive for potential PTSD. This is a high rate of possible trauma in a sample. More careful evaluation would be required to determine if those who screened positive in this sample met criteria for a diagnosis of PTSD. Although Lang et al. (2012) reported extremely high rates of sensitivity based on the cutoff score used with the PCL-C, those results were based on an already diagnosed sample of patients with PTSD. If other future research supports the rate observed in this sample, based on the National Comorbidity Study (Harvard Medical School, 2007), results suggest over a 10x greater risk for PTSD in this sample compared with lifetime prevalence in the general population (7%).

### *Resilience*

Nugent et al. (2012) studied African American adults who had reported exposure to trauma consistent with

diagnostic criteria for PTSD. Specific literacy levels were not reported. However, Nugent et al. acknowledged that, "Due to variable participant literacy, all self-report measures were administered through verbal interview" (p. 1577), similar to procedures used in the current study. Furthermore, their sample was gathered in the same metropolitan area as the current sample, through clinics affiliated with a local public hospital that serves a large number of African American and low-income patients (40% of patients are unable to pay or are uninsured). Their sample average for the CD-RISC was 80.84, which would convert to 32.34 for the 10-item version of the CD-RISC completed by our sample. In the current study, the sample average was 21.86 or more than a full *SD lower* than the sample results for Nugent et al. According to the test manual, scores below 26 on the 10-item scale are below the cutoff for the 25$^{th}$ percentile of scores (Connor & Davidson, 2003); the current sample's average was about one-half *SD* lower than that cutoff. This means that the current sample had a very low level of self-reported resilience when dealing with difficult situations or stressors.

### *Psychological Distress*

Using K6 cutoff criteria (13 or greater; Kessler et al., 2010), about 31% of the current sample would be at-risk for serious mental illness. The sample rate in this study is about four times the national prevalence rate for adults (Brody et al., 2018). Similar to PTSD, however, diagnosis of depression or other mental illnesses would require more careful evaluation than can be accomplished with a screening instrument. Nevertheless, these possible rates for psychological difficulties should be a cause for concern, especially regarding how psychological distress can interfere with learning.

## Discussion

The current study represents an in-depth, critical evaluation of common scales used to measure stress, trauma, resilience, and psychological distress and extends prior work with an intentional focus on adult learners with low levels of literacy. Our initial qualitative review of scale directions, response options, item content, and participant behavior during data collection leads us to conclude that it would have been ill-advised to simply ask this sample to read the questionnaires and respond to the items. Although in some cases, the measures used in the present study required a higher reading level than was suggested by the participants' TABE scores (e.g., PCL-5 = 11.3 grade level), we found that oral presentation of most of the measures worked reasonably well with the study sample. We did learn one surprising lesson. To enhance acceptability, instructions for each scale were modified to include sample items. While we had believed the example questions would be helpful, participants appeared to be confused about the context or relevance of the examples (e.g., how much do you like cookies). As a result, future studies might eliminate example items when administering these scales, or perhaps consider other options for orienting participants to questionnaire administration.

Although we did not test empirically conditions that may have improved comprehension of the questionnaires, we employed various techniques to facilitate valid questionnaire responses that we recommend to other researchers who want to replicate our work. Each scale's instructions, examples, items, and response options were read aloud to the participants. Between two and four research assistants were available during survey administration to answer individual questions. Participants raised their hands and quietly asked their questions, which promoted discretion, confidentiality, and safety in vulnerably asking questions. Although this approach increased researcher burden, the modifications likely enhanced acceptability of the adult learners and facilitated data collection from a larger group of participants. Further, before data collection, research assistants completed training that emphasized the importance of promoting autonomy and dignity of all study participants. Due to the nature of the scale items, we understood that participants may feel vulnerable or uncomfortable participating in this study, and therefore consistent with ethical principles in conducting research, we stressed their autonomy in making decisions, and ensured that they understood the study sufficiently to give informed consent. Through additional training of researchers prior to study implementation, we also encouraged our research team members to (a) consider potential personal biases and assumptions about adult literacy learners of color, (b) self-reflect, and (c) embrace an attitude of respect and gratitude for research participants.

Despite adjustments to test administration, at times, participants had apparent difficulties with item comprehension or more fundamentally, how to appropriately rate their response to an item. Indeed, one consideration for future studies would be to include a follow-up session in which participants could be queried regarding their understanding of the items.

## Practical Implications

Results provide preliminary empirical evidence that supports adult literacy practitioner reports that many of their learners appear to experience high levels of stress, anxiety, and depression (e.g., Horsman, 2000; Johnson, 2018). As policy makers and researchers attempt to create and implement curricular modifications to facilitate an increase in adult foundational academic skills, more attention is warranted on the psychosocial needs of the adult literacy learner population. There is considerable evidence confirming the detrimental effects of psychological stress on learning for children, adolescents, college students, and people with low socioeconomic status (Lantz et al., 2005). It is possible that high psychological stress for some adult literacy learners is resulting in detrimental effects on their ability to learn from instruction (Chapman & McHardy, 2019). More research is necessary to confirm this impact.

Just over three-fourths of the sample had scores on the PCL-C in the range for possible PTSD. The elevations for this sample could be alarming given that Lang et al. (2012) reported extremely high rates of sensitivity based on the PCL-C cutoff. However, several cautionary notes should be considered. Lang and Murray (2005) found a relatively high rate of false positive PTSD diagnoses resulting from cutoff scores on the 2-item PCL-C. Moreover, Lange et al. (2012) were unable to evaluate specificity rates based on PCL-C cutoffs because their sample only contained patients diagnosed with PTSD. Thus, replication of this finding is warranted, and more careful evaluation would be required to determine if adult learners who screen positive would meet diagnostic criteria for PTSD (Blake et al., 1990).

Individuals who have experienced trauma need support (Grad et al., 2022). Miller-Roenigk and colleagues (2023) recommend that adult education programs should learn from the increasing "trauma-informed" program movement outside the adult education field, such as in K-12 educational contexts and clinical care settings (Cafaro et al., 2023; Fernández et al., 2023). Wartenweiler (2017) discusses the importance of creating "safe learning spaces" for adults who experience/d trauma, and Johnston (2018) specifies different classroom activities that can help those adults who because of trauma have difficulty learning. Grad and colleagues (2022) suggest that all learners would benefit from screening for trauma and referrals for trauma support. The brevity of the PCL-C scale combined with the potential for PTSD in this sample suggest it would seem reasonable to incorporate a brief screening and then referral process for adult learners who screen positive based on the PCL-C. Grad and colleagues (2022) also emphasize the need for teachers to be taught about trauma's impact on learning. We would like to add that adult literacy programs would benefit from a strong connection with clinicians who are willing to work pro bono or see clients on a sliding scale.

The need for, and potential value of, particular stress management interventions can be derived from our results involving the perceived helplessness aspect of psychological stress combined with comparatively low levels of resilience and high levels of psychological distress. Indeed, several items from the Perceived Helplessness subscale refer to feeling unable to control important things in one's life, difficulty coping with life's demands, and feeling overwhelmed by difficulties as they seem to pile up. Future research is needed to explore whether training in life skills, time management, and problem- as well as emotion-focused coping strategies would seem likely to strengthen resilience and counteract helplessness-related psychological stress. Such training will need to be tailored to the life situation of many adult learners and likely should include concrete, realistic applications for practicing new skills.

## Limitations

Although power analyses indicated that our sample was sufficient for analyses, the sample was small in number and therefore results can only be considered preliminary; we encourage others to collect further data with adult literacy learners. In addition, learners were recruited from a single adult literacy program in a particular geographic area, and both of those issues raise concerns about generalizability. A similar generalizability limitation involved

the sample of mostly Black/African American women; future research should expand recruitment and settings to include broader racial/ethnic participation. Of course, participation in research is based on those who volunteer, and such individuals might be different from those who choose not to volunteer.

We also made substantial changes to measures that ordinarily are administered as self-report questionnaires with items that participants read and rate. Although data were evaluated for quality of item responses (Curran, 2016), the changes in scale administration could raise concerns regarding the validity of the obtained scores. However, we reasoned that score validity concerns would be substantially exacerbated if respondents with low levels of reading skills were left on their own to read and rate the items without verbal instructions and additional supports.

## General Conclusions

Overall, results indicate that with proper instruction and adaptation, adult literacy learners can be orally administered the types of tests described in this article. Such results provide an initial picture of the stress levels of a population of learners who typically are left out of this type of research. Compared with other adult samples in the literature (e.g., Cohen & Williamson, 1988), the tested sample in general showed higher levels of stress, trauma, and psychological distress, as well as lower levels of resilience. However, more research is needed with larger samples in order to assess the validity and reliability of these tests for this particular population. Future research is warranted to isolate appropriate measures for this group so that a deeper understanding of the adult literacy learners' psychosocial well-being is apparent. Results from those studies can influence measure creation, intervention adoption, and specific adult educator strategies in the literacy classroom.

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Research Article

# "You Don't Know What I Went Through": Adult Learners Healing Through Multimodal Play

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## Abstract

There is a growing trend of states offering alternative pathways towards a high school equivalency outside of the traditional standardized test. Amidst this landscape, this study utilizes elements of teaching inquiry, participatory action research, and qualitative methods, to investigate the outcomes of using multimodal play in a composition unit within an adult high school equivalency classroom. Findings from this study suggest that multimodal play creates opportunities for students to make choices about the stories they tell and make connections as a way to feel a sense of belonging in education spaces, both of which act as a source of healing.

***Keywords:*** healing, high school equivalency, multimodal play

"The classroom just be too much going on."

"Yeah, it went too fast, and if you didn't understand the explanation, you be left behind."

"I was just a number in a room full of students and the teachers only dealt with the students that were acting up and only taught the students that were in Advanced Placement classes."

"lady you don't know what I just went through in school."

(*semi-structured interview, September 20, 2018*).

These quotes come from adult learners seeking their high school equivalency (HSE) diploma; adult learners who represent many others where the classroom never felt like a place they belonged. Without feeling a sense of belonging and agency, they were unable to successfully complete schooling in a traditional environment and, unfortunately, have been left without a diploma.

In many states, if a student does not earn their high school diploma through traditional schooling by the age of 21, passing the General Education Development (GED) assessment, or another approved standardized assessment has been the only way that adult students can earn a HSE diploma. With a focus on passing a standardized assessment, some literacy researchers and theorists argue that HSE programs teach a narrowly focused curriculum and emulate a system that students do not feel they belong to and that they struggle to learn in (Chen, 2013; Horsman, 1999). This paper argues that teaching literacy through multimodal play can help students make choices in order to take control of their learning and make connections with others in order to heal from and reframe their relationship to academic spaces. For the adult HSE students represented in this paper, making choices and connections was an important first step towards earning their HSE diploma.

## Understanding How Adult HSE Classrooms Became Narrowly Focused

A focus on standardized teaching grows out of the early years of education, during the age of industrialization. During this time, operational forms of schooling served all children with standardized curriculum to advance the

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moral, social, and economic interests deemed vital to the nation (Labaree, 1997). Due to the sheer number and ethnic diversity of high school students in urban areas, Charles Eliot believed this could best be achieved by way of vocational education. Vocational education was for those who supposedly could not handle 'serious' math or science. Intellectual learning was saved for the most privileged members of society. To determine which track students would be placed on, Thorndike introduced standardized tests (Labaree, 1997). Standardized tests have since played a prominent role in education with the accountability measures introduced by George W. Bush and Barack Obama under the labels of No Child Left Behind and Race to the Top (Tyack & Cuban, 1997).

While adult education programs were developed to act as an agent of social change based on the needs of the students (i.e., Freire, 1970; Horton, 1932 as cited in Hale, 2007), the standardized GED exam was quickly adopted in adult HSE diploma programs resulting in literacy methodologies that have mirrored the emphasis on standardized testing and learning seen in K-12 education (Heaney, 2011). Many adult HSE centers have structured instruction in ways that will give students the skills and knowledge needed to pass a standardized test due to the urgency adults have to gain their high school equivalency in order to attain employment. A narrow instruction focused on passing a standardized assessment has worked for adults who come into classes with skills ready to test, but there are many students who are left without a high school diploma if this is the only pathway of learning offered.

### Alternative Pathways to High School Equivalency Diplomas as the New Trend

There has been a growing trend across the nation to offer alternative pathways to earning a HSE diploma. For many states, that alternative pathway includes a transcript that shows course completion (National Association of State Directors of Adult Education, 2022). With this trend, adult educators are in a position to construct and investigate what literacy outcomes are possible in an adult HSE classroom that is not narrowly focused on standardized test prep. Without the pressure to focus on a standardized assessment, there is also room to address some of the negative experiences that adult students bring with them into an adult HSE classroom. The opening quotes of this paper align with research on adult literacy students and trauma. Exposure to trauma and stress is more prevalent for low-income minoritized people in urban communities (Porche et al., 2011). Additionally, those that leave high school early are more likely to have experienced childhood trauma (Porche et al., 2011).

This study was inspired by the opportunity to expand what counts as literacy in a HSE classroom while also figuring out how to teach most effectively regardless of the trauma the literacy learners carry (Horsman, 2000). Thus, this study uses elements of teacher inquiry and participatory action research (PAR) to reflect upon how a teaching approach using multimodal play can act as a healing centered approach to literacy by allowing space for adult HSE learners to make choices and connections. This paper begins with a brief overview of the literature on multimodal play and how multimodal play aligns with healing centered literacy. I then describe how participants were co-researchers in this inquiry. Subsequently, in the findings, I describe the healing outcomes through multimodal play due to the control and connection learners had in the space.

## Literature Review

Grounded in Knowles (1980) adult learning theory that acknowledges that adults learn best when they are active in relevant and problem-based learnings, I worked alongside adult HSE students to construct and investigate a competency-based composition unit. The investigation invited play in the adult HSE classroom. The play, or unscripted moments, was supported by an increased access to modalities for composing. An increase in available modalities was influenced by previously successful units using multiple modes of meaning making with this population of students (see Gruen & Lund, 2019).

### Multimodal Play

Multimodal play stems from multiliteracies. With the belief that there is a rapid and continuous process of change in the ways in which we read, write, view, listen, compose, and communicate information, the New London Group (New London Group, 1996) coined "multiliteracies" in order to embrace a strong commitment to incorporating a more expansive perspective of what counts as literacy and literate competency. Multimodal play is unscripted - offering a low-stakes trial and error process where

participants are able to play with their ideas and the modal resources and materials around them.

Play is often studied in children with conclusions that play provides an opportunity for children to imagine possible lives, rehearse multiple scenarios, and be and become people (e.g. Hibbert, 2013; Paley, 2004; Sutton-Smith, 1997). Unfortunately, play is less present and more regulated for adolescents and adults, perhaps because there is little room in learning environments for unscripted moments in the day due to the demands of testing and accountability. Thus, multimodal play does not show up in empirical studies regarding adult HSE environments.

When multimodal literacy is studied in adults, research suggests that adults use multimodal composition to engage in narrative forms. For example, Prins (2017) provides an overview of digital storytelling in adult basic education and literacy programs. In this overview, adult learners used participatory visual methodology that included photography, video, mapping, and digital archives to create stories in new ways. Another example is Holloway & Qaisi's (2022) study that looked at multimodal use in adult education settings such as a museum, a dance studio, and a French language learning center. The findings of this study suggest that multimodality supports versatility in the ways that narratives can convey meaning.

Studies specifically on multimodal play in adolescents suggest that multimodal play can also enhance passions and joy in learning. In Vasudevan's (2015) study, adolescents' practices of manipulation and experimentation with multiple modalities brought on scenes of laughter which served as a medium of play. For the laughter and play to occur in a learning space, educators had to be mindful to avoid scripting play and had to create space for spontaneous multimodal play to move the learning in unexpected directions. In another case study on filmmaking with adolescents at an alternative pathway program for juveniles (Hibbert, 2013), multimodal play moved the process of film production forward. With the invitation to play, the group did not focus on the product, but instead jumped into the filmmaking process - experimenting as actors and directors in a low-stakes environment.

Multimodal play expands what counts as literacy learning. Aside from expanding literacy learning, the literature reveals that it has the potential to invite learners to reframe learning and the learning environment - no longer focusing on the outcomes, but instead telling stories through narrative form, creating joy, and imagining possible lives all of which align with healing centered literacies.

## Healing Centered Literacies

In her book *Too Scared to Learn*, Jenny Horsman (2000) explores the complex ways the aftermath of violence, neglect, and trauma impacts adult learner's attempts to learn. In fact, research documents that exposure to traumatic events may negatively impact cognitive, emotional, and behavioral brain development. Since this study took place, we have experienced a worldwide pandemic. This time in history holds personal and shared trauma. Trauma of pain, loss, and fear, increased social isolation, and mental health challenges (Dutro & Caasi, 2022). As noted by scholars writing and researching in the field of adult education (see, for example, Boeren et al., 2020; Housel, 2022), COVID-19 has particularly impacted the wellbeing and mental health of adult learners as they have decreased access to education and increased unemployment. Trauma is part of the human condition and thus should be addressed in the work of humans, which includes education.

And, yet, historically little attention has been given to socioemotional healing in traditional classroom spaces at the K-12 level and the adult level (Dutro & Bien, 2014). In fact, teachers and students are often asked to teach and learn in spaces that deny emotional aspects of their identity (Dutro & Bien, 2014; Horsman, 1999). Without taking on the role of therapist, literacy teachers can use aspects of narrative therapy to support healing centered practices.

### *Narrative Therapy*

Literacy and therapy are so intertwined that there are documented therapeutic strategies that use narrative storytelling to help people engage in their own stories anew, so they can explore and discover new possible endings to the problem (Combs & Freedman, 2012). Extensive research has documented how writing in narrative form can positively impact physical and mental health, especially when participants are writing about traumatic experiences (Danoff-Burg, Mosher, Seawell, and Agee, 2010). Specifically, studies documented how turning the fragmented and chaotic emotions of the

event into an organized story helps an individual regain a sense of control of the account (Danoff-Burg et al., 2010; Huber et al., 2013).

Without assuming students are in need of rescuing and teachers are responsible for healing, literacy teachers have a unique opportunity through narrative writing to invite students to participate in spaces of healing. However, when offering space for stories from learners' lives, some literacy programs may be at risk of focusing only on pain. Several therapists stressed that if the focus of the literacy program is only on pain, an opportunity to create a space for joy in the learning environment could be lost (Horseman, 1998).

I argue that multimodal play, due to its unscripted nature, could invite adult HSE learners to engage in narrative therapy while also creating a joyful learning environment. Additionally, multimodal play could be a therapeutic support because it puts control into the learners' hands - control around what materials to use, what story to compose, and what process to engage in - and it opens up opportunities for unscripted connections of sharing amongst learners. Control and connections are central to learning according to Horseman's work with survivors of trauma (1999).

Multimodal play is not yet widely used in adult HSE learning environments. Knowing that multimodal play moves in unexpected directions, this study seeks to uncover what outcomes occur when an adult HSE classroom employs multimodal play as a teaching strategy. In the following sections, I will describe how the use of teacher inquiry and participatory action research provided an opportunity for participants to reflect upon how a teaching approach using multimodal play created space to heal and to reframe their relationships to academic spaces through choice and connection in an adult HSE classroom.

# Methods

## Research Setting

The selected research site for this study is a university-sponsored literacy center located in the East Garfield Park neighborhood of Chicago. The center is situated in this neighborhood because most high schools in the community graduate 50% or less of their students and 60% of 20 - 24-year-olds in the community are unemployed (Anderson, 2017). Additionally, in Illinois, where this study took place, a new law allowing for alternative methods of credentialing took effect in January 2018 (High School Equivalency, 2019).

All students who registered for classes were invited to act as a participant and co-researcher during the summer and the fall session of the 2018-2019 academic year. A co-researcher, in this case, means students collected data, reflected on data, and analyzed data while also being an authentic participant in the classroom. After hearing about the study, purpose, and commitments, eight adult HSE students and myself provided completed consent documents; six of us participated in both sessions. The six that participated, along with how each participated is described in the following sections.

## Participants

**Andrea**, a 44-year-old African American woman enrolled in classes to earn her high school diploma with the hopes of eventually working in a children's hospital. She left school due to various medical challenges. Upon enrollment she was reading at a first-grade level.

**Diamond,** a 27-year-old African American woman, enrolled in class because she loves learning. As a child, she struggled to feel understood in school. She sees earning her HSE diploma as necessary to enter the workforce and earn an income that will help her move out of the neighborhood. At the time of enrollment, she was reading at a fifth-grade level.

**Gary** (actual name), a 38-year-old African American man, committed to earning his high school equivalency diploma alongside his 17-year-old daughter. Gary stated that he was often the class clown in school. He enrolled at a ninth grade reading level.

**Rachael.** I was a 36-year-old white woman and lead teacher in the adult education classroom at the time of this study. My background is in special education having taught for twelve years at the time of this study.

**Takeya** (actual name), a 30-year-old African American woman. As the mother of two young girls, she wanted to be able to help with their studies. At the time of enrollment, Takeya was reading at a sixth-grade level.

**Terrenya** (actual name), a 23-year-old African American woman. Terrenya identified as someone who loves school and learning. She was reading at a fifth-grade level when she enrolled.

## Data Collection and Analysis

This study used elements of teacher inquiry, participatory action research, and qualitative methods to construct understanding about teaching and learning in one adult HSE classroom as it employed multimodal play. Teacher inquiry is research into one's own practice with the goal of improving that practice (Stanovich & Stanovich, 2003). I added PAR to this methodological framework to include the students as researchers. The purpose of PAR is to engage the full spectrum of practitioners, in this case an adult education teacher *and* adult HSE learners, in inquiry, so there is equal voice in the analysis and interpretation of the research on praxis (Glassman & Erdem, 2014; McTaggart, 1991). Both teacher inquiry and PAR engage in iterative cycles of research that begin with identifying an issue, implementing an intervention, collecting and analyzing data, and reflecting on classroom practices to propose changes (Glassman & Erdem, 2014; McTaggart, 1991). In the following section, I explain the iterative process of research we took.

**Step 1: identify an issue.** In earlier cycles of inquiry, participants/co-researchers problematized the emphasis of the HSE exam on their learning. Their adult HSE learning environments mainly consisted of prep sites where they were placed on a computer to practice rote skills. Participants/co-researchers identified this as an issue because this style of instruction did not work for them.

**Step 2: design an intervention.** To figure out what style of instruction might be better, we used a semi-structured interview and experience sampling methodology to understand students' literate lives outside of class. In the semi-structured interview, students were invited to share about the schools they had attended, their feelings around education and themselves as a learner, and what kinds of texts they read and wrote. Students also participated in photo journaling to document various literacies they engaged in, how they learned those literacies, and how those literacies might help them in the classroom. Data revealed students best learned their mastered literacies in hands-on, collaborative spaces that incorporated many modes of making (i.e., cooking, sewing, crafting). Thus, multimodal play became the designed intervention.

**Step 3: collect data.** During the six-week unit, we used multiple methods of data collection to inform curriculum and analyze the outcomes that were taking place. Participant observation consisted of six, 90-minute lessons that were video and audio recorded, transcribed by the teacher researcher, and used for analysis later. Reflective field notes were collected by all researchers after each of the six lessons. These reflections were recorded in narrative form and focused on general observations, reactions, and feelings about the lesson as students thought about things like: what the lesson was about, how they participated in the learning, how they felt, and how they collaborated with one another. Finally, students collected artifacts based on what they deemed to be evidence of their learning. This documentation could include, but was not limited to, something they did in class, a picture of a moment in class, or a journal entry describing their learning.

**Step 4: analyze data.** Following in the tradition of constant comparison (Charmaz, 2000), analysis occurred both throughout and after the completion of the data collection process. Each week, I reviewed all the field notes from each researcher alongside the transcribed video date and recorded overall themes from that week. After data was collected, all researchers engaged in descriptive data analysis. First, participant researchers used in vivo coding of their portfolios of learning and field notes. In vivo coding is a code that refers to a word or short phrase from the actual language found in the qualitative data record (Saldana, 2009, pg. 105). Using in vivo coding allowed for the participants' voices to continue to be the center of the research, but was also limiting because the same student phrases were not used repeatedly, thus it was difficult to find patterns. With that in mind, research participants also used emotion coding. Emotion coding labels emotions recalled and/or experienced by the participant. Examples of codes from the participant researchers in their early memos included: school, job, need money, challenging, regret, doubt, stuck, left behind, unwelcomed, overwhelmed, lost, urgency, pressure. As participant researchers continued to look through their work, new codes appeared such as believe in yourself, take chances, life story, express yourself, one step at a time, hope, learning, emotional growth.

Once initial coding occurred, participant researchers brought their portfolios of learning, field notes, and initial codes to a semi-structured interview. Each participant researcher shared their work and their codes with time for follow up questions such as "what were you feeling during this type of reading/writing/literacy" or "how did your creation process help you in your educational goals." Once each person shared, the group of participant researchers discussed patterns they noticed across portfolio presentations in order to organize the codes into a system of themes and how they are in relationship to one another. All participant researchers listed out the codes, then categorized, recategorized, and conceptualized those codes into the following themes: power, choice, collaboration, healing, self-expression, and process.

After themes were determined by all participant researchers, I, the teacher researcher, went back into all data and independently used those codes to do more analysis. Specifically, I began with a domain analysis to better understand how the themes we identified were in relationship with one another. To do this, I used the themes as cover terms that smaller themes could fit into. For instance, play became a cover term that included themes such as power and choice. I then used semantic relationships to link the cover terms to the included themes (Spradley, 1980). Examples included "making is a way to play", "healing is a result of play." I then re-engaged with the data to code based on these semantic relationships.

Throughout the data analysis, I used a variety of tools that are common to participant action research to ensure validity. Specifically, I used triangulation through the collection of multiple pieces of data. Methods of triangulation included initial coding, interim analysis, critical friends group, and member checking. The critical friends group included three persons: one HSE teacher, one doctoral student, and one researcher. This group discussed data transcripts and initial findings, checking my analysis in light of their experience and expertise. Member checking was used by systematically soliciting feedback about the data and conclusions alongside the participant researchers (Maxwell, 2013). While members informed data analysis, I also had them check my interpretations of the data once I had written up the results of the findings. During this time, participant researchers had an opportunity to review the findings and give feedback to ensure their voices and views were accurately portrayed. Additionally, teaching practices were built upon throughout the summer and fall sessions to include insights from each unit to validate the learning in practice.

**Step 5: reflect.** I initially engaged in this study to inquire how multimodal play might be an alternative pathway to developing the competencies needed for a HSE diploma and workforce readiness program. I wanted to use PAR to do research with students whose learning this intervention would impact the most so that recommendations for their education experience were from them. In the analysis of the data, along with insight from the critical friends group and participant researchers, it became clear that multimodal play should be incorporated into adult HSE classrooms, not because it increases disciplinary competencies, which it does, but because it provides spaces of joy and healing in educational environments for adult learners. In the following section, I describe what the data showed us about the impact of using multimodal play in an adult HSE classroom, specifically how control through choice and connection through bearing witness were sources of healing for students in the educational environment. I then describe what those implications are for future teaching practices in the adult HSE classroom.

## Findings

Horsman's work with survivors of trauma (1999) suggests that literacy educators can better meet the needs of all learners when control and connection are central to the learning. The findings for this study begin by describing how multimodal play gave control to students to choose the content and mode of what they wanted to compose. As students shared their stories in unscripted moments, connections amongst students were made and those connections helped students heal and reframe their relationship to academic spaces - an important part of their HSE learning process.

### Control Through Choice

Control in many learning environments is described as learners having choice. By using multimodal play, choice of mode invited students to explore ways of doing literacy

beyond one prescribed way. Specifically, students had control over the content and mode of their composition. Control over the content seemed to give students comfort to create narrative compositions which had been shamed in other academic settings, or at least not as valued. Control over the mode gave students different tools to express their narratives.

Gary chose to write about a time when he struggled the most with education. He was 13 and his mom had just left to live a life in the street. Gary chose to write a letter to his teenage self about lessons he had learned. Reflecting on his drafted letter, Gary's memo touched on what he learned from the process of writing about that time in his life. He stated "I no longer have negative feelings about my teenage years. Instead, I am seeing that I am an expert in my own life" (May 24, 2018). This realization shifted Gary's relationship with his story. He wanted other teenagers to hear his story, so they might be impacted by the lessons he learned. Thus, he chose to record his letter in an audio format that he posted to the internet.

With the structure of multimodal play, Terrenya, who identified as a writer, found herself continually crumpling up her paper, writing, and crumpling up her paper (active participant observation, September 20, 2018). A week later, Terrenya began to observe her classmates playing with different modes. Seeing the different strategies her classmates and instructor were using (i.e., podcast, graphic novel) opened up opportunities for her to reform her narrative through a visual mode. The visual mode freed Terrenya from having to have the right words to express the story she was trying to tell - a story about her family and the dark impact those relationships had on her ability to manage school. Her final composition consisted of 3 pieces of construction paper, 2 green and one black (portfolio artifact, September 27, 2018). The black piece was placed in the middle of the two green pieces. On the left, she used images and words to introduce herself, foods she liked, products she used, dreams she had. The middle, pasted on the black construction paper, was a picture of a family tree with a broken heart. She described it as representing the pain of family. She stated that "with family, there is a lot of heartbreak among the relationships" and she would try to hide the pain she felt which caused her to go into a depressive state during high school (memo, September 27, 2018). Finally, on the right were pictures of her two sons which represented the things that were important to her in her life and gave her hope for the future.

Diamond also began by writing in a more traditional way. But after seeing others engage in various modalities, she chose to adapt her writing into a scripted play because she felt like it needed to be expressed visually to better reach her intended audience (memo, September 27, 2018). Diamond's play focused on a classroom setting in which the teacher made her feel unwelcomed, overwhelmed, and left behind. The opening scene has her entering the classroom timid, embodying feelings of anxiety and self-doubt. Throughout the play, Diamond highlighted moments of negative feedback, isolation, and denial of receiving help when asking for it. When Diamond embodied the emotions she felt in this classroom space while acting out her story, her pain was palpable. In fact, in her memo (October 11, 2018), she reflected upon the tears that welled up in her eyes during her performance and her desire to distance herself from other classmates throughout that period.

Multimodal play gave students the choice and control to share their stories authentically and vulnerably without barriers. To be that vulnerable in a classroom environment could only happen if students felt connected to the other students and the learning. Multimodal play provided an opportunity for students to connect organically and, through those connections, bear witness to each other's stories as a step towards creating therapeutic support in the adult education classroom.

## Connection Through Bearing Witness

As students crafted their own compositions, they reached across for materials, commented on each other's work, and started to co-construct stories. For Andrea, this was an entry point into composing practices. When Terrenya talked about all the things she had to do as a parent, Andrea responded:

> "when I was a little girl my mom told me I have to teach you how to be responsible because I not gonna be here forever. So, from that day on my mom teach me how to wash clothes. And she show me how to be responsible as a teenager. I was going places by myself. I was catching the bus at the age of 12 with my little brother and sister at the age of 14. I was helping my mom pay bills at the age of 16. I was going to the food store shopping by myself at the age of 17. I was taking care of my little brother and sister because my mom have past away. I thank god that my mom teach me how to be responsible. And sometimes it feel sad and

> sometimes it made me like I did not have a childhood cause I grow up too fast. But with all this been said I would not change it for the world. I just wish I had my mom for that for I can tell her how much I thank you for everything that you done for me and my brother and sister. Ain't a day go past that we love you and miss you. Every year for your birthday we let a balloon go for you. Rest in paradise mom - gone but not forgotten" (active participant observation, October 28, 2018).

Andrea was not just engaging in conversation; she was sharing her story. The shift in audience from Terrenya to her mother highlights this. Andrea's memo from that day reflected that she "feels better to share her story. There is no one way to read or write" (memo, October 28, 2018).

The collaboration and interaction of the space and materials invited everyone to learn from each other, and providing feedback as a means of validation became part of a healing process. Dutro and Bien (2014) describe this phenomenon as "critical witnessing." Critical witnesses are people who witness, either through seeing, hearing, or reading, a traumatic story and validate that story. Through this validation, critical witnesses help re-create the author's identity by seeing the author as someone beyond the trauma (Dutro, 2009).

When analyzing the data, we noticed the interactions among all people in the learning space highlighted multiple points of connection and critical witnessing. As I engaged in the multimodal composing practices among students, I also composed a narrative about my own grief, fear, and desires. In this case, I designed a graphic novel about the heartache I experienced throughout the adoption process, and the fear I had about becoming a biological mother. Since many of my students were also parents, their critical witnessing to my story, validation about the emotions I was experiencing and conveying through my graphic novel provided me with support and hope to overcome those pains and fears (memo, September 20, 2018).

Modeling vulnerability led others to be vulnerable. When Terrenya shared her visual collage as part of her portfolio, she chose to talk about her suicidality which dug deeper than the original story that she shared in class (semi-structured interview, November 1, 2018). She described her choice to use pictures instead of words because trauma is often difficult to write about - the events are "unspeakable" (e.g. Caruth, 1996). It is also difficult to share traumatic stories with people you do not feel connected to.

Sharing became an important class structure, one that required an active audience to not only hear the story, but to provide feedback and offer support. This type of sharing increased the connections students felt to one another and the vulnerability they were willing to share. In unscripted moments of multimodal composing, Andrea shared that she lost her mom to terminal illness at a young age. Gary witnessed Andreas' story and validated her by describing that drugs were the reason he lost his mother. She is now deceased, but when he was 14, Gary said the "streets got a hold of her and [he] was kind of forced to take care of [his] little sister." Takeya chimed in, adding that she never knew her parents. She was raised by her uncle until the arguing between her and her uncle grew to be too much, and she got kicked out. She then moved in with her grandmother. Unfortunately, her grandmother had severe medical needs and could not take care of Takeya. Instead, Takeya was left to take care of her grandmother, missing out on the high school experience (active participant observation, October 28, 2018).

These are the "spoken wounds" that were shared, stories that have in the past been asked to be "left at the classroom door" (Dutro & Bien, 2014). In fact, some instructors and educational administrators have invalidated personal narratives for their assumed lack of academic rigor which is seen in the narrow focus of argumentative and informative writing prompts in HSE exams. (e.g., General Education Development Test; American Council on Education, 2014). Without acknowledging the spoken wounds that students carry with them, the school can become a place of trauma as well. But this class offered something different through multimodal play - it invited sharing. Sharing their work and their stories, helped build "up [their] relationships with each other because [they] were only sharing what [they] were comfortable sharing and the task of writing wasn't getting in the way of that sharing" (Takeya's memo, November 11, 2018).

Sharing stories connected the students to one another, and it also aided in students' healing, or re-storying traumas and identities they held from the past. As Gary re-storied his teenage years through a letter of lessons he learned, he engaged in auditory modes to get his message across. He considered what music might be a good addition to his letter but struggled to find a song that had

the right meaning or beat. Takeya suggested he make a rap. Gary covered his eyes. Terrenya told Takeya to "throw down a beat" at which point Takeya began to beatbox and the whole class erupted in laughter (active participant observation, June 6, 2018).

Witnessing a classmate heal from a previous shared pain through their composition encouraged others to heal from that pain as well. No matter how the text is presented, either spoken, performed, read, or embodied in other ways, the process of expressing the testimony aids in healing (Dutro & Bien, 2014). Healing in this context, meant changing one's relationship to their narratives and their identity as a learner.

The invitation to engage in multimodal play in an adult HSE classroom allowed students to return to their personal trauma, take control of the event by organizing the traumatic events, and make choices about what version they wanted to share, remember, and forget (Spear, 2013). When stories were shared, critical witnessing occurred as the audience helped the author explore a different result to the problem - continuing to help the author gain a deeper understanding, connection, and self-awareness to continue the healing process (Haertling & Schmidt, 2017). Multimodal play gave students the opportunity to process and share their trauma narrative by being in control of the choices for their composition and building connections by bearing witness to each other's stories. This process helped them heal from past experiences and relationships with school and made them better able to focus on learning and what lay ahead for them in the future.

## Discussion

Without dismissing that trauma exists in the adult HSE classroom, it is important to recognize that modern forces and policies, such as standardized testing and the Workforce Innovation and Opportunity Act, make it difficult for adult HSE programs to provide more than standardized-test preparation skills since test-scores are how programs are measured. A sense of urgency to get students to be able to pass the writing portion of a standardized test limits writing to informational and argumentative forms. Without taking time to engage in multimodal play, the choice to tell stories and use narrative form as a source of healing may not find a place in the adult HSE classroom.

There is a need for the adult literacy field to continue to wrestle with different perspectives about what adult literacy could be. Freire (1970) calls adult educators to take up trauma stories in order to resist the dehumanizing structures and practices of school that silence emotions. Based on this study, I recommend that adult literacy, specifically HSE educators incorporate multimodal play - unscripted moments - to engage in different modes of meaning making and composing in order to invite students to make choices and make connections as avenues towards healing in the classroom. Educators should consider what materiality is available for students to make choices, how narrative expression is invited in the learning environment, and how to create time for unscripted moments of connection. In this way, perhaps, assumptions about what is and is not meaningful in regard to the outcomes we count and care about in the adult HSE classroom will shift.

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**Report from the Field**

# Learning to Teach Reading

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## Abstract

This article conveys one practitioner's career-long journey related to teaching reading. The author gained valuable information from relevant research reports regarding the keys to effective reading instruction and has learned even more while implementing a systematic approach to teaching reading as a volunteer tutor.

***Keywords:*** reading instruction, teaching reading, reading research

I have fond memories of Elena (a pseudonym), a grandmother who attended my ESOL class one summer. Elena retired after working for many years at a meat processing plant. She spoke English fairly well and told me many stories of growing up in a rural part of Puerto Rico. As a young girl, Elena helped her mother pick coffee beans and sell beautifully hand-embroidered hankies on the street. Elena never had the opportunity to attend school, and she never learned to read and write in Spanish. In my class, Elena's goal was related to reading and writing in English.

The summer I met Elena, her church was offering a day camp for kids. Elena volunteered to cook for the program. She would come to class in the afternoon after spending all morning preparing breakfast and lunch for the children. In this class, we were writing stories about our everyday heroes. Each learner wrote a story and shared it with the class. Elena's everyday hero was her daughter. In my story, I wrote about Elena as my everyday hero.

I think often of Elena as well as Chi from South Korea, Phillipe and Hellen from Haiti, Samuel from El Salvador, Zahra from Afghanistan, and many other immigrants in my adult basic education classes who did not have the opportunity to attend school much or at all. In fact, I almost always had a few learners in any ESOL class – regardless of the English level of the class-- who had limited reading skills not just in English, but also in their primary language. I knew Elena and many other learners wanted to learn to read and write; unfortunately, I was ill-equipped to help them since I had had no training in how to teach reading fundamentals.

By reading fundamentals, I mean alphabetics which includes phonemic awareness and decoding. Phonemes are the smallest units of sounds in spoken language, and phonemic awareness is about understanding that spoken words are made up of distinct sounds. "Decoding ... involves using letter-sound correspondences to recognize words in print" (McShane, 2005, p. 40). Fluency is also considered a foundational reading skill. When learners are fluent readers, their oral reading reflects an understanding of the text they are reading. As expert Timothy Shanahan (2023) put it, fluency is "making the text sound like spoken language."

## Research Reports on Teaching Reading

The many learners I've encountered motivated me to learn as much as I could about how to address the needs of adult English learners who want to learn to read; thus, I looked to the research. The National Reading Panel's (NRP, 2000) meta-analysis of reading research with children identified four essential pillars of reading, i.e., alphabetics (i.e., phonemic awareness and decoding), fluency, vocabulary and comprehension. I am sure that I was not the only adult basic education practitioner who wondered what -if any- of the NRP findings and recommendations

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might be relevant for teaching adult learners, including those who were also learning English. After all, there is clearly a world of difference between a young child and an adult learner!

Soon after the NRP report, the National Institute for Literacy convened a group of experts to explore the NRP research synthesis through the lens of teaching adults. The result was the publication *Research-Based Principles for Adult Basic Education Reading Instruction* (Kruidenier, 2002), which stated that focusing instruction on the four pillars is also important when teaching reading to adults. A bit later, another expert panel, led by Diane August and Timothy Shanahan, was directed to examine what the literature suggested about teaching reading to children and youth who were also learning English. This report, published in 2006, similarly concluded that teachers should focus on the same four components of reading but emphasized that vocabulary development was even more critical for English learners.

While research with immigrant adult emergent readers has been limited, an important article by Martha Bigelow and Robin Lovrien Schwarz (2010) summarized the extant research. These authors emphasized the need to assess learners prior to instruction (ideally in English and in the primary language) and to address reading fundamentals (i.e., phonemic awareness and decoding) when needed.

The organization Literacy Education and Second Language Learning for Adults (LESLLA) is devoted explicitly to adult learners who have limited print literacy who are also learning an additional language. At the LESLLA site, one can access papers presented at the international symposiums held yearly since 2005. A paper by Jennifer Christenson (2021) has been especially relevant to my own search for guidance. Christenson summarized key research in K12 focused on the science of reading and offers numerous practical implications for teaching adult English learners with limited print skills. The author expands on what these findings suggest for adult emergent readers who are also learning English. Christenson joins the chorus of those who affirm the need to teach reading through a systematic approach as outlined in the science of reading literature.

Importantly, a joint statement of The Reading League and the National Committee for Effective Literacy (2023) affirms the growing consensus among experts that teaching reading to English learners should be aligned with what the research has shown is needed for all beginning readers as well as supporting English learners to expand vocabulary and deepen knowledge in the content areas. Also essential is to design instruction to build on the assets learners bring to the classroom including drawing upon their oral skills in the language they already know.

## Teaching One-on-One

Three years ago, I retired from my local adult education program after 30+ years as a classroom teacher and teacher educator. My teaching experience covers nearly every type of class offered by adult education programs, including HSE, ABE, family literacy, workplace, citizenship, career pathways preparation, and all levels of ESOL. Upon retirement, my hope was to volunteer as a tutor with an adult learner who wanted to learn to read. While I have looked to the experts to expand my understanding of the reading process and how to teach reading, it was obvious to me that learning about something is not the same as knowing how to do it.

In the summer of 2023, I was able to begin working with a young woman from Honduras who had never attended school before coming to the United States 3 years ago. Marta (a pseudonym) is now 19 years old and has been attending high school. When I met Marta, I observed that she could understand and produce some English, but her ability to read in both Spanish and English was almost nil. Even so, I witnessed Marta's skills with technology, so I made a goal to integrate the use of technology into our tutoring sessions. While I recognized that teaching Marta to read in Spanish would be of great benefit to her, I initially thought that my lack of fluency with Spanish made this impractical. Nevertheless, we do a lot of translating, and I often draw Marta's attention to the similarities and differences in English and Spanish words.

At the outset, I was eager to find instructional materials suitable for teaching Marta to read. I recognized that it would be important to do some diagnostic assessment early on. Initially, I assessed Marta on the names of the letters of the alphabet, and she was easily able to name them all. I used Sylvia Greene's (2015) Informal Word Analysis Inventory, which is designed to identify which

letters and sounds a learner has mastered and which they still need to learn. Marta was able to read the first two words on the list, *fan* and *sal*, which showed me she had some understanding of the short a vowel and the consonant sounds in these words, but she was unable to read the word *hag*; nor could she read any of the next eight words on the list, so I stopped the assessment. These results suggested that it would be wise to start from the beginning, by introducing one vowel sound and a few consonants to make short words.

In my search for appropriate resources, I hoped to locate materials that featured decodable text to give Marta practice reading fluently. It was essential that the stories be designed for adult emergent readers, and not for children. I sought materials that regularly recycled the letters, sounds, and words that Marta was learning to offer multiple exposures. I wanted to teach the sound system of English in a systematic way and give Marta lots of different activities to practice and demonstrate fluency and comprehension. Since encoding is also essential, we include dictation in every lesson, too.

We use lots of color photos in our lessons since it's critical that everything we do makes sense to Marta. I locate pictures that I copy onto an interactive online whiteboard for Marta to match pictures and words. Early on, we started using the whiteboard to practice sounding out 3-letter words with short vowels referred to as CVC (consonant-vowel-consonant) words. I discovered that Marta was able to make progress in decoding when she had the opportunity to practice reading CVC word families.

A word family is when we add a different beginning consonant (the onset) to the same vowel and consonant combination (the rime). For instance, we can add several onsets, ***c, h, m, p, r, s*** and ***v***, to the rime ***at***, to make ***cat, hat, mat, pat, rat, sat, vat.*** It did not take long for Marta to be able to independently read the list of rhyming words in this word family. Using the whiteboard to enable Marta to manipulate the various onsets to make different words has been highly effective. Being able to read word families was an important breakthrough for Marta. Rather than trying to memorize the words presented to her, she was learning to make the connection between the letters in the words and the sounds those letters represent in speech. Marta can now independently read most CVC words as well as many that have two consonants at the end with only one sound, such as ***cash, duck, bath, pill***, ***miss***, etc.

## Instructional Materials for Teaching Reading

When searching for connected text, I sought stories featuring words aligned with a recommended phonics scope and sequence to give learners practice reading the graphemes (i.e., letters) and phonemes (i.e., sounds) and words they have been taught. The text *At the River and Other Stories for Adult Emergent Readers* by Shelley Hale Lee (2016) worked well for our initial lessons. This text gradually introduces letters and sounds through CVC words in stories and accompanying exercises. I next introduced *City Stories: A Book for Adult Beginning Readers* by Larissa Phillips (2017), which offers practice with CVC words through engaging stories about adults. The freely available teacher's guide supports lesson planning, and the online workbook offers more reading practice and comprehension activities.

Recently, I came across abcEnglish, a site online developed by Jennifer Christenson (n.d.), that offers a wide range of instructional resources for teaching adult emergent readers who are also learning English. Drawing from these materials has expanded my ability to address Marta's needs. Through use of an assessment tool provided on the site, I was able to confirm the specific skills Marta has learned and what to focus on next. Though Marta is still reading at Level 1, as defined on abcEnglish, she is making steady progress.

I learn more about teaching reading every time we meet. It's significant that I am now engaging Marta in reading both in English and in Spanish. As noted, it's essential that Marta understands everything I present to her in class. Since her communication skills in English are still developing, this often requires translation. It's been exciting to see Marta embrace learning to read in both languages.

## Final Thoughts

Over the past year, I've actually been learning to teach reading. My work with Marta brings my career in adult literacy education full circle, which started with Elena and so many others. I am grateful to have the opportunity

to teach Marta one-on-one. I want to affirm what many experts know about how to best address the needs of adults who are emergent readers. Placing these learners in regular ESOL classes with other students who have already developed print literacy is not a best practice. These learners need their own class with a teacher who knows how to teach reading. I've been pleased to observe that there is growing awareness about this need among adult education programs, and this practice is starting to change. Moreover, I'm hoping that high-quality training on how to teach reading to emergent readers can be provided to accelerate the changes that are needed in our field.

Reflecting on my experiences as a teacher, I've often looked to the words of Miles Horton and Paolo Freire (1990) for inspiration. In *We Make the Road by Walking*, Miles Horton talked about the three things that make for a "good education" – first "loving people" ... "next is respect for people's abilities to learn and to act to shape their own lives" and finally "value their experiences" (p. 177). My hope is that I am part of a cohort of teachers who is able to offer all adult learners a "good education."

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**Forum: Improving Service to Adult Literacy Learners**

***(Part 1 of 3)***

# Each One Can't Just Teach One

Amy Pickard, Indiana University

Daryl[1] arrives at an adult basic education (ABE) program, eager to learn to read but without knowledge of some foundational components of reading. For example, he does not have mastery of letter/sound correspondences. To participate in the reading class at this program a student must have a minimum score on the entering reading assessment, but Daryl scores below the minimum. Therefore, he is paired with a tutor, with the hope that one-on-one attention will bring Daryl's score up to the point that he can participate in class. However, after 4 months of coming regularly to his tutoring sessions, Daryl's tutor decides he no longer wants to work with him, because he believes Daryl isn't making any progress. The program decides to allow Daryl into the reading class, but he struggles to make progress in that setting too. Eventually, he is asked to leave the program and referred elsewhere, in the hopes of him finding a better "fit."

I observed this chain of events in a real program. Although I lost contact with Daryl after he left the program where I was volunteering, my research and teaching experiences suggest that he might have encountered a similar experience at the next program. Currently, and seemingly in perpetuity, U.S. adults who come to adult education programs wishing to learn to read are met with teachers and tutors who have insufficient preparation to help them do so. This may be particularly true for adults who have experienced difficulty learning to read, either from lack of educational opportunity, learning disabilities, or a combination of these and other factors. Throughout this article I refer to these learners as *adult literacy learners*. Viewed according to the six Literacy Proficiency levels derived by the Programme for the Assessment of Adult Competencies (PIAAC) (National Center for Education Statistics, n.d.), these learners would most likely be assessed as Below Level 1 and Level 1. However, some learners who place at Levels 2 and above might also experience difficulty reading or improving their reading skills.

At a national level, we know very little about how many of these adults enroll or attempt to enroll in ABE programs or volunteer tutoring programs. Although much data is collected in the National Reporting System for WIOA-funded programs, participants' reading assessment data is not publicly available. Many volunteer tutoring programs don't use standardized assessments, and results from the assessments they do use are typically not made public. We do know that ProLiteracy member programs reported that 29% of students enrolled in basic literacy/high school equivalency programming had "beginning" entry reading levels, and another 23% were described as having "developing" reading levels (ProLiteracy, 2022, p. 1).[2] These programs also reported that 33% of participating English language learners (ELL) were "unable to read English" (p. 1). However, as with the PIAAC assessments, this report does not differentiate learners new to reading English from learners new to reading in any language, sometimes called adult "emergent readers" (see Bigelow & Vinogradov, 2011, p. 121). These percentages suggest that there is substantial need for effective reading teaching in adult tutoring, ABE, and ELL programs, but much more data is necessary to understand the true scope of the need.

Although many adult learners would likely benefit from improved reading instruction, there is particular need to

[1] Daryl is a pseudonym.

[2] ProLiteracy member programs included both tutor and teacher-led instruction and WIOA and non-WIOA funded programs.

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enhance instruction for learners who read at the most basic levels; both to address the moral issues of social inclusion and equity for adults marginalized by literacy difficulties in a print-saturated society and because the discourse of contemporary adult education practice has evolved away from learner-centered concerns for this student population, which often focus on reading improvement. Federal adult education agendas focus on literacy in the service of workforce development and the attainment of academic competencies; this approach incentivizes service to higher performing learners (Pickard, 2016). Furthermore, practitioners who work with adult literacy learners often experience frustration with their ability to help these learners improve their reading skills, as Daryl's experience with his tutor illustrates. These circumstances call for a re-evaluation of the field's approach to serving adults who demonstrate difficulty learning to read.

## Re-Evaluating Common-Sense Processes of Service

When a learner arrives at an adult education program with very low reading scores or starts a program but isn't making progress in the expected way, the typical solution in our field is to pair this learner with a tutor. There is a common-sense thinking directing this approach. If an adult learner is performing poorly, the thinking goes, they might need more attention than a classroom teacher can reasonably give. Pairing the learner with a one-on-one tutor allows learners to take the material at their own speed, slowing down the pace of instruction if desired.

However, underlying this common-sense thinking are often too-simplified understandings of the processes of reading and reading instruction and the implicit belief that anyone who knows how to read can use that knowledge to teach others to do so. Using this logic, Frank Laubach coined the optimistic slogan "each one, teach one" to describe how volunteer tutors might teach adults in their communities to read; this approach structured Laubach Literacy campaigns in the U.S. and around the world (Nelson Christoph, 2009, p. 84). However, from my experience as a teacher and researcher, I have come to believe that, especially in terms of reading, each one *cannot* always teach one. For many adult literacy learners to succeed, teachers and tutors' good intentions and everyday knowledge of reading must be coupled with a toolbox full of research-informed approaches to adult literacy instruction.

Much public attention is currently being paid to research about literacy instruction for children. As of January 2024, 40+ states had passed laws requiring reforms of K-12 curricula to include the "Science of Reading" (SoR) (Goldstein, 2024). Although adult literacy researchers more commonly use the phrases "evidence-based" or "evidence-informed" instructional approaches (e.g., Comings et al., 2003; Shore et al., 2015, etc.), the central thrust of all these ideas is that instructional practice should be guided by what research tells us will produce the best educational outcomes for learners. In the SoR view of learning to read - and overcoming difficulty learning to read, which is a central concern for many adult literacy learners - systematically-taught phonics must be used alongside other evidence-based strategies for reading instruction.

Adult literacy scholars and practitioners have wrestled for years with the role of phonics as a component of learner-centered curricula, with some scholars arguing that for adults who encounter difficulty learning to read, systematic phonics instruction is particularly important (Snow & Strucker, 1999, in Purcell-Gates et al, 2001). Although efforts to identify effective and appropriate instructional approaches for adult literacy learners are ongoing, we know from existing research that teachers and tutors of adults may not use systematically presented or evidence-based approaches to teach reading. Past national analysis found that teachers and tutors of adult reading possessed a 62% mastery of evidence-based components of reading instruction (alphabetics, fluency, vocabulary, comprehension, and assessment) (Bell et al., 2013), suggesting substantial gaps in teachers' and tutors' knowledge. Furthermore, reading practitioners' decisions are sometimes impromptu, based on intuition and their own learning experiences rather than research, and are not always made with a clear sense of instructional purpose (Belzer, 2006b). As Perry and Hart (2012) describe it, teachers and tutors are sometimes "winging it" (p.116).

There are many complex, interconnected reasons for teaching reading in this way, including patterns of attendance, lack of resources, working conditions,

policy constraints, the available evidence about effective interventions, and the knowledge base from which teachers and tutors make decisions about reading instruction. Even within these constraints, however, there are steps we can take to improve the services provided to adult learners who are seeking help to improve their reading.

## Suggestions for Improving Service to Adult Literacy Learners

The suggestions for improvement outlined below consider WIOA-funded ABE programs and non-WIOA-funded volunteer programs as interconnected parts of the system of educational services available to adult literacy learners. Although WIOA accountability policy has hampered ABE programs' abilities to meaningfully address literacy and learner-centered aims, many WIOA-funded ABE programs still enroll adults who have interest in and need of foundational literacy development, while ; others rely on volunteer literacy programs as a sort of "shadow system" to help students attain a level of readiness to enter WIOA-funded programs (Pickard, 2024). Changes in both settings are needed and, given their relationship, improvements in one setting are likely to impact the other.

### Expand Upfront and Ongoing Training for Volunteer Reading Tutors

For years, many have called for improved preparation for adult reading instructors (Smith, 2017; Snow & Strucker, 1999). Scholars in adult literacy education have generally agreed that specific knowledge of reading instruction is required to teach reading successfully, but research suggests both teachers and tutors lack sufficient reading knowledge for effective instruction (Zeigler et al., 2009). Volunteer programs should expand upfront training regarding reading instruction and provide substantive ongoing support for volunteer tutors. Belzer (2006a) concluded that just-in-time support would help volunteer tutors tailor instruction to individual learners' needs and circumstances. Perry and Hart (2012) proposed that both upfront and ongoing support could improve tutors' instructional practices and address differences in tutors' varied backgrounds. The volunteer tutors who participated in their research articulated the following needs: (a) teaching tools and techniques, specifically pedagogical content knowledge, meaning *what* to teach and *how* to teach it; (b) people resources, including mentoring, a designated "reference person" to whom they could ask pedagogical questions over time, and opportunities for formal/informal networking with other educators; and (c) "other" supports, such as cultural education/awareness.

### Expand Adult Reading Teachers' Knowledge Base Through ABE Certification

For WIOA programs, states should consider offering - or requiring - pre-service certification for ABE educators who teach reading. This certification might include training in working with adult learners, addressing learning disabilities, and evidence-based instructional approaches to reading. Although such an effort may sound daunting, there are examples from Texas, Massachusetts, Colorado and elsewhere of voluntary or required certification for adult basic educators (Smith, 2017), some of which have demonstrated that ABE-centric pre-service certification can support improved outcomes for learners (Payne et al., 2013). This step could quickly improve the quality and breadth of the current teacher knowledge base about reading instruction, especially if loans acquired to attain this certification could be repaid by time spent teaching in publicly funded programs, as K-12 teachers can do. Furthermore, having a certification requirement targeted to ABE reading teachers might benefit literacy learners across types of programming - paid or volunteer - as ABE educators who receive certification can be drawn on as a resource to improve the training and supports provided in volunteer programs.

### Address Policy Constraints

Federal adult education policy has constrained ABE practitioners' attention to literacy concerns, both via accountability measures that disincentivize serving lower-performing learners (Pickard, 2021) and by shifting the discourse regarding the purpose of the field itself (Belzer, 2017). One possible remedy is to adjust WIOA to better facilitate the inclusion of literacy learners in WIOA funded programs. This might include allowing different assessment tests or alternative means of demonstrating improvement, or by expanding the list of allowable outcomes to include some that are more relevant to adult literacy learners. Another possibility is to develop additional federal adult education legislation

and infrastructure that explicitly addresses adult literacy learning. In these efforts, the recent attention in the popular press to the SoR, explicit instruction, and dyslexia means lawmakers are paying closer attention and allocating funding towards initiatives that address these concerns. Adult literacy advocates could capitalize on the popularity of these topics to advocate for increased funding for training adult educators in reading instruction and to promote the inclusion of literacy instruction as an essential component of adult education initiatives.

### Improve Data about Adult Literacy

While I am hesitant to suggest additional reporting burdens for WIOA-funded programs, sharing participants' reading assessment information in the NRS would be a relatively easy way to improve our understanding of whether and where adults with reading support needs are enrolling in our federal adult education system. Furthermore, future iterations of the PIAAC and other assessments of adult competencies should differentiate between adult English language learners who are successful readers of other languages and those who are emergent readers. Given PIAAC's estimates that 48 million adults in the United States perform English language reading tasks at the two most basic levels of its assessment (Mamedova & Pawlowski, 2022), it is imperative to refine our understanding of adult literacy learners and how they are (or are not) being served.

### Expand the Research Base and Disseminate Findings

A number of recommendations for effective adult literacy instruction have been articulated, and research in this area is ongoing. (See, for example, Alamprese et al., 2011; Greenberg, Rodrigo et al., 2007; Greenberg, Wise et al., 2011; Hock & Mellard, 2011; Kruidenier et al., 2010; Mellard et al., 2011; Shore et al., 2015). Nonetheless, many questions remain unanswered, and a sufficiently robust evidence base has yet to be established (National Research Council, 2012). Research that would answer questions about adult literacy learning and teaching is consistently hampered by an extreme paucity of funding, the small size of the scholarly field, and the generally limited policy interest in adult literacy teaching and learning. However, it is imperative that research continue to identify strategies for effective adult literacy instruction and that findings are disseminated to programs and practitioners. The federally-funded professional development program Student Achievement in Reading (STAR) is targeted to intermediate level learners, but provides a model for dissemination of research findings that could complement teachers' and tutors' pre-service training in evidence-based reading instruction for adult literacy learners.

## Conclusion

If we want to support learners like Daryl, dramatic improvements to reading instruction are needed in adult education programs. For federally-funded programs, a significant course-correction is required to return attention to adults who need and desire literacy education. For volunteer and WIOA-funded programs, enhanced training for teachers and tutors is essential. Advocates for adult education should center adult literacy learners as important participants in the field and insist on better teacher and tutor preparation, ongoing support for instructors, and the incorporation of evidence-based strategies into reading instruction. An adult education system that substantively addresses educational needs for learners at every level is within our reach, but not without our concerted efforts to create it.

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**Forum: Improving Service to Adult Literacy Learners**

(*Part 2 of 3*)

# What We Can Do Now to Improve Literacy Services for Adult Learners

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Pickard introduces her piece by discussing the hypothetical Daryl, whose needs are not met by the program in which he is enrolled. While Pickard discusses this issue from the perspective of broad policies, I think that for adult learners like Daryl, who are seeking to improve their reading skills and persist until they reach their academic and personal goals, adult basic education programs must implement evidence-based reading instruction (EBRI).

What is EBRI? EBRI refers to "practices for teaching the components of reading, grounded in research and professional wisdom" (SABES, n.d., para. 2). EBRI strategies support students with struggles, challenges, and learning difficulties-like Daryl. EBRI requires explicit and systematic instruction of reading in the four components of alphabetics, fluency, vocabulary, and comprehension.

## The Research on Adult Learners and Reading

While there is little experimental or non-experimental research that evaluates the effects of assessment on reading achievement for adults, it is widely assumed, however, that assessment of learner strengths and needs is an important aspect of instruction. To teach reading effectively and efficiently, a teacher must accurately assess an adult learner's ability in one or more areas of reading instruction (alphabetics, fluency, vocabulary, and comprehension). Reading assessment may be used to diagnose specific strengths and needs in reading for individual adults or for adults being taught in groups (Kruidenier, 2002).

While Pickard includes PIAAC and ProLiteracy literacy statistics, she does not address what we know about teaching reading to adult learners and EBRI. Research tells us that mid-level readers, in ABE NRS levels 2-4, and often the largest percentage of adult learners, have extremely varied reading needs, and although they have learned some word identification skills, they often do not make effective use of these skills when reading. Some learners may come to a word they do not recognize or may use the first few letters and/or context clues to guess rather than decode the word (Davidson & Strucker, 2002). Nearly all learners at these NRS levels need to increase fluency, build vocabulary, and/or improve comprehension skills.

## The EBRI Process

The first step for teachers and tutors to provide EBRI is to administer individual diagnostic assessments to adult learners to assess their skills in the four reading components. The two purposes of diagnostic assessment are to determine which reading components are instructional priorities for each student, and to determine the readability level of the text which is best to use for instruction.

To begin the diagnostic assessment with an adult learner, teachers and reading tutors should explain to the learner why the diagnostic assessment is being administered. Teachers and tutors may want to build rapport with a student first by asking what students enjoy doing in their free time, where they work, and what subjects they enjoyed in school and which subjects were more difficult. Additionally, it is important to provide assurances to the adult learner that the diagnostic results will be kept confidential, and not released to others except for

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reporting purposes, and will only be used to set goals and plan for instruction (McShane, 2005).

Building rapport with a learner may also reduce their anxiety and help the learner feel more comfortable during the diagnostic process. Many ABE students already understand they have struggled with reading, in the past and currently, and may appreciate the opportunity to share their experiences.

After the diagnostic assessment is completed, review the assessment results with the adult learner in plain language. Be specific, give examples, discuss their strengths, and identify areas for improvement for instruction. Avoid providing assessment data using grade-equivalent (GE) scores. Using GE scores may not only be discouraging, but they are also not a good baseline for adults. An adult learner reading at the GE 3.0 level in comprehension is not equivalent to an eight-year-old reading at the third-grade level.

## Providing EBRI Instruction and Resources

After the assessments have been administered, the next steps for a teacher or tutor are to analyze the results to determine the learner's instructional priorities in reading. Students may receive instruction one to one or may participate in small group instruction in the specific reading component identified by the assessment. For example, the learners who need fluency instruction are grouped together, the learners who need alphabetics/phonemic awareness are grouped together and so on.

Each of these groups of students receive explicit instruction in their priority instructional components. The explicit teaching methods include a gradual release of responsibility through explanation, modeling, guided practice, and application. In addition to using the gradual release of responsibility model, teachers and tutors should focus on the five fundamental elements of instruction of:

- active student engagement
- numerous practice opportunities
- time for students to reflect on the usefulness of what they are learning
- a way to monitor the effectiveness of the instruction
- motivation to persist based on instruction and feedback

The next step in the instructional process is to select the curricular resources to be used for instruction in the reading components. When selecting instructional resources, it is essential that teachers and tutors use resources developed for adult learners. The Penn State College of Education website has an extensive list of adult education resources and links at https://ed.psu.edu/research-grants/centers-institutes/goodling-institute/goal-2-professional-development/AE_Resources_Websites

## Professional Learning for ABE Teachers and Reading Tutors

Despite Pickard's assertion that it is an important strategy for improving reading instruction, it is not practical for WIOA programs to require pre-service certification for ABE teachers or tutors. The adult education system and WIOA Title II programs are significantly underfunded as it is, and adult education teachers are not compensated for pre-service certification prior to being hired in a WIOA Title II program. However, there is a more practical pathway for teachers and tutors to be successful in providing effective reading instruction to adult learners. Programs need to provide the professional learning opportunities to include the administration of diagnostic assessments, EBRI, and explicit instructional strategies. The professional learning should be incorporated in the onboarding process and through recurring professional learning and job embedded activities focused on EBRI.

These professional learning opportunities are available through self-paced courses at LINCS, a free repository of community, courses, and resources for adult educators and ProLiteracy, a leader in the advancement of adult literacy in the U.S. and throughout the world.

In addition to the self-paced courses and EBRI resources, teachers and tutors could collaborate to create reading communities of practice focused on effective reading instruction, administering diagnostic reading assessments, reviewing, and discussing score results, and comparing interrater reliability. In programs that employ multiple teachers and tutors, professional learning should include peer observation, coaching, feedback, and reflection using student data on student progress.

## Conclusion

In summary, the issues that Pickard identifies seem secondary to the more basic issue of not implementing EBRI. Assuming effective professional learning for teachers and tutors on ERBI, let us revisit Daryl's student journey in an adult education program. Daryl arrives at an adult basic education program, ABC Learning Center, eager to learn to read but without the knowledge and skills in foundational reading. The student intake specialist, reading tutor, or teacher spends some time getting to know Daryl and speaking to him about his personal and learning goals, his past learning experiences, and explaining to him the next steps that will include a reading assessment to help identify the reading areas to focus on for instruction.

After Daryl has completed the diagnostic assessment, the teacher or tutor shares the results with him. The assessment indicates that Daryl has done well in the reading components of alphabetics and phonemic awareness; however, the areas of fluency, vocabulary, and comprehension will be the focus of his instructional priorities.

Daryl begins to receive explicit EBRI with two other adult learners who also have the same instructional priorities. He rapidly makes progress and improves his skills in the targeted reading components, along with the other learners in his group. For the first time in his life, Daryl is hopeful that he will be able to achieve his personal and academic goals, and eventually earn a high school equivalency diploma. He is well on his way.

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**Forum: Improving Service to Adult Literacy Learners**

(*Part 3 of 3*)

# Response to Amy Pickard's Article on Improving Service to Adult Learners

Peter Waite, International Council of Adult Education

Amy Pickard's insightful article on improving service to adult learners is both clear and compelling. She outlines many of the important challenges in adult foundational education and makes several timely and critically important recommendations for addressing some of the key deficiencies in the field. Her central concerns about improved training, certification, assessment, funding, and policy changes are "spot on" in terms of the areas in need of further attention. Her recommendations address some of the most important opportunities for practitioners and policy makers.

While Pickard makes an excellent case for needed changes, I disagree with some aspects of her initial assessment relative to the community based/volunteer sector. From my experience, it does not reflect the reality of most of today's CBO/volunteer programs. That said, there are, indeed, still too many "Daryls" in both volunteer and traditional programs who have had the same experience.

The portrayal of the well-meaning, poorly trained volunteer being matched with students who have extreme learning challenges and who flounder until both quit. I believe to be largely a practice of the past. It does occur but in general the programs that operate CBO/volunteer programs are significantly different from those of the past. Instead, today's volunteer programs provide and require pre-service training, student intake processes, progress assessments, and student support services. Additionally, my observations indicate they utilize both traditional and non-traditional assessments particularly for the lowest level learners many of whom make up their student base.

Excellent examples of the new paradigm in volunteer programs are evident in several states where there are formal state supported organizations that assist local programs with developing effective training and management. In New York State, for example, Literacy New York oversees and monitors many volunteer-based programs and submits student progress reports through the formal state adult education accountability system. These programs have been among some of the highest performing in the state. Similar state offices in Florida, Minnesota, Wisconsin, Alabama, Arkansas, New Jersey, California, Illinois, Alaska, Oklahoma, and other states provide various services to local programs and are strong advocates for the same program quality standards suggested by the article. Many of the states allocate federal and state funds to volunteer-based programs that ensure they are appropriately assessing students and reporting on progress.

While I may differ with Pickard on the state of CBO/volunteer programs in the United States, what remains a far greater injustice is the fact that these programs are the least funded and least supported in the adult basic education field. Traditional programs often send the lowest literacy level and most challenged students to community-based volunteer programs because they are hesitant to serve learners who will make slow progress, given the current federal and state formulas for funding. Significant progress is being made with more extensive training, support services and assessment, but the fact remains that many of the students at the lowest levels are being sent to the least resourced sector in our field.

Policy makers and funders consistently neglect this important sector and continue to view some of these programs in light of the old perception of a "well meaning, untrained volunteer" being an appropriate match with a student. I believe that this false concept that is embodied

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in the ideal of untrained volunteer is one of the most serious obstacles to expansion of this sector because it continues the belief that anyone, without any training can do this work. This then, leads to a loss of respect and/or additional funding, and that myth alone helps to restrict the potential for both program expansion and innovation in the field by discouraging new funding for programs.

While I believe that Pickard's profile of the volunteer programs may not reflect the reality of many programs today, I would agree that her recommendations are appropriate to both volunteer and traditional adult education programs. They offer a solid framework for improving instructional outcomes for learners and for the field.

New and more flexible assessments are critical to all sectors and would significantly improve the ability of programs to serve students and demonstrate progress. Assessments, however, need to take into consideration the varied student goals and allow for a pace of progress that is realistic. Most approved assessments are not very helpful for students at the lowest levels because they fail to show educational gain over shorter time frame required by state and federal guidelines and often do not take into account those differing goals.

Additional support for innovative training opportunities for both pre-service and in-service tutors would also be of benefit to all programs. While programs have long "certified" tutors and volunteer program standards have been a part of the field for many years, standards alone cannot assure better student outcomes. Formalizing opportunities to expand these efforts to the broader field would be welcomed as long as they are not designed to exclude a less formally credentialed volunteer.

Supporting more research that has practical application and is relevant to the broad field would be welcomed by the CBO/volunteer sector. There are several specific research areas that my interactions with many of the state offices suggest they have long wanted to encourage but lack support and funding. These include additional research-based guidance on the best methods for teaching and related student issues. More plentiful research that is applied to the real-life challenges of teaching and learning and made available to the field could ensure the most up to date approaches are included in pre- and in-service training.

Pickard's recommendation regarding the need for a broader view of student motivations and goals beyond the workforce is another critically and vitally important suggestion. The singular focus on specific workforce goals has limited both the ability to serve many students at the lowest levels and innovation in the field by preventing cross sector collaborations with other human service providers that are not directly employment-related such as those who work to address housing, domestic abuse, health care, nutrition, and similar community priorities. While employment is a strong motivator for prospective students, this sole emphasis ignores the fact that many students go to programs for a variety of non-employment related goals.

In conclusion, while I believe some of the description of volunteer-based programs is based on practices of the past, I commend Pickard for her thoughtful recommendations for what needs to be done across the field to ensure that there are far fewer Daryls who get lost in the system, their needs unmet. These recommendations would be helpful for the entire adult foundational literacy field and welcomed by volunteers and professionals.

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Research Digest

# The Science of Reading and Where It Stands in Adult Education

Amani Talwar, American Institutes for Research

The science of reading refers to the extensive body of research on how we learn to read and the most effective methods for teaching reading. Our knowledge of what works in reading instruction is based on decades of rigorous, scientifically based research in the fields of education, cognitive psychology, and neuroscience. This research digest provides an overview of the science of reading, followed by a brief summary of research-based frameworks that explain the reading process, and concludes with a discussion of reading research in adult education.

## The Evolution of the Science of Reading

The science of reading is best understood in the context of the Reading Wars, a contentious historic debate about the most effective methods for teaching children to read. This debate centered on two opposing schools of thought: phonics-based instruction and whole language instruction. Instruction based on phonics focuses on the relationships between letters and sounds, teaching readers to sound out words and recognize common letter combinations (Mesmer & Griffith, 2005). This instructional approach is typically explicit and sequential, designed to provide children with the necessary tools to "crack the alphabetic code" and become skilled, independent readers (Castles et al., 2018; Ehri, 2020). Conversely, the whole language movement posited that children learn to read through exposure to authentic texts and characterized reading as a "psycholinguistic guessing game" (Goodman, 1967), in which readers must use contextual cues to predict or recognize words. Whole language teaching methods focus on the meaning of connected text, eschew a systematic approach to teaching phonics, and may limit explicit phonics instruction to short lessons delivered in response to student errors (Dahl & Scharer, 2000; Rayner et al., 2001; Stahl et al., 1994).

The pendulum has swung back and forth between phonics-based instruction and whole language instruction in the United States (Chall, 1967; Hempenstall, 1997). In an effort to "end" the Reading Wars, an instructional philosophy known as balanced literacy emerged as a middle ground between these two approaches in the 1990s (Pressley, 1998; Wharton-McDonald et al., 1997). Balanced literacy ostensibly incorporates elements of skills-based and meaning-based methods for teaching children to read (Frey et al., 2005). Critics contend that balanced literacy instruction includes scientifically unsupported practices, such as using picture clues to guess unknown words, and avoids systematic phonics instruction to the detriment of struggling readers (Moats, 2007; Winter, 2022).

In the late 1990s, a federal initiative to use research evidence to inform reading instruction took hold, when Congress convened the National Reading Panel with a mandate to evaluate all available reading research and identify the most effective evidence-based methods of teaching reading. This panel of nationally recognized reading experts included scientists, teachers, administrators, and teacher educators selected by the National Institute of Child Health and Human Development, part of the National Institutes of Health (NIH), in collaboration with the U.S. Department of Education (Shanahan, 2005). The National Reading Panel's landmark report, based on a review of hundreds of research studies, identified five key components of effective reading instruction: phonemic awareness,

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which refers to the ability to identify and manipulate the individual sounds in spoken words; phonics, which, as discussed previously, refers to teaching the relationships between letters or letter combinations and their sounds; vocabulary, which refers to the ability to understand the meanings of words and use words to convey their meaning accurately; fluency, which refers to the ability to read text with accuracy, ease, and appropriate expression; and comprehension, which refers to the ability to read text and understand its meaning (National Reading Panel, 2000). Some of these findings were echoed in similar comprehensive reviews conducted in the United Kingdom and Australia (Rose, 2006; Rowe, 2005).

Since the publication of the National Reading Panel's report, the science of reading has gained traction in the 21st century, as policymakers in the United States have moved toward evidence-based methods of teaching reading. The Institute of Education Sciences (IES), the research arm of the U.S. Department of Education, has published practice guides in the past two decades that highlight evidence-based recommendations for teaching reading in the K-12 system, focusing on the five components of effective reading instruction identified by the National Reading Panel (e.g., Foorman et al., 2016; Vaughn et al., 2022). As of October 2024, 40 states and the District of Columbia have passed legislation or implemented state policies that require evidence-based reading instruction (Schwartz, 2024).

## Research-Based Frameworks for Reading

The science of reading can be further unpacked by examining two prominent frameworks that are aligned with the research evidence on how we learn to read and identify the key skills involved in the process of reading. The first framework is the Simple View of Reading, proposed by Gough and Tunmer (1986), which states that reading comprehension is influenced by two components: decoding and linguistic comprehension. Decoding refers to the ability to quickly sound out words using letter-sound correspondence rules and, eventually, recognize familiar letter patterns, while linguistic comprehension refers to the ability to understand the meaning of spoken language. Importantly, the Simple View of Reading is expressed as an equation, simplified as *Reading Comprehension = Decoding* x *Linguistic Comprehension*, which indicates that proficient reading comprehension is achieved through the multiplication (or interaction) of decoding and linguistic comprehension. This interaction implies that insufficient mastery of either component can hinder overall reading performance.

The second framework is the Reading Rope, formulated by Scarborough (2001), which vividly portrays the process of reading as a finely woven rope, with the strands of the rope representing the diverse array of skills essential for proficient reading. The Reading Rope recognizes two broad categories – word recognition and language comprehension – that map onto the components of the Simple View of Reading and can be deconstructed to identify specific skills involved in reading. Word recognition is broken down into phonological awareness, which refers to recognizing and manipulating the spoken parts of words (e.g., syllables); decoding; and sight recognition, which refers to the ability to quickly recognize and read words at sight, without needing to sound them out (Ehri, 2005; Perfetti, 2007). Language comprehension is broken down into more complex skills, including background knowledge, which refers to the prior experiences and information that a reader brings to the text; vocabulary; language structures, which refer to the understanding of how words are organized within sentences and paragraphs to covey meaning; verbal reasoning, which refers to the ability to make inferences and understand nonliteral aspects of the text (e.g., metaphors); and literacy knowledge, which refers to the understanding of writing goals and conventions (Duke & Cartwright, 2021). All of these skills interweave to form that rope that represents reading proficiency, which improves as the reader becomes more efficient in word recognition and more strategic with language comprehension.

Together, the Simple View of Reading and the Reading Rope explain that readers must be able to (a) quickly process written words, translating them from text to language (decoding or word recognition) and (b) accurately understand the meanings of those words and how those meanings come together to form sentences and a larger discourse (linguistic comprehension or language comprehension). Indeed, a significant body of research shows that both word recognition and language comprehension are correlated with reading achievement

in the K-12 system (Carver, 1998; Chen & Vellutino, 1997; Foorman et al., 2015; Johnston & Kirby, 2006). While word recognition is critical in early grades, its importance gradually diminishes as students progress through grade levels, with language comprehension exerting a greater influence on reading comprehension in high school (Hoover & Gough, 1990; Kendeou et al., 2009; Lonigan et al., 2018; Tilstra et al., 2009; Vellutino et al., 2007). Additionally, researchers have documented that reading difficulties can be traced to poor performance in one or both of these areas (Aaron et al., 2008; Brasseur-Hock et al., 2011; Catts et al., 2006) and that systematic instruction focused on phonics and decoding can improve reading outcomes for elementary school students with dyslexia (Shanahan, 2023).

## Reading Research in Adult Education

What we know about effective reading instruction in the K-12 system may not directly translate to the adult education context. Individuals who participate in adult education programs comprise a heterogenous population, with diverse cultural, language, and educational backgrounds (Lesgold & Welch-Ross, 2012). Unlike school-going youth, adult learners must manage their classes alongside work and family responsibilities (Greenberg, 2008). With respect to the science of reading, child-based research findings need to be evaluated separately for adults who are improving their literacy skills (Greenberg et al., 2017; Mellard et al., 2010). Therefore, it is important to consider the evidence and limitations presented by reading research involving adult learners.

First, robust evidence on effective reading instruction in adult education settings is limited. The strongest evidence in educational research comes from randomized controlled trials, which systematically assign learners to separate groups to compare the effects of different instructional approaches, ensuring unbiased results. Only a small number of randomized controlled trials involving reading instruction have been conducted with adult learners (Kindl & Lenhard, 2023). Some of these studies were funded through a 2001 grant competition for research on adult and family literacy that was jointly sponsored by the NIH, the U.S. Department of Education, and the National Institute for Literacy, reflecting a key federal investment in adult education research (Miller et al., 2011). Overall, the evidence suggests that implementing an instructional program that includes a systematic phonics component can support adult learners in improving their decoding skills, particularly those who are nonnative speakers of English (Alamprese et al., 2011; Condelli et al., 2010). In the context of individual tutoring, vocabulary instruction focused on analyzing the structure of meaning within words also shows promise for boosting decoding performance (Gray et al., 2018). However, the burden of managing multiple responsibilities and stressors often disrupts adult learners' participation in instructional programs, which can impact the success of reading interventions in adult education (Greenberg et al., 2013; Miller et al., 2011).

Second, correlational research focused on adult learners' reading skills lends support to the Simple View of Reading and the Reading Rope. Adult learners' performance on reading comprehension assessments is associated with both word recognition and language comprehension (Barnes et al., 2017; Mellard et al., 2010; Sabatini et al., 2010; Talwar et al., 2021). Multiple studies have highlighted the importance of the specific skills recognized in the Reading Rope framework, including phonological awareness, decoding, vocabulary, and background knowledge (see Tighe & Schatschneider, 2016 for a meta-analysis). Additionally, researchers have identified different reading profiles based on adult learners' performance across these areas, including two notable groups: (a) readers who are relatively proficient decoders but struggle with understanding the meaning of what they are reading and (b) readers who have difficulty with sounding out words but have a stronger grasp on oral language (Binder & Lee, 2012; MacArthur et al., 2012; Mellard et al., 2009; Talwar et al., 2020).

Third, readers' prior knowledge may hold particular importance in the context of adult education. Adults carry a wealth of experiences and skills, which shape the vocabulary and background knowledge that they bring to a reading activity. Depending on their unique lived experiences, adult learners may have mastered vocabulary used in authentic, everyday situations but might encounter knowledge gaps in academic vocabulary (Pae et al., 2012; Strucker, 2013). Overall, adult learners with more extensive vocabulary and background knowledge are more likely to be successful at making inferences while reading (Tighe et al., 2023). Their prior knowledge of the

world influences how well they understand text, especially the type of longer passages one might encounter on high school equivalency assessments (Strucker, 2013).

Lastly, promising research is underway that could further strengthen the evidence base for effective reading instruction in adult education. As a notable example, IES funded the Center for the Study of Adult Literacy, a national research and development center that operated from 2012 to 2022 and piloted a multicomponent reading curriculum in adult education settings (National Center for Education Research, 2022). The curriculum included instruction on decoding, vocabulary, and reading comprehension, supported by self-paced reading comprehension practice in an interactive online program (Einarson et al., 2021). The research findings could provide insight into whether this curriculum supports adult learners in building the skills that are important for reading, such as those identified by the Simple View of Reading and the Reading Rope frameworks. Another example of innovative reading research in progress is the AutoTutor for Adult Reading Comprehension project, which is part of the Collaborative Research for Educating Adults with Technology Enhancements (CREATE) Adult Skills Network funded by IES in 2021 (CREATE Adult Skills Network, n.d.). The goal of this project is to develop, refine, and pilot a standalone intelligent tutoring system that supports adult learners in learning reading comprehension strategies and basic digital literacy skills. The research findings could shed light on whether this online instruction system helps adult learners in improving their reading proficiency. Once this technology is developed, it could potentially serve as a personalized learning tool for adult learners in different locations and provide instructors with data-driven insights into learners' progress.

## Conclusion

Despite its profound impact on our understanding of effective reading instruction, the science of reading has not been immune to critique. Critics argue that it overly emphasizes phonics and decoding, which is widely considered a mischaracterization of the evidence generated by decades of reading research (Seidenberg, 2019; Shanahan, 2003; Wexler, 2023; Wilkins & McNamara, 2023). With respect to phonics, the evidence demonstrates that systematic phonics instruction is more advantageous than teaching approaches in which phonics is taught unsystematically or not taught at all (Ehri et al., 2001; Stuebing et al., 2008). Additionally, the research also shows that fluency, vocabulary, and comprehension are critical components of effective reading instruction (Castles et al., 2018; National Reading Panel, 2000). For readers in the early stages of acquiring literacy, instructional practices informed by the science of reading include building vocabulary knowledge, teaching phonics-based word reading strategies, and playing games to identify and fix comprehension errors (Foorman et al., 2016). For more advanced readers, evidence-based practices include teaching how to analyze prefixes and suffixes to derive the meanings of complex words and facilitating partner work that encourages readers to summarize their understanding of a connected text to a peer (Vaughn et al., 2022).

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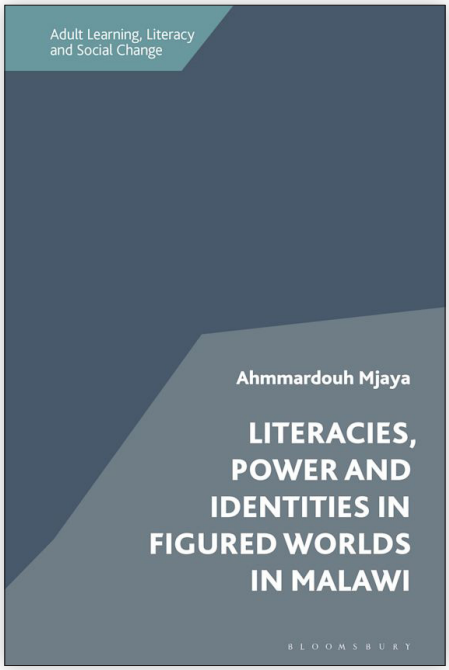
http://doi.org/10.35847/HZacharia.6.3.51

**Book Review**

# Review of *Literacies, Power and Identities in Figured Worlds in Malawi*

Hodges K. Zacharia, University of East Anglia

The author of the book *Literacies, Power and Identities in Figured Worlds in Malawi*, Ahmmardouh Mjaya is a Malawian, scholar, and lecturer at the University of Malawi. In this book, he explores literacy as a social practice focusing on rural women in Malawi. The social practice of literacy reflects the use of reading and writing in everyday life (Papen, 2006). Mjaya finds the social theory of literacy stronger in the social context and argues that a gap lies in its failure to conceptualise power and identity. This book is responding to this conceptual gap using Holland et al. (1998)'s concept of the figured world. The figured world is "a socially and culturally constructed realm of interpretation in which particular characters or actors are recognised, significance is assigned to certain acts and particular outcomes are valued over others" (Holland et al., 1998, p. 52). Mjaya conceptualises the figured world as "people's imagined areas of interests or activities, which are actualised in real life through various forms of engagement" (p.18).




Mjaya's book is based on an ethnographic study conducted in Sawabu village in Malawi where he explores the lived experiences of women in adult literacy classrooms, during conditional cash transfers and other activities in the community. Adult literacy is a key plank in Malawi's educational strategy, which itself feeds into the country's overall development strategy. However, Mjaya deeply questions the National Adult Literacy Programme for presenting literacy learners as illiterate who need literacy classes to propel them to modern life and social change. Mjaya finds this reasoning flawed and argues that women's actions depend on their cultural expectations hence change can only be achieved if the entire community changes.

To someone who has never used an ethnographic approach, I find Mjaya's chapter 3 stimulating. Mjaya nicely discusses his choice of an ethnographic approach; however, the real strength of this section is his discussion of the struggles and dilemmas as a researcher. He shares his struggles in finding living space within the community while balancing the need for personal security and living close to the people. However, he emphasises that living within the community does not make the researcher a full community member, hence Mjaya navigates his own figured worlds while wearing multiple identities assigned by community members. He provides clarity on the applicability and guidance to those who may be interested to use an ethnographic approach in literacy studies.

Mjaya, A. (2022). *Literacies, Power and Identities in Figured Worlds in Malawi*. Bloomsbury Academic. 162 pages. $130 (hardcover); $39.95 (paperback); $35.95 (eBook/ePDF). ISBN: 9781350144811 (hardcover); 9781350296176 (paperback); 9781350144835 (ePDF); 9781350144842 (eBook)

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Mjaya tests the social theory of literacy, which posits that literacy is fluid and changes in a different contexts. Using the women's experiences, literacy practices and artifacts (information leaflets, money receipts, ration cards, pens, and inkpads), he shows how community members navigated their figured worlds (Chapter 4). Though women were exposed to multiple literacy practices, they needed literacy skills beyond functional literacy. While women navigated their literacy world through thumbprinting (means of signing for those who cannot write), it also exposed the literacy identity of women as those who cannot write. Further, Mjaya critically discusses national policies, showing the gaps in practice, especially in multilingual settings. For example, Ms. Sumani the literacy learner converses with the instructor about managing clean water for drinking. From the extract, Ms. Sumani is knowledgeable on the topic but she lacked literacy skills in Chichewa hence requesting to converse in her mother language Ciyawo. Additionally, Mjaya came across an artifact (road signpost) written in English and Chichewa in the community where learners were being taught in Chichewa only. This example presents a dilemma for policymakers as Chichewa had some practical usage though limited in some situations.

Mjaya's contribution to the social theory of literacy is a pinnacle of the book. Through a figured world (literacy class), he discusses women's lived experiences of power and identity and how literacy played its role (Chapter 5). He paints a picture of literacy learners who change their positioning depending on context. Through these concepts, "the educated/the uneducated," "the knowledgeable/the not knowledgeable," "the intelligent/ the struggling," and "the instructor/the learner," Mjaya shows how literacy learning is a context for the negotiation of social relationships. For example, Ms. Msosa identifies herself as "uneducated" reflecting on her writing and reading skills. However, she "read" two pages of her book at her home reflecting a skill of the "educated." This reflects the fluidity of identities, and that literacy can be empowering or disempowering depending on the experiences in those figured worlds.

Chapter 6 demonstrates women challenging power relationships with the instructors. Through the "school culture," instructors expect learners' to adhere to the standard norms in a formal school like being in school on time, raising hands before speaking and singing songs which gave the instructors power over the learners. This power is contested though, as the learner's agency increases, this is seen as demotivating and disempowering hence resistance. Ms. Upile's case provides a good example where the supervisor directs that only Chichewa literacy graduates will be registered for English literacy classes. However, Ms. Upile registers for an English literacy class despite not being a Chichewa literacy graduate hence ignoring the supervisor's authority. This shows that power is relational and can be negotiated.

In summary, I find Mjaya's work effective in analysing power and identity through the figured world lens. In my opinion, this book is a useful practical tool for a wide audience: literacy experts, postgraduate students, ethnographic researchers, policymakers, and humanitarians. The use of the ethnographic approach is useful to postgraduate students and ethnographic researchers as it acknowledges the challenges of using the approach while assuring the users of its effectiveness in studying literacy subjects. Further, Mjaya made me reflect on my previous work as a humanitarian worker while challenging that my use of literacy artifacts (cashcard) and thumbprinting may negatively affect the dignity of some participants (those who cannot read and write) which is against the "do no harm" humanitarian principle. Further, Mjaya's skill in the incorporation of quotations from his fieldwork and interviews makes the book simple to read and easy to understand.

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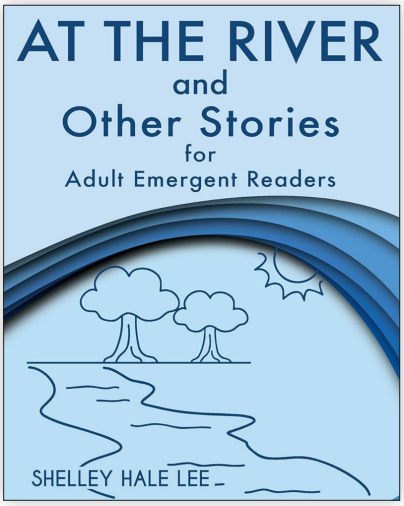
http://doi.org/10.35847/MFrank.6.3.54

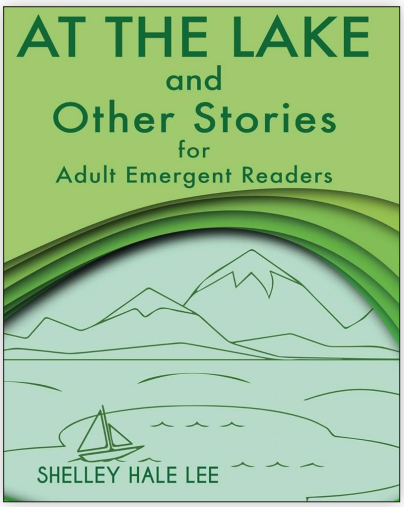
**Resource Review**

# Wayzgoose Press' *For Adult Emergent Readers* Series

Margaret Frank, Hamline University/ATLAS (retired)

This resource review includes two books: *At the River* (Book 1) and *At the Lake* (Book 2) for emergent/early readers (children and adults). The purpose of the series is to provide basic stories for English Learners (ELs) who are either non-literate or semiliterate. Along with oral language instruction, learners can improve basic literacy skills such as Roman alphabet naming and forming, English letter-sound patterns, basic word knowledge, and learn to read and understand short texts (sentences and paragraphs).




Specifically, *At the River* (10 units, 34 stories) covers Roman alphabet letter names and formation, phonemic awareness skills (oral blending and segmenting), print concepts (left to right, top to bottom), single consonants, short vowels, consonant digraphs, word blending, sight words, simple sentence structures, and text fluency.

*At the Lake* (9 units, 29 stories) includes a review of short vowels and then covers long vowel-silent e, consonant blends, R-controlled, and vowel digraphs or pairs, word blending, additional sight words, more complex sentence and paragraph structures, and text fluency.

There is a recommended assessment tool to determine needs and placement into Book 1 or 2. The author also provides a *Teacher's Guide* (free to download) that outlines a systematic and sequential lesson planning and delivery format - moving from the smallest unit of meaning (letters or sounds) to the largest (sentences or paragraphs).

## Evaluation

Both books (*At the River* and *At the Lake*) accomplish the author's goal of providing relevant, short stories for non-literate or semi-literate English learners at beginning ESL 1-3 levels - and even native English readers at ABE 1-2. The texts stay true to the scope and sequence where phonetic elements (letters, sounds, words) are carefully sequenced and systematically combined into short stories or texts. The early stories include mostly decodable words; later, they include a combination of decodable and sight words. The topics of the sentences and stories are relevant to adult learners and their families. The accompanying line drawings are simple and graceful. They do not detract from the text, but rather enhance understanding.

Zemach, D. E. (Ed.). (2020). *At the Lake and Other Stories for Adult Emergent Readers*. Wayzgooze Press. 164 pages. $12.99. ISBN: 9781938757846

Zemach, D. E. (Ed.). (2016). *At the River and Other Stories for Adult Emergent Readers.* Wayzgooze Press. 133 pages. $10.99. ISBN: 9781938757242

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The books along with the detailed *Teacher's Guide* can easily be integrated into beginning literacy programming. The books have all the necessary printed information and the Teacher's Guide offers explicit directions for regular 30–60-minute phonics classes:

1. Teach letters and sounds
2. Create a context
3. Build words
4. Read words
5. Write words
6. Read texts

The multi-sensory, systematic, and sequential design of this resource is like other phonics materials for children and adults. Although the *Teacher's Guide* is free, books must be purchased for all learners. However, the price is reasonable considering that each unit is a week's worth (or more!) of lessons. And if students leave the books in class, new students can be given books no longer used by others. The detailed *Teacher's Guide* is necessary because it outlines how to add variety to the repetitive style of the books. Together they offer a comprehensive program for teaching foundational reading and writing skills at a reasonable price.

## Recommendation

As stated above, this resource is appropriate for beginning ESL and ABE levels. Instructors (and maybe even volunteers) at these levels will find the detailed *Teacher's Guide* to be very useful when planning and delivering a series of oral and print reading foundational skills. The lesson/unit format, if followed closely, has the potential to improve decoding, fluency, vocabulary, comprehension skills and confidence.