ADULT LITERACY EDUCATION:

THE INTERNATIONAL JOURNAL OF LITERACY, LANGUAGE, AND NUMERACY

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Adult Literacy Education:

The International Journal of Literacy, Language, and Numeracy

MISSION STATEMENT

The journal's mission is to publish research on adult basic and secondary education and transitions to college and career programs. It informs practitioners, researchers, policy makers, and funders about best practices in adult literacy, numeracy, and English language education in publicly funded, community and volunteer-based programs in a wide range of contexts. Each issue will consist of research articles focused on a particular theme plus other content of interest to readers (e.g., resource reviews, opinion pieces, and debates and discussions on timely topics of interest to the field).

CONSULTING EDITORS:

Welcome

Dear Readers,

We are pleased to share Volume 1, Issue 1 of ProLiteracy's new journal, *Adult Literacy Education: The International Journal of Literacy, Language, and Numeracy (ALE)*. This journal is part of ProLiteracy's expanded initiative conducting and sharing primary and secondary research with a wide adult education audience in the United States and internationally.

ALE is a peer-reviewed, online research journal that will be available twice per year. The journal's purpose is to publish research on adult basic and secondary education and transitions to career and college. Research will reflect best practices in adult education in order to inform practitioners, researchers, policy makers, and funders.

The first issue contains three articles on research to help adult education instructors, a forum on immigration and ESL, a book review, a research digest, and a column on education technology. These components will be featured in each issue of *Adult Literacy Education*.

Our journal team—Alisa Belzer, Amy Rose, and Heather Brown—are seasoned researchers and editors of various types of journals. They will continue to seek and share only the highest quality content for subsequent issues of the journal.

The journal is available as one document AND as separate articles for download. We encourage you to share the articles widely with the many audiences you interact with in order to bring awareness to timely, relevant topics and practices about adult education research.

Do you know of someone who would like to receive the journal or an author who wants to contribute to future issues? Please contact us at **ALEjournal@proliteracy.org**. We also look forward to any feedback to help us continue to make the journal a useful tool for you.

We hope you enjoy reading our first issue!

Kevin Morgan
President/CEO

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Research Article

Adult Literacy Teachers' Perspectives on Reading Difficulties and the Origins of These Perspectives

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Abstract:

Studies of the teaching practices used in adult reading programs suggest that these practices often reflect the personal perspectives of teachers on factors that contribute to less-skilled reading development. In this study, 19 adult reading teachers were interviewed to explore their perspectives on how adults become less-skilled readers and the origins of these perspectives. Four themes were identified in terms of teachers' perspectives, which attributed less-skilled reading respectively to: (a) learners' distinct needs not being met, (b) readers' "life baggage", (c) under-developed sense of joy in reading, and (d) inappropriate learning environments. Four main types of experiences appeared to have contributed to the development of these perspectives: (a) teachers' own experiences in learning reading, (b) teachers' general teaching experience, (c) teachers' experiences of teaching reading specifically, and (d) teachers' knowledge of formal reading theories and/or empirical research findings. Potential implications for enhancing the outcomes of adult reading instruction programs are discussed.

Literacy skills have long been recognized as an important correlate of social and economic outcomes, both for individuals and for overall communities (e.g., European Union High Level Group of Experts on Literacy, 2012; National Research Council, 2012). Despite this, a considerable body of research evidence suggests that large numbers of adults worldwide continue to have difficulties in the area of basic literacy. Foremost among this research is a series of international surveys of adult skills, the most recent of which is the Programme for the International Assessment of Adult Competencies

(PIAAC) (OECD Skills Outlook, 2013). PIAAC has prompted a series of national reports examining local contexts. For example, one recent Australian report (Australian Industry Group, 2016) indicated that 44% of Australian adults have literacy skills below the minimum level required to function fully in a modern society. Similar results have been reported in studies from other developed countries. For example, in 2012, the European Union's *High Level Group of Experts on Literacy* reported that 20% of adults in Europe exhibited some difficulties in the area of literacy, while in 2014, Gyarmati et al. reported that nearly half of the working-age

population in Canada had identifiable literacy difficulties. Results such as these underscore the urgent need for research into ways to enhance literacy skills within the adult population.

This paper focuses on adult reading as a critical facet of literacy. Reading skills, or the skills needed to understand and interpret printed material, are essential for overall literacy development and growth (Galletly & Knight, 2013). Less-developed reading skills have been posed to limit an adult's ability to live a fully productive and secure life (National Research Council, 2012). Apart from the more obvious correlates of low reading levels e.g., reduced earnings, unemployment, and poverty (Centre for Longitudinal Studies, 2014; Shomos & Forbes, 2014), low adult reading skills have now been linked to negative outcomes in various other facets of individuals' lives. These facets include health and social life quality (Clark & Dugdale, 2008; Miller, McCardle, & Hernandez, 2010). Various hypotheses have been posed with respect to the precise mechanisms responsible for the association between reading levels and outcomes within these diverse areas. For example, it has been proposed that the correlation between adults' reading levels and adults' health outcomes may be attributable in part to the need for sound reading skills to make full use of available public health information, complete medical forms, and understand instructions provided on prescription medicines (Gyarmati et al., 2014). Research on the correlates of reading skills point to the wide-ranging impact that reading skills can have on the social, economic, and personal quality of life enjoyed by affected individuals.

While a considerable body of research has now emerged on the importance of possessing strong adult reading skills, research on how reading skills can best be developed has traditionally focussed on child readers. Research on less-skilled adult

readers is relatively scarce (MacArthur, Konold, Glutting, & Alamprese, 2012). In addition to the relatively scarce literature available on adult reading difficulties, confusion over the approaches that should be used in adult reading programs has been propagated through many decades of debate on how reading skills are acquired and developed through the lifespan (e.g. Goodman & Goodman, 1979; Gough & Hillinger, 1980; Share, 1995; Stanovich, 1980). Despite an emerging consensus that a balanced view of reading is necessary to develop effective reading programs i.e., ones that focus on the competent co-ordination of decoding, word recognition, vocabulary knowledge, fluency and reading comprehension processes (e.g. Pressley, 2006), research suggests that this view is not reflected in the development of many adult reading programs across the world (National Research Council, 2012).

Regardless of the particular reading theory adopted, practitioners and scholars alike agree that in principle, effective reading instruction relies upon teachers who are well-informed with regard to the reading process, and able to respond on this basis to learners' specific reading needs (Condelli, Kirshstein, Silver-Pacuilla, Reder, & Spruck Wrigley, 2010; National Research Council, 2012). Educators with higher levels of professional experience and knowledge are more likely to be able to target appropriate and important reading skills in their instruction, and to adopt effective approaches in their efforts to assist readers in developing these skills (Kruidenier, MacArthur, & Wrigley, 2010). Despite this, research suggests that the training provided to adult reading teachers is often inadequate, with professional learning opportunities reported also to be limited. Not surprisingly, the practices adopted by teachers in adult literacy programs have also been reported to vary considerably, an outcome often attributed

to the inadequate training and development opportunities provided within these programs (Kendall & McGrath, 2014). Studies of the teaching practices used in adult reading programs have also suggested that the teaching methods used are generally not evidence-based (National Research Council, 2012), more often reflecting the personal beliefs and perspectives of teachers on how adults can, or should be taught to read (Beder, Lipnevich, & Robinson-Geller, 2007; Belzer, 2006; Greenberg et al., 2011; Van Kan, Ponte, & Verloop, 2013). Findings such as these suggest that, in order to improve the outcomes achieved in adult reading programs, it is first necessary to explore the beliefs and perspectives that reading teachers bring to the programs, as well as the origins of these beliefs and perspectives.

In one previous study conducted by the authors, 60 adult reading teachers were asked to discuss their beliefs about how less-skilled adult readers should be taught to read (McHardy & Chapman, 2016). In this phenomenographic study, the adult reading teachers responded to an online survey on the instructional approaches they would use to teach a specific, profiled adult reader.

Four broad approaches to teaching adult reading were identified from the responses obtained. In the least complex of the approaches identified, the *reassurance* approach, the focus was primarily upon developing positive relationships with the learners. This reflected a belief in the notion that adult readers acquire reading skills naturally when the learning environment is conducive. There was no specific focus on providing instruction in targeted reading skill areas. *Task-based* instructional approaches also had a focus on creating reassuring learning environments, but were more directed and focused upon reading instruction, than wholly reassurance-based approaches. Task-based approaches relied heavily on teachers' views of what readers needed, and generally focused on a

limited selection of tasks. *Theory-based* approaches to teaching reading were informed by particular understandings of the reading process. These approaches were grounded in well-developed, but in many cases, narrow views on the reading process and on how readers should be taught to read. These approaches did not necessarily focus on specific reading difficulties. The most complex approach was labelled the *responsive* approach, and was characterised by the incorporation of elements from all three previous approaches, *as well as* a focus on providing instruction to bolster specified processes that are critical for effective word reading (e.g., decoding, syllable awareness). The responsive approach relied upon a high level of knowledge about the reading process, and about strategies for teaching reading. This approach also relied heavily on flexibility, allowing an appropriate 'response' to individual learners' needs.

The diverse approaches identified in this and other previous research may provide insights into why adult reading programs continue to have limited impacts on adults' reading skills (Palameta, Myers, & Conte, 2013). More specifically, the variable results obtained in adult reading programs may be a product, at least in part, of teachers not targeting specific, critical reading difficulties in their instructional approaches (e.g., MacArthur et al., 2012).

Other research has suggested that problems with a lack of sound theoretical and empirical knowledge of the reading process on the part of reading teachers may be compounded by teachers' lack of awareness of the assumptions that they bring to teaching situations (Sanger & Osguthorpe, 2011; Stephens et al., 2000). Various researchers have suggested that teachers' ability to engage in this form of reflection is a critical determinant in the success or failure of instructional reading programs (Sanger & Osguthorpe, 2011). Findings

of this kind highlight the need not only to provide better training and support for teachers within adult reading programs, but also, to bolster teachers' own ability to reflect upon, evaluate, and improve their instructional approaches. In this view, teachers need to be provided with frameworks for acknowledging and analysing their own reading-related beliefs and perspectives, as well as the origins of these, to be able to evaluate and improve upon the instructional approaches they adopt.

Given the research evidence which suggests that adult reading teachers often rely upon their own beliefs about the reading process in deciding upon their instructional strategies, rather than on evidence garnered from well-controlled research within the field (McHardy & Chapman, 2016; Benseman, 2013; Van Kan et al., 2013), to change teachers' practices and facilitate the adoption of responsive approaches in adult reading programs, it will first be necessary to extend our own understanding of the perspectives adopted by reading teachers (Barnyak & Paquette, 2010). There is limited reference to the origins of reading-related beliefs and perspectives in the adult teacher education literature. Beliefs about reading and reading development processes have been reported in child reading research to derive from personal childhood experiences, experiences and observations as a teacher, and teachers' own literacy education and school experiences (Barnyak & Paquette, 2010; Mansfield & Volet, 2010; Sanger & Osguthorpe, 2011; Stephens et al., 2000), although professional readings (Stephens et al., 2000), formal knowledge (Mansfield & Volet, 2010) and previous training (Sanger & Osguthorpe, 2011) have also been identified in some studies. Overall, however, there has been little attempt in the research literature to unpack the sources of adult reading teachers' beliefs in

this area. Based on an extensive search of the adult reading literature, no studies were identified by the authors that had focused specifically on the origins of reading-teachers' beliefs and perspectives on why less-skilled adult readers had not developed reading skills.

The present study aimed to extend our current understanding of why adult reading teachers adopt given approaches and practices in their reading instruction (e.g. McHardy & Chapman, 2016; Kendall & McGrath, 2014). The two specific research questions addressed in the study were: (a) What are adult reading teachers' perspectives on how adults become less-skilled readers?, and (b) What are the origins of these perspectives?

Method

Participants

The data for this study were generated from a series of interviews with teachers of less-skilled adult readers. Nineteen adult reading teachers from one Western Australian city and one New Zealand city participated in the study. Of the 19, four were males and 15 were females. Participants' ages varied widely; three teachers were aged 20-29 years, one teacher was aged 30-39 years, two teachers were aged 40-49 years, seven teachers were aged 50-59 years and six teachers were aged over 60.

Participants were recruited through the lead researcher's networks in Western Australia and New Zealand. Through these networks, relevant organizations were contacted via email and asked to distribute information about the study to reading teachers who worked in that organization. To capture a range of perspectives, adult reading teachers with varying years of experience, employment status, and teaching contexts ranging from community volunteers to formal tertiary settings were invited to participate.

While all participants had some experience in teaching adult reading, the number of years of experience in adult literacy varied considerably across the sample. One teacher reported having less than one year of experience, two teachers reported 1-2 years of experience; five teachers had 2-5 years of experience; six teachers had 5-10 years of experience; three teachers had 10-20 years of experience; and two teachers reported having more than 20 years of experience.

Interview Design

The research questions were pursued through a series of semi-structured interviews. Given the research questions posed, in the design of the interviews with participants, importance was placed upon understanding the *perspectives* of the adult reading teachers on the reading process, and on the *origins* of these perspectives. Thus, the interview

questions were designed to capture the underpinning ideas, behaviors and contexts associated with particular acts taken by the participating teachers. 'Perspectives' were viewed here in alignment with Blackledge and Hunt's (1985) framework, which depicts a perspective to incorporate notions of aims and intentions, significance, reasons and strategies. Guiding questions used in the interviews to address these elements of participants' perspectives are shown in Table 1.

Interview Procedures

Interviews were conducted over a three month period. Once an email response to the information sent out by organizations was received, the primary researcher organized to meet with the teacher at a convenient time and location. Interviews took between 20 and 60 minutes in all. As described above, to address the primary

Table 1: Guiding questions with related conversational questions

GUIDING QUESTIONS	CONVERSATIONAL QUESTIONS
What are the aims of adult reading teachers when they work with a less-skilled adult reader? What reasons do they give for having these aims? What challenges do they have in trying to realise their aims?	I want you to think about **adult reading:** • When you are working with a learner what are you hoping to achieve in your sessions? • Why do you think the things you mention are important? • What do you think makes you think that way? Are you aware of learning about this? • What makes it hard to achieve what you want to, in a session?
What strategies do adult reading teachers adopt in trying to realise their aims? What reasons do they give for adopting these strategies? What challenges do they face in adopting them?	You have told me what you are hoping to achieve in regards to **adult reading** in your sessions. • Now, tell me what you use, or do in your sessions so that you achieve what you want to? • Why do you choose to do these things? Why do you think they are important and/or appropriate? Are you aware of learning about this? • What are the issues, challenges, problems you have found using or trying to use these?

(continued on next page)

Table 1: Guiding questions with related conversational questions *(continued)*

What significance do adult reading teachers attach to their aims and strategies? What reasons do they give for their position on this? What challenges do they face in trying to maintain this position?	**Think about what you have told me about what you want to achieve in regards to adult reading and the things you do in your sessions (which help you achieve what you want to).** • Tell me about how important it is to you that you achieve the aims. Tell me about 'bits' which are more important than other 'bits'. • Why is it important to you that you achieve the aims? Why do you think the 'bits' you describe are more or less important? • What are some of the barriers to achieving the aims you prioritize? • Tell me which of the things/ways of teaching (strategies) you have described are more important to you. • Why are these more important to you? Are you aware of learning about this? • What are some of the barriers to using these things/ways of teaching?
What outcomes do adult reading teachers expect from pursuing their aims and strategies? What reasons do they give for expecting these outcomes? What challenges do they face in trying to realise them?	• When you are working with an adult reader and all the things we have talked about (what you hope to achieve, what things you will do and use) "fall into place" what do you think the result(s) or outcome(s) of your work with your learner will be? • Why do you think this will be the outcome(s)? • What issues do you have in attempting to arrive at these outcomes?

aims of the study, the interview questions focused upon eliciting information about the aims and intentions of the teachers in the context of a particular lesson. Other aspects of teachers' perspectives explored through the interview questions included the strategies that teachers used to achieve their aims, as well as significance of these strategies in the teachers' views. Throughout the interviews, the participants were prompted to elaborate their responses through frequent 'why' questioning, with the goal of encouraging the teachers to think deeply about the factors that underpinned their responses to particular situations.

Analysis Approach

All interviews were audio taped and transcribed for coding purposes. Coding procedures were then used to identify common themes. Transcribed interviews were read and re-read multiple times and were coded on a line-by-line basis. Within each interview, the researcher attempted to put herself in the position of the participant, and to interpret the actions of that participant and grasp the meaning(s) of the participant's actions through the lens adopted by the participant. The key research questions were used as a focus throughout each reading to enable the researcher to identify viewpoints that were then reduced into themes. Miles and Huberman's (1994) three stages of data reduction, data display, and conclusion drawing were used to guide the analysis process. Emergent viewpoints and themes were listed at the side of the page containing the raw data and revisited and reworked over successive readings. Relationships between the categories were then

identified for the purpose of generating the themes that were identified.

Results

Four themes emerged with respect to Research Question One: What are adult reading teachers' perspectives on how adults become less-skilled readers? These responses suggested the beliefs that, to become a skilled reader, a) distinct learner needs must have been met, b) that 'life-baggage' must be managed, c) that learning environments must meet physical, psychological and learning requirements, and d) that the pleasure of reading must be developed. Twelve participants made comments that reflected the distinct needs theme, 11 participants spoke of factors that suggested the pleasure of reading theme, and all 19 participants spoke of aspects signifying both 'life baggage' and inappropriate learning environments themes. The themes are summarized in Figure 1 below.

Four themes emerged with respect to Research Question Two: What are the origins of these perspectives? These themes suggested that adult reading teachers' perspectives originated in a) teachers' own experiences in learning and reading (reflected in comments from 10 participants), b) their experiences as teachers (comments from 15 participants), c) teachers' knowledge

of teaching reading (comments from nine participants), and d) their knowledge of reading frameworks and theory (comments from nine participants). The themes are summarized in Figure 2 below.

In the next section, the perspectives expressed are considered together with reported origins of each perspective to emphasize the connection between the two. Differing origins emerged in discussions of any one perspective theme; the expressed perspective of any one participant as to why an adult was a less-skilled reader did not always have the same origin as the same perspective expressed by another participant. The origins of perspectives were not exclusive to any perspective theme.

Perspective Theme 1: Distinct Needs

Two overlapping viewpoints characterized this teacher perspective; reading skill development

FIGURE 1. Adult reading teachers' perspectives on why adults are less-skilled readers.

Perspectives on why adult readers are less-skilled

- Distinct needs
- 'Life-baggage'
- Undeveloped sense of joy of reading
- Inappropriate learning environment
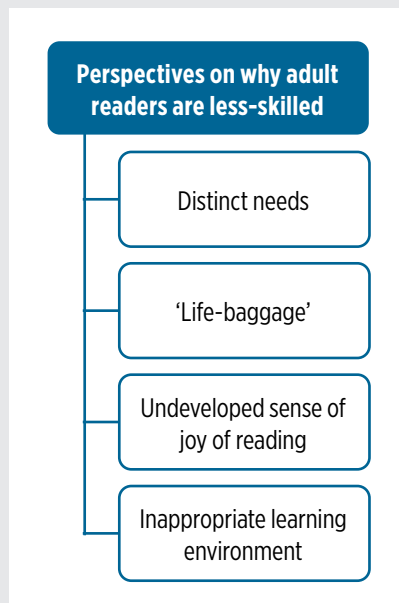
FIGURE 2. The origins of adult reading teachers' perspectives on why adults are less-skilled readers.

Origins of perspectives

- Experiences learning and reading
- Experiences teaching
- Knowledge of teaching reading
- Knowledge of frameworks and theory
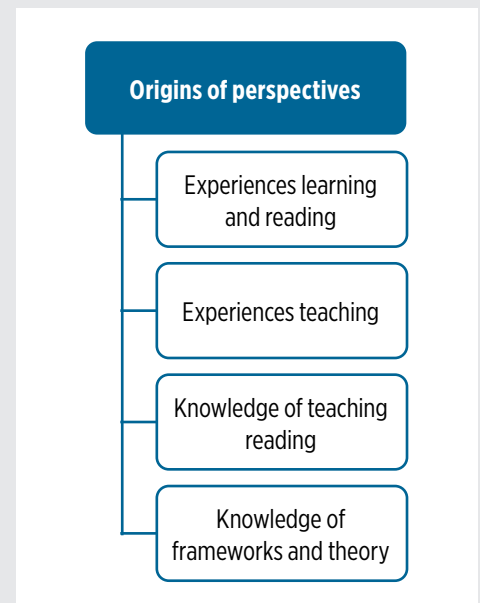
may have been limited by first, a cognitive or physical disability such as dyslexia or speech difficulties and second, by lack of attention to individual learning requirements. Nine participants spoke about specific disabilities as possible explanations as to why an adult had not developed skills in reading. That individual learning requirements may not have been met was suggested by seven participants. The viewpoints were characterized by comments on the need to target the teaching to each individual with reference to different abilities, learning demands, learning styles, context, and cultural factors.

> Oh, every session is different...one size doesn't fit all... often the learners come here, they might have a disability or something ...and sometimes I can be blown away...and what I have thought would be good for them, or not good for them, but be helpful to them, is not.

The source of these perspectives was degrees of combinations of experiences as a teacher and particular understandings of theory and frameworks of adult learning and learning needs.

> I have read a lot of research - that says it is, but I found over and over again. I wouldn't teach everyone the same way: I could have another learner and I wouldn't be teaching them like this. They would know the alphabet, maybe. The learning demands could be quite different - learning requirements could be quite different.

Perspective Theme 2: "Life-Baggage"

Three viewpoints emerged and are collectively labeled as "life-baggage" which less-skilled readers "carry" and which restricted opportunity to build reading skills. The viewpoints were that first, reading skill development had been limited by earlier experiences where reading was not valued or encouraged, second, by current life stresses and concerns which take priority or distract the adult learner and third, by poor self-esteem and confidence which has left the adult-reading learner *terrified*, *frightened* and *powerless*.

> OK, so, the first thing that makes that difficult is self-esteem in the learner, bad experiences that they've had, and mostly an identity decision that they've made that they do not read and they're not a reader, and they are one of those 'other' people.

The source of these viewpoints was largely based on teachers' experiences with teaching and learners. The three "life baggage" viewpoints are discussed in more detail below.

Limited earlier reading experiences of learner. Six participants expressed the viewpoint that learners may not have had much exposure to text. The origins of the perspective were combinations of two sources: teachers' own experiences of reading and learning, and knowledge of reading theory. Teachers discussed their own early, positive experiences as a reader (*I grew up reading. I read all the time… and find it hard to imagine a life lived without text*). There is a sense by teachers that this childhood history of reading was not a universal experience and learners have been left out.

> There can be negative experiences that have an impact, not just motivation but attitude towards reading. They may have a home environment, a home background where reading is not so valued. They may not do so much reading...

Teachers prioritized exposure to text and links were made to theory:

> There is that boot-strapping effect where the more they read, the more they engage in reading, and the more likely they are to develop automaticity [of] those kinds of skills.

Current life stresses. The second viewpoint on the 'life baggage' that learners 'carry' was that of current life stresses which lead to many issues for learners including poor attendance. Eleven teachers spoke of current life stresses. The source of this perspective was experience as a teacher:

> When the learners are stressed, it's very hard to... which is often...very hard for them to concentrate. It makes it very difficult to teach, because there's never a day where everyone's on the same page. In addition, people, especially people who don't have much money, [are] too busy to be able to have any

time for what for them is quite a new thing. New things take a lot of energy. I've been through a lot of learners, and I've... it's an observation.

Poor self-esteem and confidence. All 19 teachers expressed a third viewpoint in the "life-baggage" theme which saw poor self-esteem and low confidence as limiters to reading skill acquisition. Less-skilled readers have had *bad experiences*, and are *ashamed* and *terrified when the next challenge comes up.* Teachers know this from *histories of failure* told to them by learners.

> They have had a lifetime of poor self-esteem, negativity ... that you have to get over. [I] do think that there is a lot of stuff for adult learners where they're self-limiting... where people just do not attempt to do things, because they believe they can't... the moment there's a word that is difficult, or a sentence that makes no sense whatsoever, they just throw their hands up and go "it must be me, I'm stupid, I can't do this" ...if we can give people evidence that it's not their stupidity that stops them from being able to do it, that reading is a task like any other thing [that] you can learn to do, and some strategies will help ...that there will be things that are more difficult than others and some stuff is impossible, but it may not be your fault. It is all to do with what happens in the session, how the learner feels in the session [and I] wouldn't frighten them with something too hard.

Perspective Theme 3: Undeveloped Sense of Joy of Reading

The third theme, expressed by 11 participants, described a perspective that less-skilled readers have not developed a sense of joy about their reading and this has limited their development as skilled readers.

> I believe that he [the learner] gets no joy or pleasure out of reading things. My hope is that they [learners] get a taste for reading; that they start to enjoy reading. I think that's important too, because they need to continue their reading development when you've finished with them. There's the dream; the dream is that these adults will begin to find books that [they] will love and read, then reread them. I'd like people to begin to develop a self-sustaining interest in reading.

The source of this perspective was teachers own experience as a learner and reader:

> ...there's a lot of satisfaction that can be gained from being able to read. You know what sort of joys and pleasures you get from it, and how much information you get, leisure time, work as well.

Perspective Theme 4: Inappropriate Learning Environment

The many ideas which emerged to characterize this theme are summarized into two general viewpoints: (a) Less-skilled readers have not had appropriate physical and psychological environments provided to foster learning, (b) nor have they had a teaching and learning environment which appropriately addressed their needs as a learner.

Appropriate physical and psychological environments. All 19 teachers spoke of the need to create a comfortable, calm, relaxed, safe reading place with the implication that this has not been the prior learning environment for learners. These ideas came from experience as a learner and teacher, and also from adult learning theory.

> Warm positive relationships must be established as relationship[s] and rapport can overcome some of the 'things' limiting the reader. This is common sense. If an adult feels uncomfortable, in any way, they're not going to learn, and there is a need to be settled into feeling comfortable with each other. I was raised in a very positive environment myself. There's the big rapport-relationship component with adults, I think, it has to be there, and part of that is trying to enter their world, to figure out what motivates them and what encourages them...

Appropriate teaching and learning environment. Two groups of ideas emerged from comments of 17 participants to describe this viewpoint: First, less-skilled adult readers have not been taught in an informed, planned, professional way with targeted, assessment-informed content

demonstrating understanding of specific needs, and second, the learners have not been taught in an engaging way and *"hooked-in"* to learning. The teaching has not motivated learners to learn. Experience, knowledge of teaching and theoretical knowledge were all sources of these perspectives.

The first group of ideas was that informed, planned, professional teaching underpinned by assessment is needed for effective teaching with the implication that lack of this has limited the less-skilled reader.

> Learners can get shoved aside, like what probably happened at school. Teaching must be specialized but flexible enough to deviate if need be so as to create momentum and success. It's their [the teachers] job to do their best every time, to bring quality stuff, no matter what. Teachers have to have training and education … have to be research-informed with a combination of a ton of reading….

The second group of ideas was that less-skilled adult readers have not been taught in an engaging way and *"hooked-in"* to learning. Teachers drew on their experience.

> It is important for your student to see the purpose behind it: even though I explained it to him, now and again he would say "what's the point of all this". So, for students to see the overall picture, and relevance in their life, and how it's going to help them in the program as well... pay attention to what they [are] interested in. If it's not interesting, they'll struggle with things. Sessions need to be interesting or funny or very little learning occurs. Teachers need to talk [to learners] quite a bit to see where the interests lie and try to find something that's relevant. There are programs with at least half the students bored and half the students struggling. Adults will learn if it's realistic, authentic, and real life strategies, and content is used. Keep it real for them.

Discussion

Responses to questions about what teachers hope to achieve in adult reading programs, how they expect to do this and why they act in the way they do, reveal varying perspectives on why teachers in this study teach the way they do and varying origins of these perspectives. These teachers teach the way they do because of perspectives that less-skilled adult readers have not had distinct learning needs met, have issues which hinder learning, have no joy of reading, and have had inappropriate learning environments. The origins of these perspectives are personal experience as a learner, reader and teacher, and knowledge of teaching reading, and knowledge of theory and frameworks.

While these findings support, in part, those from studies of teachers of children (Barnyak & Paquette, 2010; Mansfield & Volet, 2010; Sanger & Osguthorpe, 2011; Stephens et al., 2000) the findings make an original contribution to the existing literature on adult-reading teachers and specifically on teacher perspectives on why adults may be less-skilled readers. Although perspectives regarding teaching and learning are fundamental to every teacher (Abernathy-Dyer, Ortlieb, & Cheek, 2013) there is frequently a lack of awareness of individual perspectives and where they come from (Sanger & Osguthorpe, 2011; Stephens et al., 2000). The identification and graphic organization of adult-reading teacher perspectives in this study, provides a useful tool for further reflection in general. More importantly, identification of the origins of the perspectives, where the ideas come from, enables teachers to evaluate the merit of views underpinning teaching practice; understanding the origins of the perspectives allows candid reflection on the value and relevance of such perspectives for teaching (Sanger & Osguthorpe, 2011). The graphic tool facilitates teachers in confronting their own views about how they teach and how they view adult-reading learners.

Viewing perspectives alongside their origins highlights particular implications for adult-reading teachers and programs. First, the findings

demonstrate that despite discussing how they draw on levels of teaching-reading knowledge and frameworks, adult-reading teachers may often rely principally on personal experiences and assumptions about learner lives to make decisions about how to teach. Despite quoting theories of adult learning and reading development, teachers talk about using approaches which worked for themselves as child learners, of how they themselves like to learn, and of their own positive childhood experiences. Teachers own personal joy of reading is drawn on to speculate on approaches to motivate and enthuse less-skilled adult readers. However, the adult learners have reading difficulties with experiences potentially, vastly different from the teachers who were likely readers whose reading skills followed normal development patterns. Further, generalisations are made about negative life experiences of learners and the need to compensate for this. While personal sources of information and perspectives are important in providing the empathy and rapport-building aspects of the teacher-learner relationship, they are not sufficient to inform instruction which can address reading difficulties effectively (National Research Council, 2012). Adult-reading teachers need to be watchful of the over-dependence on personal feelings and beliefs which is evident in this study.

Second, teachers in this study contend that they teach the way they do because they are informed by professional experience and observations. Indeed, professional wisdom, acquired through experience, traditionally informs teacher perspectives. While teacher experience is useful, previous studies have established that it does not necessarily match the relevant research (Benseman, 2013) and teachers need to be aware of an over-reliance on professional observations and experience described by teachers in this study.

Third, despite describing the importance of using research-backed, targeted teaching, assumptions are made about learners and how to teach them which appear to have no bearing on the reality of that learner or on their specific learning difficulties. Useful adult reading instruction includes careful recognition of what reading skills an individual has mastered, and which skills need further development. To address entrenched reading difficulties, programs must be informed by diagnostic assessment (Kruidenier et al., 2010, National Research Council, 2012) not merely by teachers' subjective views of what the problem is and how to address it. The lack of reliance on diagnostic assessments, and inability to interpret and apply findings, illustrated in adult teacher responses, supports the case for more focus on diagnosing reading difficulties in training and ongoing professional learning.

Adult-reading teachers must be aware of, and open to, alternative teaching options and approaches depending on the needs of the learner. To be open to new ideas teachers must be aware of their own knowledge and limitations, and to what informs individual's teaching decisions (Fives & Buehl, 2012). Both teacher education programs and professional learning must prepare teachers by helping them become aware of when personal perspective and research-based practices are incompatible. More research on the perspectives of teachers and the origins of perspectives is required in order to advance our understanding of teaching practice. A specific focus on possible associations of beliefs with teacher characteristics and training, may inform future targeted professional learning; the more teachers know about themselves, the better the ability to reflect on and modify teaching decisions. In addition, trials are required to evaluate the potential of self-reflective frameworks, such as that created

in this paper, in teacher professional learning. Understanding and addressing perspectives and their origins, and how these influence teaching practices, may help teachers identify shortcomings in their perspectives on why adults are less-skilled readers and provide a platform for adult-reading teachers to build new information and improve effectiveness of adult reading teaching.

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Research Article

Linking Root Words and Derived Forms for Adult Struggling Readers: A Pilot Study

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Abstract:

The goal of this pilot study was to investigate the effects of morphological instruction on component literacy skills of adult struggling readers. Sixteen adults, most with decoding and encoding deficits, were randomly assigned to tutoring in either morpheme or syllable analysis to learn academic vocabulary and increase component literacy skills. Those taught semantic connections between Latin and Greek root words and their derived forms outperformed those taught syllable types on a standardized test of word recognition, though both groups demonstrated large gains for learning target words. Results support connectionist theories that promote teaching morphological links in literacy instruction.

Ninety million adults in the United Stated have low literacy skills according to the National Research Council (2012). Given the number of people directly affected, and the associated costs to public health and employment, there is a serious lack of rigorous research studying interventions for adult struggling readers (Greenberg, 2008; Kruidener, 2002; Tighe & Schatschneider, 2016). Adults seeking alternative high school credentials like the General Education Development (GED) diploma, and those in Adult Basic Education (ABE) programs have a wide range of reading skill deficits (Perin, Flugman & Spiegal, 2006; Greenberg, Ehri & Perin, 1997). Surprisingly, despite promising results of morphological instruction with both children and adults, there is little evidence that adult literacy studies are taking advantage of the potential of teaching morphemes, including prefixes, root words and suffixes (Alamprese, MacArthur, Price & Knight, 2011; Deacon, Parrila & Kirby, 2006; Fracasso, Bangs & Binder, 2015; Law, Wouters & Ghesquiere, 2015). Randomized pilot studies such as this one, are "those in which a future definitive clinical trial involving randomized study groups or its components are investigated on a miniature scale" (Kaur, Figueiredo, Bouchard, Moriello & Mayo1, 2017, p. 1243). This study tests the feasibility of providing instruction in morphemes to increase component literacy skills of adult struggling readers.

Theoretical Underpinnings

According to Perfetti and Hart's (2002) Lexical Quality Hypothesis, the process of reading is essentially about knowledge of words. Being able to reliably identify the pronunciations, spellings and meanings of words paves the way for successful reading comprehension and subsequently, more practice with reading. Perfetti and Hart (2002)

argue that "multiple encounters with a given word tend to produce a common core representation consisting of a nexus of orthographic, phonological and semantic information" (p. 190). Skilled readers tend to have tightly connected internal representations of words' spellings, pronunciations and meanings. In contrast, struggling readers tend to have poorly specified lexical representations of words' core constituents such as their orthographic, phonological and semantic (with syntactic) identities. Low quality lexical representations result in poor word analysis and word identification skills, impeding access to higher level skills like fluency and comprehension. Simply put, readers are not likely to comprehend passages containing words they cannot decode or recognize. Increasing the quality of lexical representations ought to lead to greater word reading, thereby reducing obstacles to comprehension (Perfetti, 2007).

Like Perfetti, Ehri (1978, 1999, 2005) argues that readers must clearly specify words' phonological, semantic (with syntactic), and orthographic identities to read words fluently. Ehri (1999, 2005) theorizes that readers progress through various levels of linguistic awareness in learning sight words, which are defined as any words that readers can identify instantly. These levels of linguistic awareness include the pre-alphabetic, partial alphabetic, full alphabetic and consolidated alphabetic phases. In the first three phases, readers learn to map graphemes with phonemes with increasing proficiency. In the final stage, readers learn to read larger, "consolidated" linguistic units, such as morpheme and syllable units, which facilitates complex word reading by reducing the memory load (Ehri, 2005).

The Potential of Teaching Morphemes to Adult Struggling Readers

Many adults struggle to read complex words

(Greenberg, Ehri & Perin, 1997; Perin, Flugman & Spiegal, 2006; Tighe & Binder, 2015), and require explicit instruction to read "consolidated" linguistic units. Teaching adults with low literacy to read larger "consolidated" units, including both morphemes and syllables, ought to be beneficial. Teaching them morphemes might even be more effective than teaching them syllables because it encompasses all three constituents (phonological, semantic and orthographic) required for high quality lexical representations, whereas teaching syllables encompasses only two constituents (phonological and orthographic). Furthermore, teaching syllables may encourage readers to "abstract away" from meaningful lexical boundaries within words, in order to focus on superficial phonological boundaries (Chomsky, 1970, p. 291). Consider how parsing the word *question* into its syllables *ques* and *tion* obscures the meaning of its morphemes *quest* and *ion*, and semantic links to its relatives such as *request* and *conquest*.

For older struggling readers, relatively stronger awareness of morphemes (morphological awareness) may offset severely reduced awareness of phonemes (phonological awareness). For example, middle school age students with reading disabilities who were given comprehensive literacy instruction with a morphological element showed greater literacy improvements than those in a phonological control group (Berninger, Nagy, & Carlisle, 2003). Adult struggling readers often read at approximately middle school levels, with one study estimating that GED students' skills were just below the fifth-grade level (Perin, Flugman & Spiegal, 2006). Thus, if morphological instruction boosts literacy in middle schoolers, it may also benefit adult readers with middle school level skills.

Four correlational studies show the critical role of both morphological awareness and phonological awareness in adult literacy, which makes sense given

that the structure of English is morpho-phonemic. This means that English orthography reflects both words' phonemes (i.e., jump maps each sound to a letter) and morphemes (i.e., jumped retains the past tense morpheme as *ed*, even though it is pronounced as /t/) (Chomsky & Halle, 1968). In the first study, Reilly and Binder (2013) evaluated the literacy skills of 293 adults in basic education. Component literacy skills were compared to three tasks of morphological awareness. For both native English and native Spanish speakers, morphological awareness correlated highly with vocabulary and comprehension, leading researchers to conclude that adults in basic education would benefit from direct teaching of morphemes. In the second study, Herman, Cote, Tighe & Binder (2015) found that morphological awareness contributed independently and substantially to reading comprehension for adults with low literacy enrolled in Adult Basic Education (ABE) classes. The 57 adults in their study demonstrated difficulties reading complex words, for which authors recommended the teaching of prefixes, base words and suffixes. In the third study, Tighe and Schatschneider (2016) examined the component literacy skills of adult struggling readers, to weigh the relative contributions of each component skill to the process of reading comprehension. They analyzed 16 studies with 2,707 poor readers and identified 10 component reading skills that were consistently referenced, including both morphological and phonological awareness. Morphological awareness was one of six component reading skills most strongly correlated with reading comprehension, in addition to language comprehension, fluency, oral vocabulary decoding and working memory. In the fourth study, Fracasso, Bangs & Binder (2016) found a strong influence of both morphological awareness and phonological awareness on the reading skills of adults in ABE. Phonological awareness predicted spelling, listening comprehension and reading comprehension, whereas morphological awareness predicted spelling, vocabulary and listening comprehension skills.

Beyond correlational studies, there is also evidence that morphological instruction benefits adult struggling readers. Alamprese et al. (2011) investigated the effects of a morpho-phonemic reading intervention program on the literacy skills of low to intermediate adult readers. Using a program based on Venezky's (1999) study of English orthography, students were taught a structured approach to word analysis that focused on phonemes, morphemes and spellings, as well as a metacognitive strategy for decoding complex words. Those who received the structured approach made better gains in decoding than those in the control group, who were taught the regular adult literacy program using a children's curriculum adapted for adult use, but both groups made small to moderate gains in word recognition and spelling. Similarly, Gray, Ehri and Locke (2018) taught GED students to analyze the word origins, base words, morphemes and syllables of academic vocabulary words embedded within a civics curriculum. Those taught to parse words' morpheme and syllable structures made greater word reading gains than those taught the same words as whole words, without analyzing their internal structures. Thus, adult literacy instruction that draws attention to the phonemes, morphemes and spellings of complex words results in literacy gains, particularly for word recognition.

The Importance of Academic Vocabulary for Adult Struggling Readers

Academic language is the formal, specialized language, both spoken and written, that occurs within academic settings to facilitate thinking about advanced concepts and disciplinary content (Nagy & Townsend, 2012). It serves a purpose, in

which "the grammatical attributes of academic language- more affixed words, nouns, adjectives, prepositions, and nominalizations—are means of achieving greater informational density and abstractness" (p. 93). Academic vocabulary words tend to be morphologically complex, with base words extended through suffixes that are either inflectional (i.e., do not change the part of speech of a word, as *motive* and *motives*) or derivational (i.e., do change the part of speech, as in *motive* and *motivational*). Academic text contains many multi-morphemic words, many of which come from the Latinate layer of English, with its characteristic bound roots that require additional word parts, such as prefixes and affixes, to stand alone as words. For example, the bound root *agri*, meaning *field*, is seen in the derived forms *agriculture* and *agrarian* (Moats, 2010, p.122.).

Recent changes in proficiency tests for adults, such as the revised GED, the HiSET and WIOA, require comprehension of more sophisticated and discipline specific texts for which morphological instruction could be advantageous. For example, science tests that contain numerous Latinate vocabulary words ought to support students in passing the proficiency tests and succeeding in post-secondary education. According to Adams (2015), the new GED test is "designed to be more challenging, with questions that focus on critical thinking and better reflect new standards for career and college readiness" (p. 4). Teaching academic vocabulary through morphological instruction offers advanced instruction for the more rigorous test.

Linking Academic Vocabulary to Bound Root Words

Recent research has demonstrated the effectiveness of teaching middle and secondary school students about word parts from the Latinate layer of English,

specifically bound root words that require other word parts like prefixes and suffixes to stand alone as complex words. One study demonstrates the effectiveness of teaching bound root words to older children to promote use of a word-learning strategy that Anglin (1993) called "morphological problem-solving" (Crosson & McKeown, 2016; Crosson & Moore, 2017). In his seminal study measuring children's vocabulary growth, Anglin differentiated "actually learned" words from "potentially knowable" words, the latter of which were greatly increased by knowledge of "morphological problem-solving". Children demonstrated "knowledge of a morphologically complex word by relating it to another complex word of similar morphological form (e.g., if a *piglet* is a *baby pig*, then 'a *treelet* might be a *baby tree*')" (p. 144, 145). Crosson and McKeown (2016) asked whether explicit teaching of bound morphemes would increase middle schoolers' ability to infer meanings of unfamiliar academic vocabulary. They taught morphological analysis directly, first by providing students with the root word origin and its meaning, then by showing them how to analyze connections between the bound root word and its root-related words. For example, the bound root word *min* meaning *small* connects the word *diminish* to *minor*. Dynamic assessment revealed that sixth and seventh graders who were taught morphological analysis demonstrated a significantly greater ability to infer meaning for root related words than the control group who received the regular language arts instruction. They noted that "instruction in bound roots might strengthen mental representations for the instructed words by providing more connections about a word's semantic and orthographic features" (p. 168). Given that adult struggling readers often have middle school reading levels, perhaps the instruction of bound roots that was effective for middle schoolers could be successful with adults as well.

Rationale for Current Study

The morphological intervention of this pilot study adhered to the principles that were effective in Kieffer and Lesaux's (2010) morphological instruction for adolescents who had approximately the same reading levels as the adults in the current study. First, systematic teaching of morphemes with flexible stems was accomplished through instruction in root word trees, which were graphic organizers displaying high frequency root words in the root position of trees and low frequency derived forms in the branches of the trees. Second, teaching a cognitive-linguistic strategy was achieved through instruction in morphemic analysis and circling of Latin or Greek root words within their derived forms. These principles were also consistent with Crosson and McKeown's (2016) study teaching meanings of bound root words to middle schoolers to increase their ability to infer the meanings of unfamiliar words.

The control phonological intervention taught six syllable types which are often used in effective phonics instruction (Duff, Stebbins, Stormont, Lembke, & Wilson, 2016) particularly with students who have decoding difficulties (Mather & Wendling, 2011): closed syllables (lax vowel sound followed by consonant sound/s; e.g. *cat);* vowel-consonant-E syllables, (tense vowel sound followed by consonant and final silent E e.g. *pine);* open syllables (tense vowel sound at end; e.g., *ro*-bust); consonant –LE syllables (consonant followed by LE; e.g., mar-*ble*); r-controlled syllables (contain vowel sound followed by R; e.g., *car*); and double vowel, schwa and odd syllables (contain consecutive vowels pronounced as one or two sounds; e.g., *soap, boil;* unstressed reduced vowel sounds; e.g. *a*-bout; and structures not categorized as any of the other five syllable types) (Moats, 2010).

Best practice for pilot studies asserts that they "can

be used to evaluate the feasibility of recruitment, randomization, retention, assessment procedures, and implementation of the novel intervention and each of these can be quantified" (Leon, David & Kraemer, 2010, p. 626). In accordance with the criteria for randomized pilot studies, this study addressed the following questions: Were recruitment, randomization, and retention of participants successful? Was the experimental intervention effective and its control condition suitable? Does this pilot study demonstrate the potential for a successful randomized control trial?

Method

Participants

Four ABE and 13 GED students volunteered to participate by signing up during classes at an adult learning center in New York City. Participants met the eligibility criteria: enrollment in a GED program (m = 10th grade education); native English speaker or bilingual English/Spanish from birth (10 monolingual; 6 bilingual); age of 18-30 (m = 23); at least average intelligence (*TONI-4* Index ≥ 85); and no reported history of cognitive, neurological, sensory or speech-language disorder. Seven were Hispanic, four were Indian-American, and five were African American. Of the 12 females and four males, half were employed in minimum-wage jobs, such as childcare, sales, and food service. Their reading skills ranged from 4th to 10th grade equivalency levels, with sixth grade skills on average. All demonstrated significantly reduced performance on at least one component literacy skill; all had reduced word attack except one who had reduced comprehension. Seventy-five percent reported that they had never received specialized literacy instruction in school.

Materials

Standardized Measures

To screen for intelligence, participants completed the Test of Nonverbal Intelligence (TONI-4), a pattern recognition task (Brown, Sherbenou & Johnsen, 2010). To estimate reading levels for random assignment to treatment, reading composites were calculated using the mean grade equivalency of the WJ-III. Split-half reliabilities for the 19-29-year-old norm group appear in parentheses: Letter Word Identification, an oral word reading task (r =.90-.91); Reading Vocabulary, requiring production of synonyms, antonyms and analogies after reading words (r = .87-.91); and Passage Comprehension, a silent reading, sentence completion task (r = .75) (Woodcock, McGrew & Mather, 2001, 2007). Using the reading composites, participants were ranked, matched in pairs, and randomly assigned to either intervention. WJ-III decoding and encoding subtests were not included in the reading composites due to participants' very low scores but were included as pretest/posttest measures: Word Attack, a pseudoword reading task (r = .83 - .87), 5) Spelling, a word dictation test (r = .88- .91), and 6) Spelling of Sounds subtest, a pseudoword dictation task (r = .58 - .64). Alternate WJ-III forms were used at pretest (A) and post-test (B) with high correlation (r = .85 - .96) (McGrew, Schrank & Woodcock, 2007).

Target Word Measures

Five target word measures assessed participants' gains within each session: Target Word Identification (Task: Read target words. Example: *edict.*); Target Word Analysis (Task: Circle target words' roots. Example: circling *dict* in *dictum*.); Target Word Spelling (Task: Spell target words to dictation. Example: *malediction*); Target Word Definition Matching (Task: Match target words to their definitions. Example: *benediction* is matched with *a blessing*.); and Target Word Sentence Completion (Task: Complete sentences using target words. Example: A local rabbi started the ceremony by giving a _____ to the audience. (answer: *benediction*).

Intervention Programs

Participants completed four weekly 2-hour sessions of intervention, plus 2 hours of testing. Each intervention included the following common elements: individual tutoring; PowerPoint slideshow presentation of about 400 slides; teaching the same 56 target words, using the same definitions (for definition matching task) and the same sentence contexts (for the sentence completion task); graphic organizers; and target word measures. Each participant had a binder containing: worksheets with the graphic organizers for each of the 56 target words and pretests and posttests for each of the 5 target word measures. In the first three sessions, four graphic organizers were taught (each with four academic vocabulary words) and in the final session, two graphic organizers were taught.

Target words were selected using a list of frequently occurring root words (high frequency, to promote learning transfer) (Frye & Kress, 2006), and a list of their infrequently occurring derived forms (low frequency, to reduce the chances of teaching words that were already familiar to participants). Target words were morphologically and phonologically complex (2-4 morphemes, 2-6 syllables) low frequency words. Words, definitions and sentences were selected from a 9 - 12 grade vocabulary program (Osborne, 2003), dictionary and etymology websites.

Morphemes Treatment

Vocabulary words were organized in 14 sets of

Latin/Greek root words, each with 4 derived forms, totaling 56 words. Graphic organizers for each set depicted a tree, whose roots contained the spelling and meaning of the high frequency root word, with branches containing the spellings and meanings of the 4 derived forms. To illustrate semantic connections between root words' and derived forms', definitions of the derived forms included the root word meaning. For example, the Latin root *fic /fac,* meaning *make* or *do,* was presented in the root position of the tree, with the 4 derived forms and their meanings (containing the root word meaning *make*) in the branches: *artifact* (an object *made* by man); *fictitious* (created by imagination; *made* up); *facsimile* (a copy, *made* alike); and *malefactor* (criminal, *maker* of something bad). See Figure 1.

For each root word set, tutors and participants read aloud from scripted slides instructing participants to: View a picture representing the meaning of the root word; View the root tree graphic organizer; Copy the content of the graphic organizer in their binders; Analyze the words' morphemes in the following ways: Listen to and repeat the word; Divide the word into morphemes, using hyphens; Underline the morpheme that is pronounced with the primary stress; Circle the root word; Write the spelling of the word after dictation; Match the word to its definition; and Complete the sentence using the derived word.

The sequence of instruction for morphological training was determined by the level of phonological transparency of derived forms. Effective morphological instruction begins with words that have transparent morphological relationships (Goodwin, 2010) without pronunciation changes from the root or base word to the derived form. Therefore, phonologically transparent derivatives, without pronunciation changes from base to derived forms (e.g., *artifact,*

whose pronunciation is the same as the root word FAC) were introduced first, followed by more opaque derived forms (e.g. *Anglophile,* whose vowel differs from the root word PHIL).

Syllables Treatment

The eight participants in the control group focused on learning the six syllable types and syllabification (segmenting words into syllables), a more traditional approach to word analysis that is often taught in adult literacy programs (Kruidenier, 2002). Graphic organizers for each set depicted a tree, whose base contained the label of the type of syllable, and the number of syllables, with branches containing the spellings and meanings of four complex words containing at least one example of the featured syllable type. Definitions and sentence contexts were identical to those in the experimental condition. Syllables were defined as "word parts with one beat and one vowel sound". Thus, participants learned the six syllable types, and were encouraged to segment syllables in a flexible way. For example, the first syllable tree featured *closed syllables,* written in the base of the tree, with the spellings and meanings of four words containing at least one example of closed syllables in the branches: de-*flec*-tion (the act of bending aside or turning away from proper course); *dic-tum* (a formal or authoritative statement), ar-ti-*fact* (an object made by man), and *as*-ter-*isk (*a star-shaped character indicating additional information).

For each syllable set, tutors and participants read aloud from scripted slides instructing participants to: View a picture representing the syllable type; View the syllable tree graphic organizer; Copy the graphic organizer in their binders, and Analyze the word's syllables in the following ways: Listen to and repeat the word; Divide the word into syllables, using hyphens (e.g., *as*-ter-*isk* whose first

and last syllables are *closed syllables*); Underline the syllable that is loudest or has the primary stress placement (e.g., *as*-ter-isk); Scoop out the syllables in the word, using curved underlines; Spell the word; Match the words with their definitions; and Complete sentences using the words.

The sequence for phonological training followed the recommended progression of instruction in syllable types (Wilson, 1996; Moats & Tolman, 2009): closed; vowel consonant E; open; consonant LE; R-controlled; and double vowel, schwa or odd syllables. After all six syllable types were taught, the instructional sequence progressed from phonologically simpler words (2-3 mixed syllable types) to increasingly complex words (5-6 mixed syllable types).

Fidelity Check

To check fidelity to treatment, all of which was provided by the primary investigator, sampling of participants' binders was conducted. Two independent evaluators, one masters and one doctoral student, randomly sampled 6 out of 14 of the graphic organizers. After completing a checklist, they found 100% adherence to the required instructional elements.

Results

Recruitment, Retention and Randomization of Participants

Both recruitment and retention of participants were successful. From the 18 GED and ABE students who signed up to participate, 17 of them completed the screening and began the study, while 16 of them completed the study. Every effort was made to provide convenient scheduling and to make up missed sessions. Sixteen of the seventeen participants completed the study.

An independent t-test showed no significant differences between treatment groups after randomization, prior to treatment, including: all scores on the WJ-III; age (each group: $m = 23$ years old); education levels: last grade completed (Morphemes $m =$ grade 10.0; Syllables $m =$ grade 9.88); nonverbal intelligence (Morphemes $m = 91.75$; Syllables $m = 93.38$); and language learning background (each group: 5 monolingual, 3 bilingual).

Effectiveness of Experimental Intervention and Suitability of Control

Group Mean Scores

Figure 2 shows the mean gains scores for the 5 target word measures, including: Target Word Identification; Target Word Analysis; Target Word Spelling; Target Word Definition Matching; and Target Word Sentence Completion. For all measures, the group taught morphemes had measurably greater mean gain scores, with sizable differences for Target Word Analysis and Target Word Identification.

Effect Sizes

Table 3 shows the mean scores, standard deviations and effect sizes using Cohen's d statistic, which must be interpreted with caution as small sample sizes are likely to yield imprecise effect sizes. For both groups, each target word measures yielded large effect sizes ($d = 1.32 - 4.13$), with smaller effect sizes for the WJ-III standardized measures. After Morphemes Treatment, small gains were seen on Letter Word ID ($d = .20$) and Spelling ($d = .24$), with slight gains for Word Attack ($d = .12$). After Syllables Treatment, moderate gains were seen for Spelling of Sounds ($d = .67$), with minimal gains for Word Attack ($d = .12$) and Spelling ($d = .08$). Other standardized measures of WJ-III Reading

Vocabulary and Passage Comprehension yielded either negligible or negative effect sizes.

Individual Responders

Figure 3 illustrates that at pretest, every participant had significantly reduced reading skills for the Word Attack subtest, except for Participant #8 who had significantly reduced Passage Comprehension skills.

In accordance with best practice for pilot studies, a threshold of meaningful clinical change was set to indicate which participants had responded favorably to treatment. On any subtest, a gain score of at least one standard score was designated as the threshold for Responders, as this represented one standard deviation from the mean. Figures 4A-F shows the results for Responders on each of the six WJ-III subtests: 1) (Fig. 4A) For Word Attack: Morphemes Treatment = 3 Responders; Syllables Treatment = 4 Responders; 2) (Fig. 4B) For Letter Word Identification: Morphemes Treatment = 5 Responders; Syllables Treatment = 1 Responder; 3) (Fig. 4C) For Spelling: Morphemes Treatment = 5 responders, Syllables Treatment = 4 Responders; 4) (Fig. 4D) For Spelling of Sounds: Morphemes Treatment = 4 Responders; Syllables Treatment = 7 Responders; 5) (Fig. 4E) For Reading Vocabulary: Morphemes Treatment = 4 Responders; Syllable Treatment = 1 Responder; 6) (Fig. 4F) For Passage Comprehension: Morphemes Treatment = 2 Responders; Syllables Treatment = 3 Responders.

Discussion

With low literacy skills directly affecting 90 million adults in America (NRC, 2012) and posing challenges to public health and employment, there is a serious need for more rigorous research on the effects of adult literacy interventions. The current randomized pilot study contributes

to the literature on adult literacy interventions and supports prior recommendations to provide morphological instruction for adult struggling readers (Alamprese et al, 2011; Fracasso et al, 2015; Law et al, 2015).

The first question of whether recruitment, randomization, and retention of participants was successful was answered affirmatively. With regard to recruitment, 17 participants were recruited from an adult learning center in New York City. Although participants were reluctant to initiate contact with the primary investigator to begin the study, they were responsive to providing their contact information on a sign-up sheet so that the investigator could initiate contact. With regard to randomization, participants were matched in pairs on reading composite scores (mean grade equivalent on WJ-III Letter Word Identification, Reading Vocabulary and Passage Comprehension), then each pair member was randomly assigned to one of the treatments. A t-test for equality of means revealed no significant differences between the groups for component reading skills (on the WJ-III), age, education level, and language learning background, confirming that randomization had resulted in equivalent groups. With regard to retention, 16 of 17 participants completed the study, a rate considerably higher than other adult literacy studies.

The second question of whether the intervention was effective and its control condition, suitable was answered by comparing group mean scores, effect sizes and individual responders from each group. According to Group Mean Scores, Morphemes Treatment resulted in considerably greater gains for Target Word Analysis, which was expected because only the experimental group learned to extract root words from multi-morphemic words. Notably greater gains were also seen for the Morphemes Treatment for Target Word Identification. Greater gains in word

analysis and word recognition of target words suggest that learning to connect root words and their derived forms was a more effective strategy to increase decoding and word recognition.

Effect sizes must be interpreted with caution as small samples lead to imprecise effect sizes. However, gain scores on all target word measures from both groups were large, suggesting that each intervention resulted in participants effectively learning to analyze, recognize, spell, match definitions and complete sentences for the target words. Small effect sizes were seen on the WJ-III Letter Word Identification and Reading Vocabulary subtests after Morphemes Treatment than after Syllables Treatment. However, for the WJ-III Spelling of Sounds, moderate effect sizes were seen after Syllables Treatment. Notably, each treatment group had the same effect size on the WJ-III Word Attack, suggesting that learning to analyze morphemes and learning to analyze syllables result in similar decoding gains on pseudowords.

To measure Individual Responders (those who responded favorably to treatment), gain scores of at least one Standard Score on any subtest of the WJ-III were set as the threshold for meaningful clinical change. The number of Responders in each group was about the same for Word Attack, Spelling and Passage Comprehension. However, considerably more Responders were seen for the WJ-III Letter Word Identification and for Reading Vocabulary after Morphemes Treatment than after Syllable Treatment. In contrast, more Responders were seen for the WJ-III Spelling of Sounds after Syllable Treatment. Thus, Morphemes Treatment may have served as a more effective strategy for word identification and vocabulary learning, whereas Syllables Treatment may have served as a more effective strategy for learning to spell pseudowords. Overall, learning morphemes increased more individuals' ability to make

connections among semantic, phonological and orthographic constituents of words, whereas learning syllables increased more participants' ability to make connections among phonological and orthographic, but not semantic, constituents.

The final question of whether this pilot study demonstrates the potential for a successful full randomized control trial, was answered affirmatively. With favorable recruitment, randomization, and retention, along with acceptable intervention procedures, results demonstrate the potential of this pilot study to be followed by a successful RCT, but with a couple of modifications. First, the assessment measures need to be constructed to align target word measures with standard measures, so that each assessment task reliably measures what it purports to measure. Second, because the intervention and control resulted in similar findings for most measures, the control intervention ought to be changed so that it varies more distinctly from the experimental intervention. For example, the experimental intervention teaching morphemes could be compared to a control intervention teaching whole words rather than sub-lexical word analysis.

Limitations

Five limitations to this pilot study involved its sample size, group comparisons, word learning contexts, intervention duration and lack of standardized morphology assessments. First, analyses were underpowered with this small sample size. A larger sample might have detected other differences between groups at posttest, perhaps amplifying the vocabulary benefits that the subset of poor coders received after morphological teaching. Second, because both groups were taught word analysis, and made comparable gains in decoding and spelling, it would have been more informative to have had

a third control group without word analysis. For example, another intervention group could have received vocabulary instruction using the same words, definitions and sentence contexts, but presented as whole words without parsing of morphemes or syllables, to investigate whether word analysis was more powerful than whole word instruction. Alternatively, it would have been beneficial to have included a control group who received only the GED program instruction, without any tutoring in vocabulary and literacy, to serve as an authentic program comparison. Third, morphological teaching may have been even more powerful if new words had been taught within the context of meaningful passages. Similar studies placed morphological instruction within thematic passages with positive results (Kieffer & Lesaux, 2010; Alamprese, 2011). Fourth, the brief duration of the intervention likely limited the impact of the interventions. While only one month of treatment did result in small gains for certain component literacy skills, lengthier interventions would likely have led to greater treatment outcomes. Finally, the current standardized assessments of morphology (e.g., Foorman, Petscher & Bishop, 2012; Sabatini, O'Reilly, Halderman & Bruce, 2014; Sabatini, Bruce, Steinberg & Weeks, 2015) were not available at the time of the study.

Conclusions and Implications

To investigate the benefits of morphological instruction in adult literacy, this pilot study provided adult struggling readers with academic vocabulary instruction in either morpheme or syllable analysis. Both groups made very large treatment gains on informal measures of component literacy skills for the target words. The group taught morphemes significantly outperformed the group taught syllables on a standardized test of word recognition. More individuals responded to the treatment after Morphemes Treatment on standardized tests of word recognition and vocabulary. Word recognition skills, when accurate and efficient, enable access to higher level reading skills like vocabulary and comprehension, according to the Lexical Quality Hypothesis (Perfetti & Hart, 2002; Perfetti, 2007). If the results of this pilot study are replicated in a full RCT, they may corroborate results and recommendations from previous research, including the greater word recognition gains of adult struggling readers after morphological instruction in Alamprese et al's (2011) study.

Further studies are needed to determine which elements of the present study were most effective in teaching literacy to adult struggling readers. It appears that teaching the meanings of bound root words may be beneficial for adults with reading skills at the middle school level, as it is with middle schoolers themselves (Crosson and McKeown, 2016). To increase complex word reading skills in adults, teaching morphemes may be more effective than teaching syllable types, though teaching syllable types may increase phonetic spelling skills. Based on this pilot study, instructional recommendations would be to develop academic vocabulary by explicitly teaching semantic links between root words and their derived forms, to use graphic organizers to organize complex linguistic information in visual form, and to present challenging instructional material to the diverse population of adult struggling readers.

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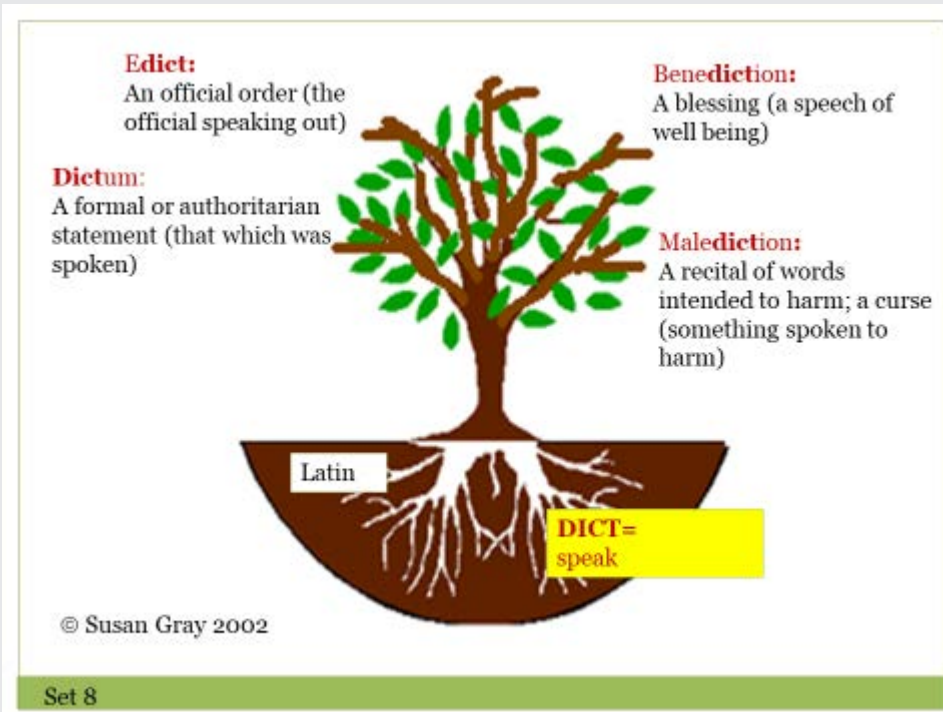
TABLE 1. Means, Standard Deviations, Gain Scores and Effect Sizes* for Target Word Measures and Standardized Measures

	Pretest M (SD)	Posttest M (SD)	Gain M (SD)	ES* d
TARGET WORD MEASURES				
1. Word Recognition (max = 56)				
MORPH TREATMENT	25.9 (10.3)	51.4 (4.5)	25.5 (10.3)	2.47
SYLL TREATMENT	28.8 (9.1)	50.3 (4.6)	21.5 (9.1)	2.46
2. Word Analysis (max = 56)				
MORPH TREATMENT	30.8 (7.9)	51.1 (6.4)	20.4 (7.9)	2.60
SYLL TREATMENT	31.4 (9.2)	45.6 (7.5)	14.3 (9.2)	1.54
3. Spelling (max = 56)				
MORPH TREATMENT	30.8 (14.9)	50.4 (5.4)	19.6 (14.9)	1.32
SYLL TREATMENT (max =56)	30.3 (12.1)	49.0 (4.6)	18.8 (12.1)	1.55
4. Definition Matching (max = 56)				
MORPH TREATMENT	23.9 (8.2)	49.4 (3.4)	25.5 (8.2)	3.10
SYLL TREATMENT	24.5 (5.9)	49.0 (5.7)	24.5 (5.9)	4.13
5. Sentence Comprehension (max = 56)				
MORPH TREATMENT	22.5 (10.7)	41.8 (6.5)	19.3 (10.7)	1.80
SYLL TREATMENT	25.9 (7.9)	44.8 (6.1)	18.9 (7.9)	2.39
STANDARDIZED MEASURES (WJ-III Standard Scores)				
1. WJ-III Letter Word ID				
MORPH TREATMENT	85.6 (6.3)	86.9 (6.8)	1.3 (6.3)	.20
SYLL TREATMENT	84.4 (6.3)	82.9 (8.1)	-1.5 (2.4)	-.23
2. WJ-III Word Attack				
MORPH TREATMENT	82.4 (9.6)	83.5 (9.2)	1.1 (9.6)	.12
SYLL TREATMENT	79.8 (9.7)	80.9 (10.9)	1.1 (9.7)	.12
3. WJ-III Spelling				
MORPH TREATMENT	86.5 (13.0)	89.6 (10.8)	3.1 (13.0)	.24
SYLL TREATMENT	86.1 (7.8)	86.8 (5.8)	.6 (7.8)	.08
4. WJ-III Spelling of Sounds				
MORPH TREATMENT	85.8 (10.7)	85.6 (8.9)	-.12 (10.7)	-.01
SYLL TREATMENT	79.4 (6.7)	83.9 (6.1)	4.5 (6.7)	.67
5. WJ-III Reading Vocabulary				
MORPH TREATMENT	83.8 (5.4)	83.4 (7.6)	-.4 (5.4)	-.06
SYLL TREATMENT	84.9 (3.8)	82.1 (4.9)	-2.8 (3.8)	-.72
60 WJ-III Passage Comprehension				
MORPH TREATMENT	88.0 (5.2)	86.5 (5.6)	-1.5 (5.2)	-.29
SYLL TREATMENT	87.1 (3.0)	85.8 (6.2)	-1.4 (3.0)	-.46

*Effect sizes must be interpreted with caution, as small sample sizes are likely to produce imprecise effect sizes. All effect sizes were calculated as Cohen's d (Cohen, 1988), using the formula: {d = m after − m before/ standard deviation of pretest} because the pretest SD is more meaningful than that of the difference scores or pooled SD, as it is in the units of the original measurements (Howell, 2008).

FIGURE 1: Graphic Organizer for Root Word Trees*

Edict:
An official order (the official speaking out)

Dictum:
A formal or authoritarian statement (that which was spoken)

Benediction:
A blessing (a speech of well being)

Malediction:
A recital of words intended to harm; a curse (something spoken to harm)

Latin

DICT= speak

© Susan Gray 2002

Set 8

* Meanings of root words were explicitly linked to meanings of their derived forms (root related words). In the example, each definition of derived words contains a form of the word SPEAK (edict= the official *speaking* out; benediction= a *speech* of well-being; dictum= that which was *spoken*; malediction= something *spoken* to harm), linking them to the meaning of their root word DICT meaning "SPEAK".

FIGURE 2. The group taught morphemes surpassed the group taught syllables for gain scores on each target word measure, including 1) Word Identification, 2) Word Analysis, 3) Spelling, 4) Definition Matching, and 5) Sentence Completion.
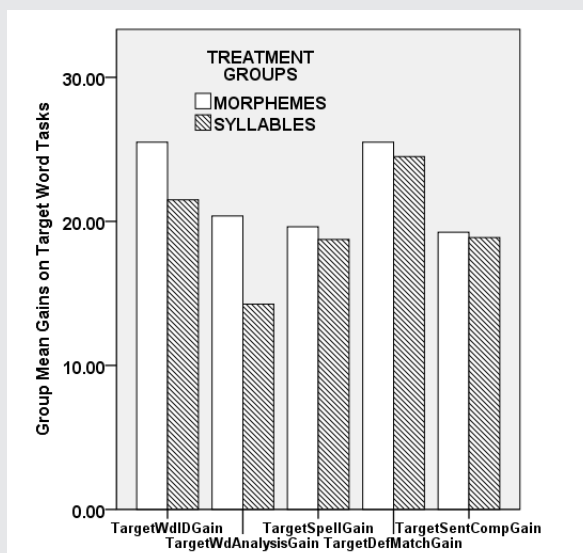
FIGURE 3. A-B. At pretest, every participant had significantly reduced decoding skills on the WJ-III Word Attack subtest except participant number 8, whose primary difficulty was in reading comprehension, estimated to be 6th grade equivalency level.
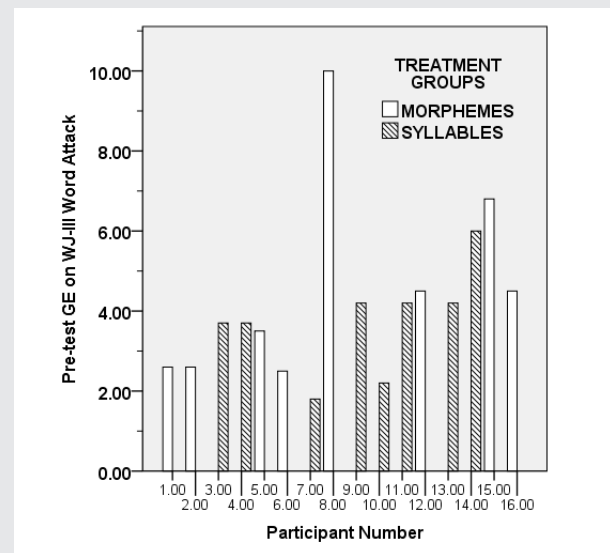
FIGURES 4 A–F. Participants who made at least one SS gain on any WJ-III literacy subtest were labeled as "Responders" who had responded to treatment with clinically meaningful gains.
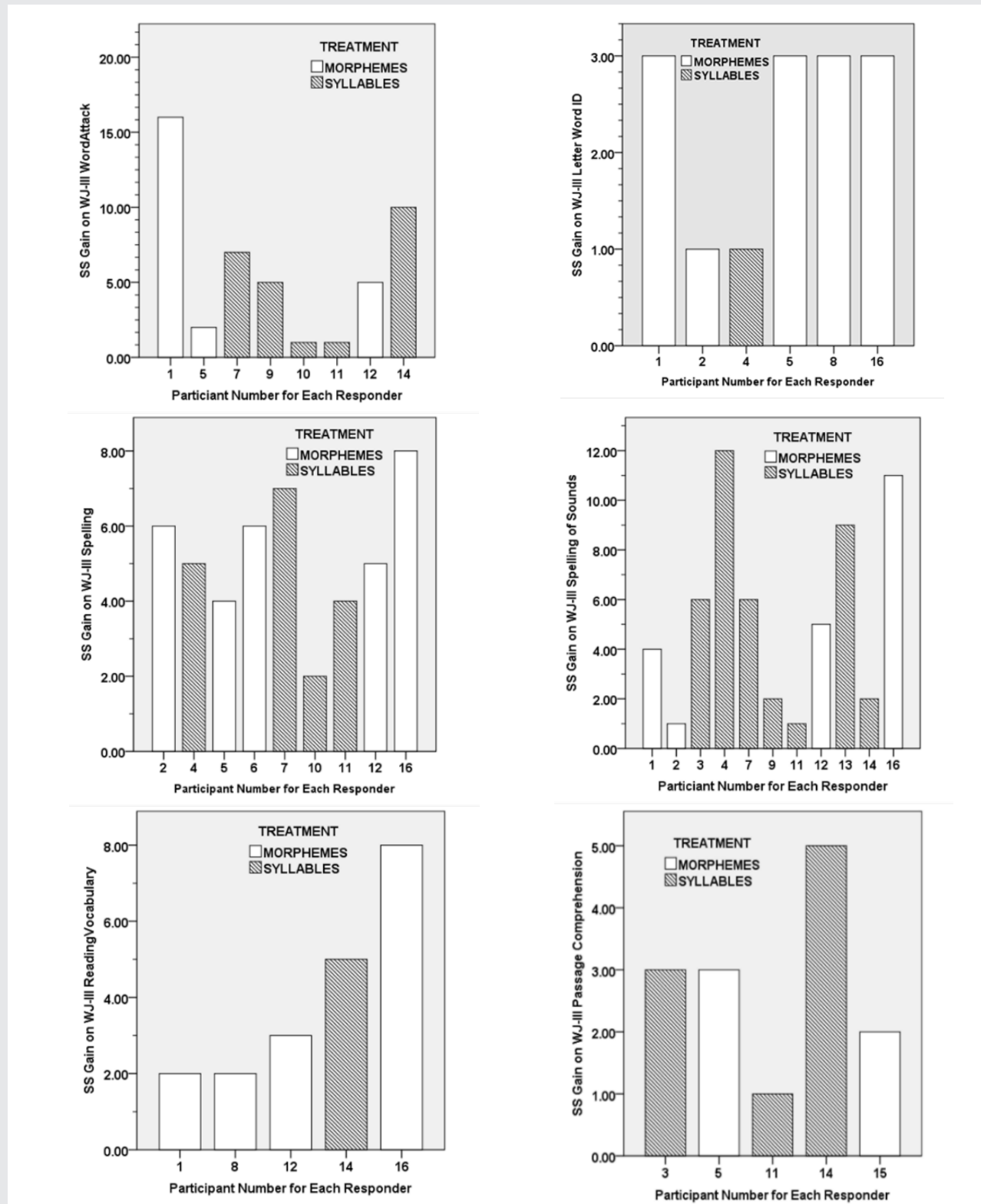
Appendix 1: Latin/Greek Root Word Tree Sets

Root Word	Meaning	Derived Form	Derived Form	Derived Form	Derived Form
fic/ fac	make	artifact	fictitious	facsimile	malefactor
mov/ mot	move	motif	emote	motivate	immovable
ast	star	asterisk	astronomical	astrological	astrophysicist
dict	say	edict	dictum	benediction	malediction
scrib/scrip	write	postscript	ascribe	prescriptive	circumscribe
flec/flex	bend	flexor	deflection	inflexible	inflectional
geo	earth	geode	geocentric	geochemistry	geologist
clam/ claim	shout	declaim	exclamatory	clamorous	acclamation
cred	believe	credible	incredulous	credence	credulity
chron	time	chronicle	chronological	anachronism	synchronous
vol/volv	roll, turn	evolve	voluble	convoluted	devolution
port	carry	portly	comportment	purported	importunate
bio	life	biome	autobiography	antibiotic	biosphere
phil	love	philter	philanthropist	philanderer	Anglophile

Research Article

The PIAAC Literacy Framework and Adult Reading Instruction

An Introduction for Adult Educators

Amy R. Trawick, CALLA

Abstract:

This article is excerpted (with slight adaptations) from the reports *Using the PIAAC Literacy Framework to Guide Instruction: An Introduction for Adult Educators* (Trawick, 2017) and *Bringing Reading Instruction to Life: Supplement to the Introductory Guide* (Trawick, 2018). The Programme for the International Assessment of Adult Competencies (PIAAC) conducted an international literacy assessment for adults in 2012 and 2014, and this article describes how adult educators can use its literacy framework to frame instruction as well. Key aspects that can guide teaching and learning include a "literacy-in-use" orientation to reading, the definition for "literacy" adopted by the literacy expert group, and how PIAAC operationalized Context, Content, and Cognitive Strategies. A model of contextualized reading instruction is proposed as a way to organize reading instruction.

The Organization for Economic Co-operation and Development (OECD) has invested in international surveys throughout the years, with each assessment including rather detailed information about the skill levels of the adults in the United States. The results of the literacy portion of the latest assessment, the Survey of Adult Skills, give one pause. Though the average score for adults in the United States is not significantly different from the international average in reading literacy (Rampey et al., 2016), the overall average conceals results of great concern:

- A larger percentage of U.S. adults scored in the very lowest levels for reading literacy, compared to the international cohort;

- U.S. adults with less than a high school diploma scored lower than their peers internationally;

- While only 9% of Whites in the U.S. scored at the lowest levels of proficiency, 33% of Blacks and 40% of Hispanics performed at these levels;

- Roughly 75% of unemployed adults (age 16-65) in the U.S. have less than a high school credential as their highest education level, and a third of these perform at the lowest levels in reading literacy; and

- Adults with the lowest literacy scores were more likely to report a poor health status and more limited civic engagement (Rampey et al., 2016).

This news of how the skills of adults in the United States compare with their peers across the globe comes at a time when the nation is challenged by international economic competition and by a variety of social and political stressors, both at home and on the world stage (Kirsch, Braun, Yamamoto, & Sum, 2007). Individually, U.S. adults face a dynamic and complicated labor market, including ever-changing technology and new occupational structures that are biased towards skilled and educated workers. Furthermore, in their homes, at work, and in their communities, adults confront diverse and often conflicting sources of information, delivered through platforms unimaginable twenty years ago. The latest international assessment data suggest that it is imperative that adults develop the requisite skills to participate fully in society and for their society to participate successfully in the international arena. The OECD (2013b) argues, "Without the right skills, people are kept at the margins of society, technological progress does not translate into economic growth, and enterprises and countries can't compete in today's globally connected and increasingly complex world" (p. 26).

An Invitation

The Survey of Adult Skills (a.k.a., "PIAAC"; see EXHIBIT 1) does more than provide a measure of the skill levels in participating countries. It also provides tools that educators may find useful in helping adults build those skills. These tools work well with adult education content standards that are being used across the country. The *College and Career-Readiness*

Standards for Adult Education (Pimentel, 2013), along with comparable state versions, have been adopted in efforts to prepare adult learners in the United States for the skill demands of the 21st century. These college and career readiness standards (CCRS) articulate the English language arts/literacy and mathematics skills required to succeed in three broad arenas: 1) entry-level positions of promising careers, 2) introductory academic college courses and workforce training programs to prepare for these careers, and 3) activities required of active citizens in a demanding democracy. For the first time, efforts are aligning K-12, postsecondary education, and adult education in a vision for what it means to be "college and career ready."

These efforts were bolstered by the 2014 passage of

EXHIBIT 1: Overview of PIAAC

The Survey of Adult Skills, formally known as the Programme for the International Assessment of Adult Competencies, or PIAAC, is a cyclical, international assessment of the skill levels of adults in advanced, information-rich economies. Coordinated by the Organization for Economic Co-operation and Development (OECD), the PIAAC assessments have been conducted in three rounds internationally thus far (in 2012, 2014, and 2017).. The "key information-processing skills" of *literacy* (reading only), *numeracy*, and *problem solving in technology-rich environments* have each been assessed through separate surveys. These skills were selected because they were deemed "essential for full participation in the knowledge-based economies and societies of the 21st century" and:

- "necessary for fully integrating and participating in the labour market, education and training, and social and civic life;
- highly transferable, in that they are relevant to many social contexts and work situations; and
- 'learnable' and, therefore, subject to the influence of policy" (OECD, 2013a, p. 18).

For more information on PIAAC visit http://piaacgateway.com.

the Workforce Innovation and Opportunity Act (WIOA; 2014), the principal legislation directing workforce and adult education activity nationally. Together, WIOA and the CCRS focus the field of adult education on developing skills with an eye towards college, careers, and citizenship. This emphasis has given rise to the need for approaches to teaching and learning that can realize this vision.

While the recent results of PIAAC (Rampey et al., 2016; OECD, 2013b) underscore the importance of this national activity, the work that went into developing the survey provides material that, with adaptation, has the potential to enhance the delivery of adult education itself. In particular, the conceptual framework that guided the literacy assessment (a.k.a. "the literacy framework") invites a way of thinking about adult reading instruction that is based on theory and research related to how adults use reading in their everyday 21st-century lives.

Central to the PIAAC work is an understanding that complex skills are best conceptualized in terms of how adults actually use the skills as they go about the various tasks that comprise their adult lives. In the case of reading, individuals draw from and put to use cognitive strategies and component sub-skills (e.g., alphabetics and vocabulary) as they tackle reading tasks throughout their day, but ultimately it is the accomplishment of the tasks themselves that matters most. What PIAAC is principally interested in assessing, regarding reading, is how well adults can apply key reading skills to accomplish these adult reading tasks—using adult-oriented materials, in authentic contexts, for real-life purposes. The term "literacy-in-use" captures this intent (PIAAC Literacy Expert Group, 2009, p. 6).

The reasoning and the conceptual tools that made such rich assessment work possible can do double-duty in helping to prepare adults for these kinds

of reading tasks. The National Research Council (NRC, 2012) notes that adult literacy instruction "is most likely to lead to durable, transferable learning if it incorporates real-world activities, tasks, and tools" (p. 6). The PIAAC literacy framework focuses on these "real world activities, tasks, and tools," and, thus, offers the field of adult education an opportunity to think in creative and sophisticated ways about adult literacy instruction. The purpose of this article is to explore how specific aspects of the PIAAC literacy framework might inform instructional planning and curriculum development in adult education, especially related to reading instruction.

The Building Blocks of the PIAAC Literacy Framework

To start, this section overviews some key pieces of the PIAAC literacy framework, ones that serve as building blocks for developing items for the survey. They include the definition of literacy and three basic elements comprising reading tasks: contexts, content, and cognitive strategies. Embedded in the discussion are applications for adult education.

Definition for *Literacy*

The literacy framework was developed by a literacy expert group and its members, and how they defined *literacy* for the Survey of Adult Skills sets the stage for everything else in the framework. The specific words in the definition provide valuable insight into what the international community valued about literacy for this iteration of the PIAAC assessments, but it also makes more concrete what can otherwise be a rather abstract concept. See EXHIBIT 2.

It is important to note upfront that the PIAAC framework uses *literacy* to refer to reading-related activity, as opposed to activity related to spoken

language or writing. The survey focused only on reading because of the current limitations of assessing across language and culture on an international scale (OECD, 2013b; PIAAC Literacy Expert Group, 2009). Note, too, that the skills typically associated with reading are listed in the second sentence of the definition and range from decoding words to evaluating complex texts. The PIAAC framework states that literacy <u>encompasses</u> these skills; it is not <u>defined</u> as these skills[1].

It is in the first sentence that we see the core of PIAAC's use-oriented definition of literacy. The definition identifies three major **purposes for literacy**: 1) *participate in society, 2) achieve one's goals, and 3) develop one's knowledge and potential.* The expert group explained that an earlier draft of the definition originally used the word "function"

in the first purpose. The expert group ultimately landed on "participate" in order "to focus on a more active role for the individual" (PIAAC Literacy Expert Group, 2009, p. 9). Here's how the expert group explained the intent:

> Adults use text as a way to engage with their social surroundings, to learn about and to actively contribute to life in their community, close to home and more broadly. And for many adults, literacy is essential to their participation in the labor force. In this, we recognise the social aspect of literacy, seeing it as part of the interactions between and among individuals. (PIAAC Literacy Expert Group, 2009, p. 9)

The definition goes on to underscore the role of text in the pursuit of personal goals and developing one's potential. Personal goals might range from managing a shopping trip to managing a career, from choosing a menu item to deciding upon a retirement plan, from negotiating the bureaucracy of the local school system on behalf of a child to navigating the financial aid waters of the local community college on behalf of oneself. Managing texts is likely required in all of these goal pursuits, especially in an information-rich society. Perhaps unsurprisingly, developing one's knowledge and potential through lifelong learning—whether that learning is formal and classroom-based, or informal and self-directed—often requires text as well.

A use-oriented view of adult literacy, then, must take into

EXHIBIT 2: Defining Literacy

PIAAC

Literacy is defined as the ability to understand, evaluate, use and engage with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential.

Literacy encompasses a range of skills from the decoding of written words and sentences to the comprehension, interpretation, and evaluation of complex texts. It does not, however, involve the production of text (writing).

Information on the skills of adults with low levels of proficiency is provided by an assessment of reading components that covers text vocabulary, sentence comprehension and passage fluency.

(OECD, 2013b, p. 59)

*PIAAC delineates literacy from numeracy and problem solving in technology-rich environments and defines each with its own framework.

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[1] The literacy expert group addressed the role these skills play through a Reading Components assessment. Adults who were unable to successfully complete a set of four core literacy tasks at the start of the assessment were not required to complete the full literacy survey. Instead, they were directed to a Reading Components assessment that focused on three key reading components: reading vocabulary, sentence processing, and passage comprehension.

consideration these three purposes for literacy. The four verbs we see in the PIAAC definition-*understand, evaluate*, *use*, *engage*--describe the **types of interaction with text** needed to achieve these purposes (see EXHIBIT 3).

Understand and *evaluate* are familiar constructs in adult reading education and are well represented in states' adult education content standards. The other two types of interactions, however, may warrant a moment of deliberation. The expert group described "using" a text as "applying the information and ideas in a text to an immediate task or goal or to reinforce or change beliefs" (PIAAC Literacy Expert Group, 2009, p. 13). Most questions in the PIAAC literacy assessment are framed within this use orientation, but how adults use written text is also addressed in the questions in the PIAAC Background Questionnaire that probe reading-related activities at work and in everyday life. For instance, respondents were asked whether they read the following and to what extent:

- directions or instructions
- letters, memos, or e-mails
- articles in newspapers, magazines, or newsletters
- articles in professional journals, or scholarly publications
- books, fiction or nonfiction
- manuals or reference materials
- bills, invoices, bank statements, or other financial statements
- diagrams, maps or schematics

These *uses* of written text speak to an immediate interaction with text; reading *engagement*,

however, "refer[s] to the degree of importance of reading to an individual and to the extent that reading plays a role in their daily life" (PIAAC Literacy Expert Group, 2009, p. 20). In other words, *engagement* addresses the general attitudes and behaviors related to reading, especially the

EXHIBIT 3: Purposes for Literacy and Types of Text Interaction

Types of Interaction with Text
Readers
- understand
- evaluate
- use
- engage with written text

TO

Purposes for Literacy
- participate in society
- achieve one's goals
- develop one's knowledge and potential

extent to which the individual views reading as a priority option for spending time and as a way of accomplishing goals. The expert group articulated five integrated aspects of engagement:

a. *Amount and variety of reading.* The more one reads and the more different types of reading (purposes, types of text) one uses, the greater one is engaged with reading.

b. *Interest in reading.* The more one seeks out reading as a means of obtaining information and for enjoyment, the greater one is engaged with reading.

c. *Control.* The more one feels in control of what one reads and is able to direct one's own reading, the greater the engagement.

d. *Efficacy.* The more an individual feels able to read well, especially the confidence to read successfully new texts, the greater one is engaged with reading.

> e. *Social interaction.* The more one is interested in sharing reading experiences and seeks out others to talk about reading, the more one is engaged with reading. (PIAAC Literacy Expert Group, 2009, p. 20)

Fostering reading engagement is an increasingly vital piece of the overall mission of many adult education programs, especially in light of the fact that some adult learners do not remain in those programs long enough to achieve the skill gains that could make a difference in their lives. Reder (2012) maintains that inviting students to develop their reading skills in the classroom through participation in reading practices that mirror those they find "in real life" (e.g., analyzing nutrition labels; finding and reading online information; reading, evaluating, and discussing opinions about current events) may inspire and enable students to engage in those practices when they depart the program. The hope is that, by continuing to interact with texts after their departure, students will reinforce and further develop their reading skills even without the benefit of ongoing instruction. That hope--and the multifaceted nature of the concept of engagement itself--suggest that these reading practices need to be taught and learned in adult education programs in ways that build self-efficacy, that promote ownership in the reading and learning processes, and that foster a sense of collaboration.

Taken as a whole, the purposes and types of text interaction described in PIAAC's definition for literacy offer the field a concrete reference point for reflecting on our vision for literacy (reading) instruction in our classroom and program settings. Do these purposes seem legitimate? Are these interactions with texts indeed the kinds we want to promote? If so, are we structuring learning opportunities in reading and wrap-around services for adult learners in ways that transfer to their lives? Practitioners in adult education programs might use this definition to revisit the program's mission/vision statement, curriculum, and/or services to ascertain if the scope of literacy programming offered supports the purposes for literacy and types of text interaction described in the literacy framework. Answering questions like those posed in EXHIBIT 4 can aid in this kind of reflection, a first step to building the collaboration and system support required for the integrated instructional approaches that follow.

EXHIBIT 4: Guiding Questions for Reflecting on the PIAAC Definition for Literacy

	Description	Questions to Ask
PURPOSES FOR LITERACY		
Participate in society	Refers to the active ways in which adults use text to interact with each other in order to contribute to their homes, communities, and workplaces.	**1. For each purpose, answer these questions:** • In what ways does your **program mission statement** capture this purpose? • In what ways does your **CCRS** document further this purpose? (In addition to the standards themselves, look at the *Introduction,* examples, guidelines, etc.) • Where/how/to what degree do your **program's curricula, materials, and/or approaches** already foster this purpose? Find specific examples. • (Teachers) Look through recent **lesson plans**. In what ways are you already teaching to this purpose? **2. What are the implications moving forward?**
Achieve one's goals	Refers to how adults use text to address their immediate and long-terms needs/goals. These goals may range from finding housing to progressing in a career to participating more fully in the community.	
Develop knowledge and potential	Refers to how adults use text for self-directed, informal, or formal learning to improve some aspect of their life.	
TYPES OF INTERACTION WITH TEXT		
To understand	Addresses such things as understanding vocabulary, identifying the main idea, grasping the author's purpose and how ideas are organized, including knowing how these are affected by social function. Many *understanding* tasks can be quite complex, requiring high-level inferencing and analysis.	**1. For each type of interaction, answer these questions:** • How is it captured in your **program's mission statement**? How might the mission statement be revised to better capture this interaction? • How do the **Reading CCRS** prompt this interaction? • Where/how/to what degree does this interaction already show up in your **program's curricula, materials, and/or approaches**? • (Teachers) Review recent **lesson plans**. In what ways are you already teaching for this type of interaction? **2. What are the implications moving forward?**
To evaluate	Addresses whether a particular text is relevant for the task—and reliable as a source. It can also involve making judgments about the accuracy of a particular statement or the quality of an overall text. The ability to evaluate text has emerged as an important skill in the new digital age, where adults are inundated with information from sometimes questionable sources.	
To use	Addresses ability to apply information in a text to a specific goal. Adults don't read menus to define words or answer questions. They read menus to order food. They read directions to get something done. They read websites to find information that they can act on.	
To engage	Addresses the degree to which adults seek out reading to obtain information or for enjoyment; the amount and range of reading they do; the confidence they have in their own reading and their ability to direct their own reading; and how likely they are to share their reading with others.	

Basic Task Elements: Contexts, Content, and Cognitive Strategies

After clearly defining *literacy*, the PIAAC literacy expert group next had to decide how to assess it. The PIAAC expert groups from across all three of its assessments developed a basic framework, one that was customized and elaborated upon to guide assessment in each specific skill domain. These elements (see EXHIBIT 5) describe essential aspects of authentic adult tasks in information-rich societies and can be used to guide teaching and learning for adult students.

Contexts. The first element of the basic PIAAC assessment framework is *contexts*, defined for all the PIAAC assessments as "the different situations in which adults have to read, display numerate behavior, and solve problems" (OECD, 2013b, p. 59). For literacy, "the circumstances and context

in which reading takes place may influence the motivation to read and the manner in which texts are interpreted" (OECD, 2012, p. 22). That means that the PIAAC expert group needed to identify those key contexts in which adults operate and then to specify the texts and tasks appropriate within those contexts. Four broad contexts were identified for literacy use for adults:

- **Work and occupation** (e.g., job search, wages, salaries, benefits, being on the job)

- **Personal uses**

  - Home and family (e.g., interpersonal relationships, personal finance, housing, and insurance)

  - Health and safety (e.g., drugs and alcohol, disease prevention and treatment, safety and accident prevention, first aid, emergencies, and staying healthy)

EXHIBIT 5: PIAAC Framework Elements

Framework Element	General Definition *(applied across the assessments for literacy, numeracy, and problem-solving in technology-rich environments)*	Applied to Literacy
Contexts	The different situations in which adults have to read, display numerate behavior, and solve problems	• Work-related • Personal • Society and community • Education and training
Content	The texts, artifacts, tools, knowledge, representations and cognitive challenges that constitute the corpus to which adults must respond or use when they read, act in a numerate way or solve problems in technology-rich environments	**Different types of text. Texts are characterized by their medium (print-based or digital) and by their format:** • Continuous or prose texts • Non-continuous or document texts • Mixed texts • Multiple texts
Cognitive Strategies	The processes that adults must bring into play to respond to or use given content in an appropriate manner	• Access and identify • Integrate and interpret (relating parts of text to one another) • Evaluate and reflect

*Adapted from *EXHIBIT 2.1 Summary of Assessment Domains in the Survey of Adult Skills (PIAAC) (OECD, 2013b, p. 59).*

- Consumer economics (e.g., credit and banking, savings, advertising, making purchases, and maintaining personal possessions)

- Leisure and recreation (e.g., travel, recreational activities, and restaurants, as well as material read for leisure and recreation itself)

- **Society and community** (e.g., public services, government, community groups and activities, and current events)

- **Education and training** (e.g., opportunities for further learning)

How might practitioners apply this information?
Let's look at how one teacher, Marco, might use the PIAAC literacy contexts in his work:

> Marco teaches in a large urban community-based organization and has a class of 15 intermediate students (GLE 4-8.9). He is responsible for teaching to the state's College and Career Readiness (CCR) English Language Art (ELA) Standards and has been trained in STAR, a federally-sponsored approach to teaching adult intermediate readers. According to his program's mission, he is also supposed to simultaneously build students' content knowledge and support them in meeting their college, work, family, and life goals. Many students plan to move into the next class to prepare for the GED. Marco's class meets 5 hours a week for ELA instruction. Recently, Marco's local program used the PIAAC literacy framework to make a reference sheet to use when planning instruction for life-oriented reading.

> Marco is ready to plan the context focus for his next unit. One of the students in the class has just been diagnosed with diabetes, and there has been a good deal of informal talk about what diabetes is, what causes it, and how she's going to treat it. Students have also been talking about gun violence. Marco needs to decide where he wants to focus the skill instruction for the unit. He looks over his list of PIAAC topics and realizes that the class has recently completed units in career exploration **(work)**, what it takes to go to college **(education and training)**, elections **(society and community)**, and current events **(society and community)**. He reads through the PIAAC options and sees the "health and

> safety" category under the "personal" section and realizes 1) addressing student health is a major part of the program's mission and 2) he hasn't covered science in whole class instruction yet. He knows he needs to be building students' background knowledge both for the GED and for life. The topic "disease prevention and treatment" is listed in the PIAAC content topics and is directly related to his students' expressed interests. Marco decides to proceed from the student interest in diabetes to frame a unit around students' own "health concerns," permitting students to research disease prevention and treatment if that is where their concern lies. The unit will enable them to build their knowledge related to their bodies and health and to develop their informational reading skills along the way.

Marco wants to expose learners to an array of contexts over time so they come to understand more fully the types of situations in which literacy is used and how literacy use varies across contexts. Teachers and curriculum developers would ideally draw a specific context directly from the students whenever possible to assure that students in the classroom see the immediate or future relevance of selected contexts. However, the PIAAC categories can serve as concrete reminders of potent "hot topics" for adults from which to start.

Content. The second element in the literacy framework, content, refers to the different types of texts adults read. PIAAC targets advanced, information-rich countries, so in identifying texts, the expert group was influenced by the role computer technologies play in accessing and presenting text. The top-down, left-right orientation of traditional print is augmented by the "nonlinear, recursive, and interactive nature" (PIAAC Literacy Expert Group, p. 5) of digital environments, complicating what it is that adults must know and manage to navigate text. The increased abundance of non-continuous texts— in graphs, charts, bullet points—also requires a unique set of skills. Thus, texts used in the literacy assessment were described by their **medium** (print-based or digital) and **format** (continuous

text, non-continuous text, mixed within one text, or multiple).

The expert group teased out further aspects of texts as well. EXHIBIT 6 shows additional differentiations: rhetorical stance, layout of non-continuous texts, and digital text considerations.

the rhetorical stances category. The topic will likely employ the use of tables to convey information, so Marco thinks it is a good opportunity to provide instruction in reading and constructing **tables (intersected lists).** Because students will also be working on websites, he decides to provide instruction and practice with **index-like links** to help them go right to the specific information they need.

EXHIBIT 6: Features of Authentic Texts

Rhetorical Stance	**Layout of Non-Continuous Texts**	**Digital Text Considerations**
(for Continuous and Non-Continuous Text)		
• Description	• Matrices (simple lists; combined lists; intersected lists; nested lists)	• Hypertext (index-like; text-embedded)
• Narration	• Charts and graphs	• Interactive
• Exposition	• Locative documents (maps)	• Other Navigation Features (scroll bar; "next page" button; etc.)
• Argumentation	• Entry documents (forms)	
• Instruction	• Combination	
• Records		

Let's pick up with Marco to see how he makes use of this information.

> Marco has decided to frame a unit around health concerns, so he begins to think about the kinds of texts students will read. His program uses an intake form to ascertain what kinds of texts students want to learn how to read. He reviews those results for the students in his class. Most students have indicated they want to learn how to read websites more efficiently, which is a natural fit with the context of health concerns. Adults often research their health issues on the Internet. He envisions students conducting a structured investigation about a health concern of their choice and presenting their findings through a class blog in which they share the causes and impacts of their health issue and how they are changed by what they found. Right now he thinks students will read two texts, one of which will be an Internet article **(digital)** they find.
>
> Marco then refers to the features of authentic text from PIAAC, keeping in mind the context of the readings students will be involved with as they explore their health concerns, as well as students' past experiences with reading. In reading about their health concerns, students will naturally encounter a great deal of **exposition**, so Marco decides to make that the focus from

For Marco, the PIAAC categories and descriptions provide a way to consider authentic types of texts adults need to experience in the classroom in order to be prepared for the often complex literacy tasks they will increasingly encounter in their homes, their workplaces, and their communities. He wants to ensure that students are taught the social functions, formats, and skills related to common rhetorical stances. He also wants to provide practice in the various kinds of non-continuous texts. Finally, he wants to make sure students themselves are actively maneuvering through digital texts, learning what to ignore and what to target to find the information they need. Marco does not always include all three content categories in one unit; however, he does think carefully about them as he designs learning experiences for his class.

Cognitive strategies. The third basic element in the PIAAC framework is cognitive strategies,

those "processes that adults must bring into play to respond to or use given content in an appropriate manner" (OECD, 2013b, p. 59). Three main sets of cognitive strategies were targeted in the literacy assessment: 1) access and identify; 2) integrate and interpret (relating parts of text to one another); and 3) evaluate and reflect. While other cognitive strategies may be relevant for any particular real-life task, these three were deemed sufficiently prominent in importance to be assessed on the last three international assessments.

- **Access and identify.** The first set of cognitive strategies—*access and identify*—refers to finding information in a text, a common need of adult readers. Sometimes this can be a rather straightforward exercise, identifying a single piece of literal information that is "right there," such as a phone number or a date. However, sometimes tasks of this type can be challenging. They might involve making inferences and/or drawing upon understanding of formats and the social functions of texts, knowing, for instance, how authors tend to organize arguments or how webmasters tend to organize websites. Thus, these questions are not necessarily easy. The expert group identified two sub-types of *access and identify* strategies: locating refers to finding just one piece of information, and cycling refers to finding multiple pieces of information.

- **Integrate and interpret (relating parts of text to one another).** Another major aspect of what adults do when they read is to connect different parts of text. Readers may need to understand how the end of a text relates to its beginning, how an anecdote supports an argument, how a graph illustrates findings from a research study. A major part of the PIAAC literacy assessment, then, targets the

cognitive strategy *integrate and interpret.* To integrate and interpret is to determine the relationship between different parts of a text, whether that relationship is explicitly stated or not. Common relationships include problem-solution, cause-effect, category-example, equivalency, compare-contrast, and whole-part (e.g., determining the purpose of a text or its main theme).

- **Evaluate and reflect**. The ubiquity of text in today's world requires adult readers to separate the relevant from the irrelevant, the reliable from the unreliable. Online texts may be posted by anyone, regardless of his or her credentials or expertise, and may be left online long after the timeliness of the content has passed. The third PIAAC cognitive strategy, *evaluate and reflect*, addresses the often difficult process of determining the quality of information, taking into consideration that readers often employ information, ideas, or values beyond the text to decide its relevance and credibility for an issue at hand. Readers may also need to attend to such factors as a text's purposefulness, register, structure, accuracy, timeliness, and use of evidence and language.

Here's how PIAAC's description of cognitive strategies might inform Marco's planning:

> Marco thinks about the type of texts students will encounter as they read about health concerns in the unit, what they need to learn to read those texts, and what he is responsible for teaching students at this level. He has decided to focus instruction on exposition (rhetorical stance), tables (non-continuous text format), and text-embedded links. Now he ponders the cognitive strategies he needs to teach. Since students will be looking for specific kinds of information about their health concerns and will be navigating websites, Marco knows he will need to provide instruction in *access and identify,* specifically in locating information using index-link links, headings, and key words related to causes/risks. Another focus will need to be *integrate and interpret*, notably *cause*

and effect, since health concerns are often discussed in terms of prevention/causes and treatment. He has traditionally thought of *cause and effect* as <u>text structure</u>[2], and he can think of ways to bring in graphic organizers to help students analyze the expository text they are reading. Since students will be researching health concerns on the Internet (even with restricted websites), Marco feels he should also teach them some basics about ***evaluate and reflect***, such as assessing the credibility of the source.

Let's take note of a few aspects of Marco's planning. First, Marco is using a unit structure—linked lessons related to the same topic--to plan instruction. That means students will be reading multiple texts over time, with ample opportunities for Marco to teach and for students to practice and integrate several strategies within one unit. Identifying specific strategies (e.g., <u>locating information using index-link links, headings, key words</u>, <u>identifying cause and effect</u>; <u>evaluating credibility of sources</u>) within each cognitive strategies category enables him to proceed in his planning with clarity of intent. Exploring a health concern utilizes a great many skills/strategies, but Marco cannot teach them all to students with the same intensity. He must use the time he has with students in a focused manner. Thus, he targets just a few strategies so he can provide the intensity of explicit instruction plus practice needed for students to learn them well.

Secondly, Marco does not need to select strategies from across all three PIAAC sets of cognitive strategies. He does so in this case because it makes sense for what the real-world task asks of students—and he thinks he can focus the instruction appropriately to provide enough practice in each strategy. In many units, however, teachers may draw from only one or two of the PIAAC sets of cognitive strategies.

Thirdly, Marco need not limit his strategy selection to just the three sets of cognitive strategies identified in the literacy framework at all. The PIAAC literacy expert group restricted the assessment to these broad sets of highly relevant strategies for the purposes of the international survey; however, there are other skills and strategies that students may need to learn in order to accomplish a wide range of tasks. Practitioners should feel free to incorporate other skills and strategies into instruction as required by the tasks students are attempting, the content standards teachers are required to teach, and the reading components (e.g., phonics, vocabulary) students need to develop. The inclusion of the cognitive strategies in the PIAAC framework helps us remember, though, that 1) adults use strategies/skills in the pursuit of real-world reading tasks (and that's, ultimately, how we should teach them) and 2) the three identified sets have high-utility in adult reading activity.

Model for Contextualized Reading Instruction

The use-oriented conception of competency that underlies the PIAAC literacy definition and framework is congruent with research on transfer of learning. In general, this body of literature points to the increased likelihood that transfer of learning is enhanced either when there is a considerable overlap between the features of a task in a learning situation and a new task <u>or</u> when a skill is learned and practiced in multiple contexts (NRC, 2012: Perin, 2011).

Since one of our goals in adult education is to help adults build competency in using literacy skills to accomplish real-life goals and purposes, it

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[2] Text structure refers to common patterns authors use to organize ideas within a written text. For more information, see http://www.adlit.org/strategies/23336.
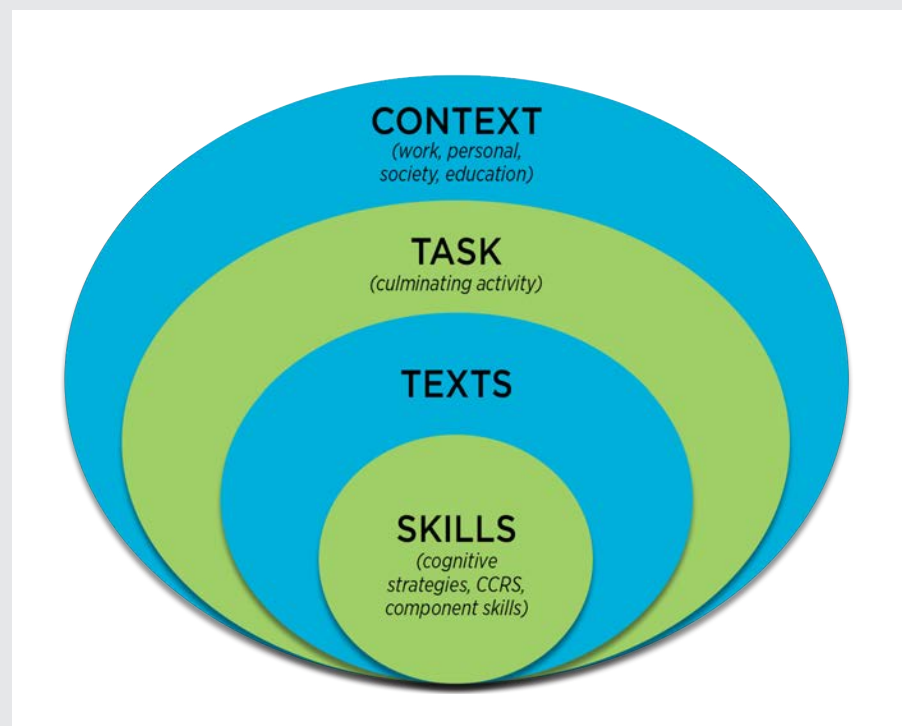
makes sense that we would want to construct in-class reading activities that mirror these real-life reading activities. The key elements of the PIAAC framework—contexts, content (texts), and cognitive strategies—all contribute to thinking about and constructing these authentic reading activities for instructional purposes.

It might be helpful to think about these basic elements as being nested within one another, and to change the language a little bit as we move more fully from the PIAAC framework into instructional planning (see EXHIBIT 7). Let's use the word "skills" to refer not only to PIAAC's cognitive strategies but also the reading components (e.g., phonics, fluency) and other skills articulated by a state's College and Career Readiness Standards. The PIAAC work helps us envision how these **skills** are used in real-life, as we read **text(s)** in the pursuit of an overarching **task**, situated within an authentic adult **context.** By applying this same organizing principle of nesting and contextualizing to construct learning activities, we can provide students with meaningful learning experiences that develop *literacy-in-use* for long-term retention and transfer.

As we saw with Marco's example, this kind of instruction entails teaching in a unit. Identifying a literacy task for a unit, one that is central to the unit and demonstrates in essential ways how literacy is used in "real life," is crucial. Such a task is considered *authentic*. Since

many students will be moving on to postsecondary and training settings, literacy tasks that replicate or simulate the kinds of reading they'll experience in these contexts can also be considered authentic, if the transfer to those settings is made clear. The goal is to design an overarching literacy task that is as authentic as possible, considering the limitations of such things as time, materials, and transportation. We can think about the task in this model as a culminating activity that requires the learner to practice and ultimately use targeted reading skills, either to do something (e.g., find contact information; shop for groceries) or to access, analyze, and evaluate information in order to produce a product (e.g., a piece of writing or an oral presentation). Ideally, the culminating activity will also have an audience other than the teacher, such as the students themselves (as with a journal), classmates, the larger program/adult learning center, the workplace, or the community.
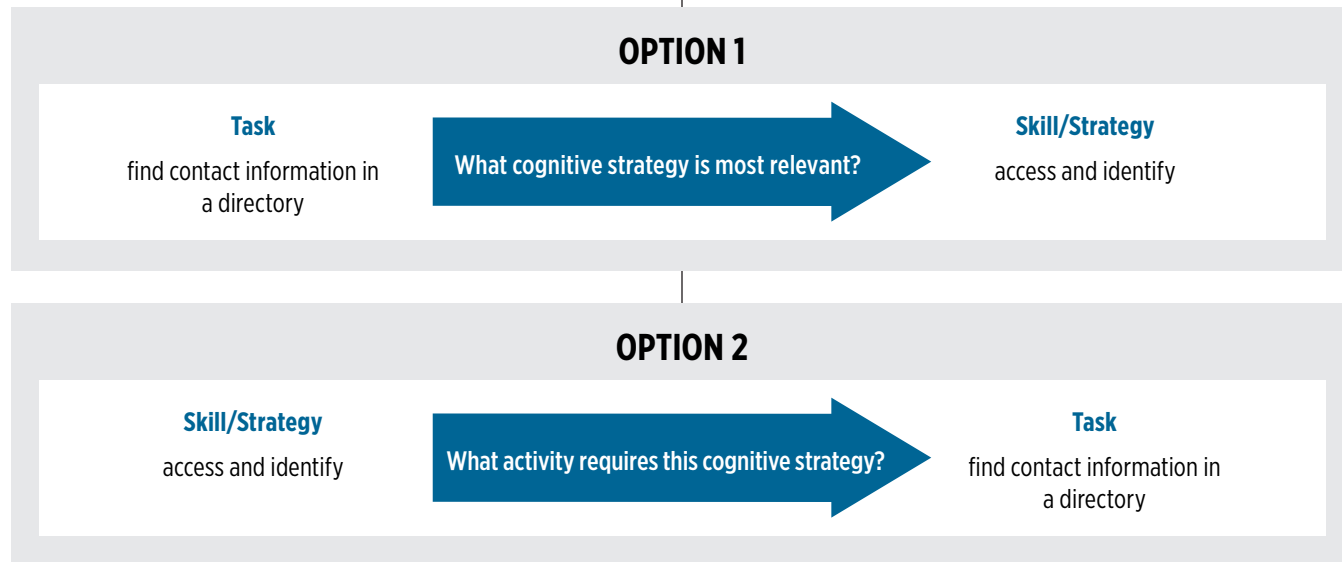
EXHIBIT 7: Model for Contextualized Reading Instruction

CONTEXT
(work, personal, society, education)

TASK
(culminating activity)

TEXTS

SKILLS
(cognitive strategies, CCRS, component skills)

There are a number of ways to arrive at a culminating task that can frame instruction. Two options are described below: Option 1 shows how a teacher starts with a task and identifies the relevant skill required to complete the task. Option 2 reverses the process, with the teacher beginning with a targeted skill and contemplating an authentic reading tasks that applies that skill.

Whether Option 1 or Option 2 is used, identifying both the task and the targeted skill(s) happens early in the instructional design process. Soon afterwards, the teacher can plan lessons that will get students to those outcomes. This kind of design is often referred to as **backward design**

OPTION 1

Task	What cognitive strategy is most relevant?	Skill/Strategy
find contact information in a directory		access and identify

OPTION 2

Skill/Strategy	What activity requires this cognitive strategy?	Task
access and identify		find contact information in a directory

EXHIBIT 8: Sampling of Contextualized Units

Topic	FINDING CONTACT INFORMATION *(low level)*	CAREER EXPLORATION *(intermediate level)*	RESEARCHING TOPICS THAT MATTER *(high level)*
Context	**Community, Work**	**Work**	**Education and training, Community**
Task	Find contact information in a simple directory	Compare 3 careers and identify the best fit; explain why it's the best fit	Write a letter to an online community discussion board discussing multiple sides of a controversial topic currently in the news (e.g., GMOs, global climate change), making the case for one particular side
Texts	Print-based, digital Non-continuous Records (Simple/simplified online, print directories)	Print-based, digital Continuous; non-continuous Exposition (Online and print career resource materials--e.g., O*NET)	Print-based, digital Continuous; non-continuous Argumentation, Exposition (Student-accessed print and online texts)
Skills	Access and identify; ABC order; scanning; specific sound-symbol correspondences; etc.	Compare and contrast; tables; graphs; text-embedded links	Evaluate and reflect—credibility of sources; argumentation; access and identify—finding diverse sources;

(Wiggins & McTighe, 2006). EXHIBIT 8 provides examples of what contextualized units might look like in classrooms at different levels when constructed around these basic unit features.

To ensure that these contextualized units do the work intended, practitioners can use the questions in EXHIBIT 9 as a guide.

and features. The proficiency with which adults are able to navigate these texts for a range of purposes has implications not only for themselves and their families, but for their workplaces, their communities, and for the larger society. Our challenge as a field is to continue to find ways to help adult learners increase their reading proficiency, meeting adult learners where they are

EXHIBIT 9: Guiding Questions for Designing Contextualized Units

Feature	Questions to Ask
Context	• Is the context important to students, either now or in the future? How do you know? • Has there been variety in the contexts covered in previous instruction? If not, is that okay? How do you know? • What do learners already know about the context/topic?
Task	• How will students demonstrate their learning of the targeted understandings and skills in a way that is *most authentic to the context*? (Is the purpose as "real" as possible? Is the audience as "real" as possible? Is the product as "real" as possible?) • Is the task appropriate for the level of the students?
Texts	• Will students read print-based or digital texts? Are students being exposed to a both as they progress through units? • Are students reading continuous or non-continuous texts? Are students being exposed to both as they progress through units? • Are students engaging with a variety of rhetorical stances and non-continuous text layouts across the units? Is direct instruction being provided in these?

Skills	• Which set(s) of cognitive strategies should be the focal point of instruction (considering level of students)?
	  - **Access and identify**
	  - **Integrate and interpret** [problem-solution, cause-effect**,** category-example, equivalency**,** compare-contrast, whole-part (e.g., main idea/details, purpose)]
	  - **Evaluate and reflect**
	  - **Other**
	• Do other reading skills/standards need to be taught, especially vocabulary, comprehension strategies, and other essential components (phonemic awareness/phonics, fluency)?

Conclusion

The PIAAC definition for literacy is one that prioritizes the desire of adults to participate in society, to achieve their own goals, and to pursue lifelong learning. These purposes require adults to be able to understand, evaluate, use, and engage with texts that vary in rhetoric, formats,

and connecting learning with what they want to be able to do. Oriented in authentic adult practice, PIAAC offers us a rich set of tools to do just that.

More ideas for using PIAAC's literacy assessment framework to inform adult education practice can be found in *Using the PIAAC Literacy Framework to Guide Instruction: An Introduction for Adult Educators* (Trawick, 2017) and *Bringing Reading to Life: Supplement to the Introductory Guide* (Trawick, 2018).

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Forum: Immigration and ESL

(Part 1 of 3)

Immigrants Learning English in a Time of Anti-Immigrant Sentiment

Clarena Larrotta, Texas State University

Immigrants bring a wide variety of skills that favor the market productivity and add to the economic life of the country. They contribute to the development of the U.S. economy through the skills they bring to the market (cognitive skills such as abstract thinking, non-cognitive skills such as motivation and initiative, and specific skills such as the ability to operate machinery) and through the small business they own. Lancee and Bol (2017, p. 696) assert that different types of skills are relevant on the labor market: cognitive skills, non-cognitive skills, and specific skills. Likewise, Costa, Cooper, and Shierholz (2014) explain that:

> Immigrants have an outsized role in U.S. economic output because they are disproportionately likely to be working and are concentrated among prime working ages. Indeed, despite being 13 percent of the population, immigrants comprise 16 percent of the labor force...the share of immigrant workers who own small businesses is slightly higher than the comparable share among U.S.-born workers. Immigrants comprise 18 percent of small business owners. (p. 3)

Despite being a significant force in the development of the economy and the contribution they make to the demographic diversification and cultural growth of the country, immigrants are currently not welcome in the United States. In fact, in 2016, the United States resettled 97,000 refugees; however, this number dramatically

decreased in 2017 when it resettled only 33,000 refugees (Pew Research Center, 2018). This decrease in numbers is the product of new immigration policies aiming to further restrict who enters the country. Mr. Trump's presidential campaign was full of anti-immigrant rhetoric particularly against Mexicans and Muslims (Kteily & Bruneau, 2017). As reported by the Homeland Security webpage:

On March 6, 2017, the President issued a Memorandum for the Secretary of State, the Attorney General, and the Secretary of Homeland Security on *Implementing Immediate Heightened Screening and Vetting of Applications for Visas and Other Immigration Benefits, Ensuring Enforcement of All Laws for Entry into the United States, and Increasing Transparency among Departments and Agencies of the Federal Government and for the American People.*

To no one's surprise, after his election, President Trump´s administration has issued repressive and punitive policies and has encouraged raids performed by the U.S. Immigration and Customs Enforcement Agency (ICE) throughout the country. ICE manages detentions and the removal of people who have already been arrested for immigration violations. However, recently, ICE has targeted community centers, among

other places, offering education services to the immigrant community, and workplaces where immigrants are known to attend.

This shift in ideology criminalizing immigration has made it more difficult for the United States to honor its humanitarian obligations when the assumption is that refugees, asylum seekers, and immigrants in general, are potential terrorists. The public, in particular those who lack information and knowledge about the complexities of immigration and the many reasons why people migrate, may end up believing what they hear from official government sources who are against immigration and immigrants. As Olivia Waxman (2018) writes in her report for *Time*, "placing immigration in the national security sector reveals a changed focus on the idea of potential safety threats represented by immigrants, asylum seekers and refugees." Waxman further explains that:

> If immigration is an economic or work-force issue, it would make sense to place it under the oversight of departments that deal with those issues. Placing immigration in the national security sector, however, reveals a changed focus on the idea of potential safety threats represented by immigrants, asylum seekers and refugees. That shift didn't start with the attacks of 2001. Immigration had been mixed in with national-security issues during the Clinton administration, too, especially after the first World Trade Center bombing on Feb. 26, 1993 (para 9).

The U.S. government has had mixed feelings about immigration and immigrants at different times in history. At present, a strong anti-immigrant sentiment has resurfaced in the country. There is no doubt that this anti-immigrant rhetoric has been promoted by the current president and the immigration policies issued during his administration.

The new immigration policies are negatively impacting immigrants living and arriving in the United States. The fear caused by these policies is not just product of enforcing the laws, but is a deliberate tactic of the anti-immigrant strategy of self-deportation. "The Trump administration actions amount to an all-out attack on immigrants and immigrant communities" (Goodman, 2017, p. 152). This anti-immigrant sentiment has generated anxiety and confusion among immigrants who are afraid of being deported. Even immigrants who are legal residents fear losing their jobs or their work permits. They also fear traveling out of the country, there is reasonable doubt of being unable to return to their jobs and lives in the United States if they are denied re-entry at the border or the airport. Immigrants with a green card can still be deported from the United States if they have been convicted of a felony or crime, or if they fail to properly file tax returns, or if they have participated in public welfare programs. For undocumented immigrants, life in the United States is even more complicated. The Pew Research Center (2017) reports an estimated 11 million unauthorized immigrants living in the United States. Undocumented immigrants fear being apprehended and deported and this makes their mobility and participation in community events more difficult. They often isolate themselves and are easy prey for abuse. As Lalami (2018, p. 13) reports:

> When undocumented workers are free to work, they provide cheap and unprotected labor. When they are detained in immigration jails, they become sources of revenue for private prisons, where they can be forced into unpaid labor. Either way, they make money for others, while they and their families remain vulnerable to being broken up.

Regardless of legal status (i.e., documented or undocumented), living as an immigrant has become more difficult nowadays in the United States. Rules and policies that applied to immigrants a couple of years ago do not apply today. Every day new immigration policies and difficult situations arise adding uncertainty,

anxiety, and fear to the life of different immigrant populations in the United States.

A specific example relates to how community-based education centers have been targeted by ICE due to the large number of immigrants attending the programs they offer. Among the services that adult education centers offer, English as a second language (ESL) and literacy classes constitute important services addressing the immediate educational needs of immigrant adults and families. Adult ESL programs serve a diverse array of immigrant students, including young adults, parents, and senior citizens with a wide range of educational background as well (Lukes, 2009, p. 8). Adult learners attending ESL classes come from various population groups; they could be either documented or undocumented immigrants (Wrigley, 2013; Young-Scholten, 2015), refugees (Young-Scholten, 2015), or migrant workers (McLaughlin, Rodriguez, & Madden, 2008). Due to their immigration and legal status, and their work conditions, this group of adult learners is directly impacted by immigration policies. For example, in a recent article published by the *Chronicle of Higher Education*, Field (2017) describes the irregular attendance patterns in adult education programs across the country. The following is a summary of relevant data she provided in her newspaper article on March 22, 2017:

> At Louisiana Delta Community College, in Monroe, less than a quarter of the 200 enrolled students are attending class; at Linn-Benton Community College, in Albany, Ore., no one has enrolled in the ESL program since January... In San Diego and San Jose, CA, programs have seen declines of around 15 percent, compared with the fall semester and last year... In Tupelo, MO, the number of Hispanics enrolled in GED and parenting classes fell from 25 to three, following raids in Jackson, 175 miles southwest, and the deportation of four local residents...In Illinois and California, some ESL programs have experienced drops in attendance, while others have witnessed growth...At Triton College, in River Grove, Ill., enrollment is down 15 percent from last spring. But at Moraine Valley

> Community College, in Palos Hills, Ill., just 20 miles south, it is up in 9 percent...In Chicago, enrollment in citizenship classes at the Pui Tak Center nearly doubled from January to March; *Centro Romero*, a nonprofit organization in Chicago, gained 49 new students in January and 53 in February, up from a dozen most months.

Regardless of the political climate, learning English continues to be a compulsory need of adult immigrants. However, attending ESL classes has become a hazard for some immigrants who feel vulnerable and perceive attending adult education centers as unsafe.

Analysis of data from the 2012 Program for the International Assessment of Adult Competencies (PIAAC) that directly assessed literacy and numeracy across multiple countries indicated that U.S. immigrant adults with lower proficiency in English literacy were more likely to report poor health (Batalova & Fix, 2015). There is a direct correlation between speaking the language and the wellbeing of a community. Thus, weak skills in English translate into inadequate access to health care. In addition, not learning English can lead to social isolation and lack of participation in everyday activities beneficial to individuals and society.

Knowing English means being able to obtain a better-paying job, becoming self-sufficient, having access to services and culture, having a wider access to information and knowledge, developing a sense of belonging, and finding the courage to apply for citizenship. Often, immigrants have families who depend on them and their income. Their children may be attending school and their immediate family members (e.g., spouses, parents, and siblings) have settled in the local community where they have created a new life away from their country of origin. Most immigrants do not wish to return to their homelands; they hope to stay in the United States to make a living, even if this means hiding and limiting their circle of friends and activities to

a small segregated community or neighborhood. Consequently, those who are undocumented are the ones at most risk of being detained, deported, and lose everything they have worked for. Undocumented immigrants are aware of their reality and live in fear. There are plenty of stories of parents who have said good bye in the morning, went to work, and were unable to come back for supper. Being an undocumented immigrant means facing a constant risk of deportation.

Because of the raids performed by ICE, many ESL and adult literacy learning programs housed at community-based centers, churches, and libraries have started to offer workshops on immigration issues and have also invited expert guest speakers (e.g., immigration attorneys, counselors, and immigrant activists) to provide legal guidance and professional counseling to their students. Also, adult educators and program administrators have been forced to face the ethical dilemma of either denouncing or protecting undocumented immigrants attending their programs. For many years, adult educators and programs have welcomed undocumented students in their classes, however, recent anti-immigrant policies and the anti-immigrant political climate have made it more difficult for them to protect this population of adult learners.

Recently, instructors and program administrators have created materials such as identification cards with key phrases in English and handouts with relevant information that their students can use if they face detention or are interrogated on the street by police officers or immigration officers. Another aspect of the efforts in helping students feel safe attending ESL and literacy classes has been geared towards educating immigrants about human rights and their legal rights. Therefore, the recent anti-immigrant and political climate has created more work for program administrators,

instructors, and volunteers working at adult education centers, community-based programs, churches, and libraries. Nevertheless, more work does not necessarily means obtaining more resources or a larger budget to offer adult education services to the community.

Likewise, adult educators and program administrators have realized the importance of providing resources and support for the emotional needs of their learners. "The immigration process is unquestionably linked to major adjustment stressors" (Perez Foster, 2001, p. 154). In general, immigrants face emotional and physical challenges before deciding to leave their countries, during their immigration journeys, and after immigration. For example, anxiety, depression, and posttraumatic stress disorder (PTSD) have been associated with immigration trauma (Perez Foster, 2001). Leaving what is familiar behind, leaving their relatives behind, or leaving their countries due to war or persecution are examples of the causes of the trauma they face before immigration. Arriving in a new country is also a shock for many. Experiencing the new culture, speaking a new language, making new friends, getting a job and surviving the new place can be challenging as well. Therefore, more than ever, adult educators are now feeling the pressure to understand how to best serve their students within the present political and social conditions they face outside the classroom.

As Pratt-Johnson (2015) noted: "In recent years, laws that appear calculated to harass or punish immigrants –especially undocumented immigrants and their families- have been passed in many states, such laws also provide a source of on-going stress and anxiety for English learners and their families" (p. 144). A learner who does not feel safe in the classroom will hardly be able to concentrate, study, or participate in

adult education or language learning. Through the ESL and literacy classes, immigrant adults should be able to acquire essential tools such as communication strategies to share feelings, ideas, and doubts with other people. Above all, they should feel safe and engaged in learning (Buttaro & King, 2001).

Furthermore, community and adult education centers have realized the need to offer additional civics classes and citizenship classes since many of their students have decided to become American citizens. According to recent Bureau of Immigration statistics reports, there are around 13.1 million permanent residents living in the United States. Of these, 8.8 million are eligible to apply for U.S. citizenship (see http://dhs.gov). Following the immigration bans implemented by President Trump's executive order, many students attending ESL and literacy programs decided that applying for U.S. citizenship would be more efficient than renewing their green cards or work permits. However, according to the quarterly report issued by Homeland Security, "approximately 264 thousand aliens obtained lawful permanent resident (LPR) status in the first quarter of Fiscal Year 2018 (FY18 Q1). They represent an almost nine percent decrease from the same quarter in FY 2017." In other words, even if more immigrants decide to become U.S. citizens, this does not necessarily mean they will be able to reach their goal. Becoming a U.S. citizen is a long, expensive, and complex process.

As a result, adult learning centers have started to organize workshops to help their students with citizenship applications and are also offering free classes to help applicants prepare for the U.S. citizenship test and interview. There are many materials available online to study and prepare for the citizenship test (test and interview DVDs, study guides, U.S. history cards, citizenship test

apps, etc.). Nevertheless, not knowing how to use the computer or lacking confidence about how to file the citizenship application online are barriers for some immigrants and could become a service provided by adult education centers. The application form and the application process are long and a bit intimidating if the applicant lacks in computer literacy or does not understand, read, or write English. Being able to prepare their U.S. citizenship form online (Form N-400) could save immigrants a lot of money and could help them avoid hiring an immigration attorney, which adds to the already high cost of the citizenship application.

In conclusion, becoming an immigrant to the United States whether documented or undocumented, is more complex and less attractive at present. A strong anti-immigrant sentiment has resurfaced in the country making immigrant life more difficult. Immigration policies are a moving target and are negatively affecting individuals, families, and entire cities. The work of adult educators and literacy educators has doubled. They cannot just teach language, or math, or literacy. They must teach the whole individual and assist immigrants in identifying resources and providing for their emotional needs. More than ever, adult immigrant learners need to be resilient and persistent if they wish to learn English and succeed in their immigration journeys. However, learning English will not be enough; they will also need to learn how to deal with immigration trauma, learn about their legal rights, and make informed decisions about where to study, work, and live. Achieving the *American Dream* has become harder than ever; only those who are resilient and resourceful will succeed. More than ever, adult immigrants need to make use of their talents, human capital, and social capital to be able to stay and prosper in the United States.

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Forum: Immigration and ESL

(Part 2 of 3)

How Policy Changes Affect Local Immigrant Learners

Susan Finn Miller

"Teacher, what's going to happen now?" This was a question nervously posed to me by an adult learner in my English as a Second Language (ESL) class on Wednesday, November 9, 2016, the morning after Donald Trump was elected president of the United States.

Civics education is an important component of what we do in adult ESL classes. Therefore, in the fall of 2016, although most of the adults in my class were not yet citizens, and, therefore, not eligible to vote, I wanted the learners to understand the upcoming election and especially the significance of red and blue states as reflected in the electoral college. While learners had strong political opinions about who they wanted to win the election, my stance was always strictly nonpartisan. Over several days, learners worked in small groups to research the number of electors in each state, and they learned that the candidate who won at least 270 electoral votes would become president of the United States even if that person did not win the popular vote. Students learned that in 2000 Al Gore lost to George W. Bush, even though Gore had won the popular vote that year. In 2016, we saw electoral college history repeated.

While Clarena Larrotta has offered a national perspective on the impact of recent immigration policies on the lives of the adults we serve

in literacy programs, my goal is to share the experience of one community.

Since 1991, I have worked in a local adult education program in Lancaster, Pennsylvania, teaching English to immigrants and refugees. Like many adult literacy practitioners, I have met people from around the world in my classes, many of whom have faced unspeakable tragedy and pain in their lives before coming to the United States. For many decades, our country, through the goodwill and generosity of our citizens, has been a refuge to those in need.

In fact, my city has a long history of welcoming those fleeing danger and persecution. There is a large community of Mennonites and Amish whose ancestors found a new home in this area seeking religious liberty centuries ago. Because welcoming the persecuted is part of our heritage, many people currently living in Lancaster share a conviction that helping those in need is a moral imperative.

In January of 2017, the BBC featured Lancaster in an online video calling my city the "**Refugee Capitol of the U.S.**" As reported by the BBC, "Since 2013, Lancaster has taken in over 1,300 refugees," which is "20 times per capita more than the US as a whole."

Among our more recent arrivals are families from

Syria and Somalia, two countries whose people are now banned by our government's travel restrictions. Tragically, Syrians and Somalis who have already settled in our community fear they may never again see some of their loved ones who were left behind. In addition to these travel restrictions, the current administration is also seeking to end the Temporary Protected Status (TPS) program, which has provided legal protection for individuals from certain places who have experienced tragedy due to extreme violence, war, or natural disaster. Many thousands of individuals from Sudan, Haiti, El Salvador, and Nicaragua under TPS, who have been living in our country for decades, may now face deportation.

I have met and taught hundreds of individuals from these countries in my ESL classes over the years. I know a woman, who at 19 – fully aware of the dangers – walked to the United States from El Salvador. There was a man from Somalia in my class whose response to the oral language assessment question "What do you like about Pennsylvania" was "There is no war here." I know a woman who was late for a meeting with me because she had to wire $20 to her daughter and grandchildren back home because they hadn't eaten in three days. I've encountered individuals from Haiti who lost everything, including family members, to the devastating 2010 earthquake.

I've met many refugees and immigrants who have been traumatized by violence, poverty, and natural disasters, and yet the enormous stamina and resilience most of them demonstrate is a testament to human potential and strength. I know foreign-trained physicians from Haiti, Cuba and Iraq who are now providing much needed health care here in the U.S. A brilliant former student from Iran received an award for the highest score on the GED and is now attending college pursuing a career in health care. There are many refugees, for

example from Nepal and Myanmar, who volunteer their time in our public schools because they want to give back. There are untold numbers of hard-working immigrants who have started their own successful businesses.

In our community, we've heard of raids in workplaces, and immigrants being deported. We worry that raids might even happen in our classrooms. Learners who had TPS status for many years are concerned about their families being turned upside down if they are forced to leave. How do families who have children who were born here and are U.S. citizens handle such chaotic disruption? What of the rights of natural born citizens? Also heartbreaking are stories we hear from those who dreamed they would one day have the opportunity to be reunited with family members by sponsoring them to come to the U.S. Those dreams have been shattered.

Unfortunately, those making immigration policy are blind to the many powerful ways immigrants contribute to our communities. These new immigration policies, in addition to the overwhelming stress experienced by those with uncertain status under the Deferred Action for Childhood Arrivals (DACA) and the horrific treatment of families seeking asylum at the border where children, including even infants, have been separated from their parents, are transforming the United States from a country that has long reflected the words etched on our beloved Statue of Liberty to one that cowers in fear and lashes out cruelly to those who are different.

With the critical distinctions that Native Americans were here long before any Europeans arrived and many Africans were brought here in chains to be enslaved, the United States is a nation of immigrants. A majority of us can harken back to ancestors who came here seeking

safety, freedom and a better life. While each new group of immigrants has often faced persecution, diversity has made our country strong and, dare I say, "exceptional."

I'm proud to report that, in Lancaster, leaders from government, business and civil society have recognized that immigrants enrich our community and are necessary to keep us economically strong. In 2017, Lancaster was one of 25 cities to receive technical assistance from the New American Economy and Welcoming America. This award included a research study to explore the impact immigrants and refugees have had on our community. Through the **Gateways for Growth study**, we learned that these new residents "contribute over **$1.3 billion** to our annual GDP, this translates to **$155 million** in state, local, and federal taxes paid, bringing **$440 million in yearly spending power** to our community." Immigrants are also "more likely to be self-employed and are responsible for creating or retaining over 1,000 manufacturing jobs" in our community.

As noted by **John Feinblatt, President of the New American Economy**, "While Congress debates the value of immigration, in city after city, the evidence is already in—immigrants revive neighborhoods and drive economic growth." Local leaders in Lancaster, including the president and CEO of the Chamber of Commerce, have echoed this sentiment with conviction and enthusiasm during public gatherings and in **newspaper op eds**.

Due to the understanding and vision of local leaders that immigrants are needed to keep our economy strong as well as the compassion of much of the faith community and others in our area, I believe that we will weather this current hateful storm. As noted in the Gateways for Growth report "immigrants and refugees are part of our

community's DNA."

It is abundantly clear that this new political landscape has created challenges for adult educators and the learners we serve. While we need to be respectful of diverse points of view, many of us are understandably deeply concerned. Thankfully, several years ago, our community formed a coalition of local organizations to support immigrant and refugee integration. This coalition, which meets regularly, represents refugee resettlement agencies, providers of health care, adult and K-12 education, housing, and employment services as well as representatives from the various immigrant groups and the faith community. There is even a volunteer group that restores computers to donate to immigrants and refugees in need. Through our coalition, we are seeking to educate both those at risk from the new immigration policies and those of us who work with immigrants and refugees. Workshops on the legal rights of immigrants living in the U.S. have been offered to immigrants and the general public. We are learning how to legally protect the most vulnerable.

On November 9, 2016, like most of our country and the world, the learners in my ESL class were shocked when Hillary Clinton lost the electoral college. Despite my deep sense of foreboding about the future, I realized how important it was for me to convey to the class the principle of the peaceful transition of power, which is perhaps the single most essential key to maintaining a stable democracy. That day in class, we listened to excerpts of President Obama's speech as well as Hillary Clinton's concession speech. In their words, both Obama and Clinton highlighted this quintessential aspect of our democratic system.

I told the students that it was not possible to predict exactly what the future would bring

with this new president. However, almost immediately we began to see the hateful rhetoric toward immigrants and refugees turned into policy. In response, there has been an enormous groundswell of activism across the nation, as well as in our community, among those who are standing up for what is right and good.

On November 8, 2016, our country changed in dramatic ways; however, given the vision and compassion of the American people as well as the ingenuity, strength, and resilience of the immigrants and refugees who have been woven into our communities, I have to remain hopeful that goodness will prevail. I have said many times that each day seems to bring a new heartache, but despair is not the answer. The antidote to despair is to work with others to actively advocate for what is right. Thankfully, over the last two years, we have seen that joining together with those who share our values has become commonplace across the country. We must be steadfast in these efforts.

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Forum: Immigration and ESL

(Part 3 of 3)

Showing Up for Immigrant Learners (and Each Other)

Andy Nash, World Education, Inc.

We are witnessing a mounting campaign in this country to blame immigrants and refugees for our economic insecurity, rampant violent crime, and a diminished social safety net. Under this banner, our government is using immigration policy to turn away asylum seekers and refugees, separate children from parents, and threaten the Temporary Protected Status (TPS) of communities that have lived in the United States for a generation and consider this their home.

Turning us against our immigrant neighbors is not a new trend. It is an example of a time-tested divide-and-conquer strategy that is quite effective at redirecting legitimate grievances (low wages, unaffordable health care, etc.) away from the powerful who benefit and toward an easily identifiable (by accent or skin color) "other." And the result of this targeting, as Larotta notes in her piece, "Immigrants Learning English in a Time of Anti-Immigrant Sentiment," is that many immigrant groups are reporting increased incidents of intimidation and harassment, and many English language learners who come to our programs describe living in fear.

Educators everywhere are trying to figure out how to address this new reality – how to make sure that all students feel safe and able to learn, how to encourage critical thinking about daily events, and how to break down the manufactured fear of black and brown immigrants that keeps us from coming together to build alliances. None of us wants to be the frog in the proverbial pot that waits as the temperature slowly rises until it's too late to do anything.

There are things we can do. Some involve challenging the conditions that fuel immigration - the poverty, repression, and danger that drives people from their homes - and others focus on creating the conditions *here* that nurture connection to one another and discovery of the commonalities and differences in our experiences.

In adult education classes, we can demonstrate our commitment to creating safe learning spaces for all, and to thinking critically with our students about the causes and effects of this ongoing campaign. Below, I share and build upon some of the promising practices I've seen implemented in adult ABE and ESOL programs.

For Classroom Teachers

In the classroom, we need to think first about immediate harm reduction, and then we can plan for a curriculum that includes serious practice of the critical analysis skills highlighted in our rigorous learning standards.

Build safety through community. Immigrants

attend all kinds of adult education classes, not just English language classes. Many teachers include activities that engage students in sharing their experiences and finding their commonalities – not just personal characteristics such as how many sisters they have but talking about how an issue touches their lives on a daily basis – getting their kids to eat, finding a living-wage job, dealing with weather (climate change) disasters. Sharing experiences puts the voices of students at the center, developing their agency in naming, discussing, and analyzing issues and ideas. And building relationships with real people is a powerful inoculation against hate.

There are practical ways to do this kind of community-building that also attend to language learning, with all the related grammar, pronunciation, and vocabulary building. You can find wonderful examples in the archived webinars of the Immigrant Learning Center[1] and the New England Literacy Resource Center[2]. See also *The Change Agent*[3] and Welcoming America's toolkit for adult educators[4].

Teach analysis of the big picture. While it's important to note current events as they are happening, educators don't have the capacity to respond to daily upheavals – nor is it helpful to focus on what drains and disheartens. We can instead help students step back and study an issue more deeply by organizing instruction into thematic units that encourage students to name their concerns, ask and investigate their own questions, and develop the language skills to express informed opinions. This would include opportunities to consider "why" questions – why this? why now? – that honor the ability of students at any level to draw on their learning and their life experiences to analyze what they see.

Here's a quick mention of some topics, skill areas, and questions you might include in a unit:

- Media literacy: What is reliable news? What is fake news? Why is there fake news? How do we distinguish objectively descriptive from subjectively persuasive language and evaluate the bias of a text/source? (Resources: Mind Over Media[5], The News Literacy Project[6], "Don't Get Duped"[7])

- History: People created our institutions and systems (our schools, our economic system, etc.) and people can change them. History offers up many examples of how communities and social movements have been able to advance justice in the past and can do so again. History also helps us understand the origins of current policies, attitudes, and behaviors. But since that history is usually written by the "victor," we need to check multiple sources and remind students to consider: Whose perspective is reflected here? Whose is missing? (Resources: Teaching for Change[8], Zinn Education Project[9])

- Critical analysis: How is a problem defined by different stakeholders? What questions do we need to ask in order to fully understand an issue (e.g., Who benefits? Who is hurt? Who is making money?)? (Resources: Right Question Institute[10])

In developing a unit on Immigration (for ESOL or ABE), in addition to all the level-specific lessons we might do about the fact that people throughout history have been on the move (using maps, graphs, images, and other visuals to support learning), we might consider the categories above to help frame class discussions and activities:

Building community: What do you know about your own family origins (Native American, immigrant, refugee, or enslaved)? What is a question you have about your family origin?

History: Why do people come here? What is

happening in their countries? (Extra credit: What role has the U.S. played in their countries? In your own?)

Critical analysis: How do asylum-seekers describe their reasons for coming to the border? What does the administration suggest are the reasons? What does the evidence suggest?

Media literacy: How is terminology used (asylum-seekers vs. invaders) to influence a reader about immigration? What other language devices are used to persuade readers?

Find each other. It can feel disorienting to work in a field that has become almost solely focused on workforce preparation in a time when basic human dignity and connection are on the line. To keep moving forward, concerned educators need to support one another as we continue our own self-education, speak up where we can, share resources, and reflect on the assumptions underlying our work. What are the implications, for example, of defining the purpose of adult education to be almost exclusively well-being through individual employment? What will we do when we're expected to turn away students based on a newly criminalized immigration status?

We can help each other grapple with these perplexing questions and find the courage to follow the internal moral compass that points us toward protecting the rights of our immigrant (and otherwise targeted) friends. (Resources: LINCS discussion boards, Facebook groups, local immigrant and racial justice groups).

For Program Leaders

Program leaders have a crucial role to play in communicating support for all students.

Explicitly demonstrate solidarity with vulnerable students. Adults who are at risk of being targeted

(immigrant, LGBTQ) anywhere in the community need to know that the program is a safe space. Leaders in many programs are making it clear (through banners or public statements) that hate is not welcome in their programs and that all residents are invited there to study and learn. Such declarations set the tone of the program and model how to speak up in solidarity with our neighbors.

Organize program-wide projects. Celebrations of any sort that bring students together informally to learn, mingle or break bread do a lot to build community and dispel fears. And as Larotta suggests, creating space for program-wide learning (bringing in speakers to talk about community resources, events, or issues; organizing student-researched voter education campaigns; hosting "Know your Rights" workshops and legal clinics; or hosting an awareness event about the upcoming Census 2020 – the importance and the risks) opens up opportunities for students to interact about a topic of common interest. Very important is introducing students to community organizations, both service organizations that can help them build their support networks and activist/advocacy organizations they can join to organize collectively for themselves.

For Adult Education Advocates

Advocate for inclusive services. Funding sources each come with their own rules and regulations. At a time when federal and some state funders are looking for ways to limit the access of our immigrant students to all kinds of services, it is incumbent upon us to push back on those restrictions and to seek out other funding that allows us to continue full services to all residents of our communities. The recent proposal to broaden the way the government determines who may be a "public charge" (and therefore ineligible for public services) is just one example of efforts

to vilify and exclude current and future language learners from our programs.

Build alliances. Adult education advocates have historically been guided by the maxim that we need to focus our advocacy message exclusively on adult education funding. And while that targeted message has yielded certain results, the practice of staying in our advocacy silos competing for funds has not advanced a united cross-issue movement that reflects the intersectionality of our students' (and our) struggles. Adults are not just immigrants or students or parents or patients or workers, and now more than ever we need to build alliances with all the movements working to help people get free. The Massachusetts Coalition for Adult Education, for example, has allied with labor organizations on the *Fight for $15* and with

immigrant rights organizations on many issues; and conversely, those organizations have added adult education funding to their own priority lists.

Conclusion

I would like to be part of an educational community that helps one another find the courage to creatively resist unjust immigration and economic policies where we can. I don't want to have to look back one day and wonder what I was doing as xenophobia was being used to destroy lives and entrench the powerful. I am so grateful to the adult education coalitions, justice organizations, and individual educators who are refusing to be too busy to respond to these dangers. I hope we can all find ways to show up for our immigrant learners and each other.

For More Information

[1] Immigrant Learning Center (**www.ilctr.org/promoting-immigrants/ilc-workshops/**)

[2] How to be an Effective Ally to Adult Students, The New England Literacy Resource Center (**https://bit.ly/2AyjzaU**)

[3] The Change Agent magazine for teaching resources and compelling student writings (**changeagent.nelrc.org**).

[4] Welcoming America's *Instructors' Toolkit for Building Bridges Across Communities* (**https://www.welcomingamerica.org/content/instructors%E2%80%99-toolkit-building-bridges-across-communitie**s)

[5] Media Education Lab's Mind Over Media webpage (**https://propaganda.mediaeducationlab.com/**) offers teaching resources to support students to think critically about propaganda and the messages all around them.

[6] The News Literacy Project, (**http://www.thenewsliteracyproject.org**) is a national education nonprofit offering nonpartisan, independent programs that teach students how to be critical media consumers in the digital age.

[7] Alicia Shepard, Don't Get Duped, (**http://www.nationofchange.org/2016/12/12/savvy-news-consumers-guide-not-get-duped**)

[8] Teaching for Change (**teachingforchange.org**)

[9] Zinn Education Project (**Zinnproject.org**)

[10] Right Question Institute (**rightquestion.org**)

Resource Review

Review of *The Mayor of Moultrie Avenue*

Christine Miller, Georgia State University

When Carl Walworth began volunteering as a literacy tutor in Mattoon, Illinois, he did not realize that he was making a 24-year commitment and a lifelong friend in Eldo, his student. *The Mayor of Moultrie Avenue: The Literacy Journey of an Unlikely Pair* serves as both a memoir and a description of an adult literacy tutoring relationship. While working at the local newspaper as a reporter, Carl began volunteering with a local literacy program as a tutor. Part of what motivated him was curiosity about adults who struggle with reading.
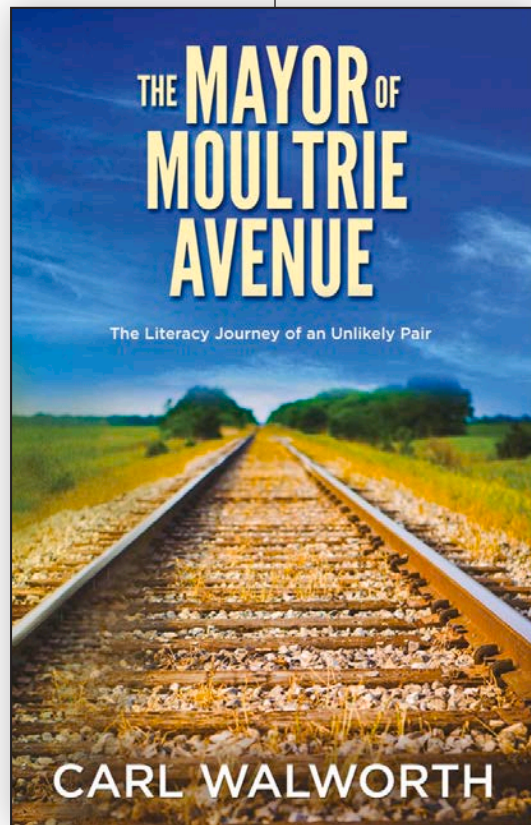
Throughout his narrative, Carl actively contrasts and compares himself to Eldo as a means for better understanding the complexities of adult literacy in the United States. Eldo is a generation older than Carl, but they both come from small towns in Illinois. While they have led parallel lives in some ways, socioeconomic class divides them in other ways. The child of educators, Carl initially cannot understand how an individual can go to school and not achieve literacy proficiency. Further, Carl's parents raised him with the middle class assumption that college followed high school graduation. Carl's relationship with Eldo helps him to see how socioeconomic class narrows or widens opportunities and expectations.

As a child of the 1950s in a working class neighborhood of Mattoon, Illinois, Eldo struggled with reading even though his reading delays were not remarkable to his family and friends. He began working to help his large family around the age of 12, and it was felt that it was possible for him to grow up and make a comfortable living without advanced reading skills or a high school diploma. As Eldo became an adult, the changing economy of an

increasingly automated and globalized United States constrained his ability to support his family, and it became progressively more difficult for him to do so. These changes meant that Eldo had to work harder for less money and fewer benefits. When he and Carl meet, Eldo has survived a major stroke, which left him permanently disabled along with other chronic health issues such as diabetes and an enlarged heart. By the end of the memoir, a fiftyish Carl himself experiences the effects of the changing economy in his own career at the newspaper, which is cut short by the Great Recession.

Carl Walworth gives an authentic account of the challenges facing adult tutors and their reading students. Adult learners must juggle jobs, family commitments, illnesses, etc., while working on increasing their reading skills. Carl layers the story of his tutoring relationship with Eldo by giving readers the historical background of Mattoon, sharing Eldo's own insights about how he survived with limited reading skills on the job, explaining how the literacy tutoring program operated, and offering practical tips for readers who may be interested in tutoring adults.

A strength of this book is that Carl personalizes the millions of adults who struggle with reading in the United States. Eldo is multi-dimensional; he is intelligent, resilient, and actively involved in his community despite struggling with limited reading skills. Tutoring milestones are described and one special one is their shared reading

pleasure over Mark Twain's classic, *The Adventures of Huckleberry Finn*.

The book is not structured in a strictly linear fashion, which enlivens the story. The writing is strongest when Carl dons his reporter's cap and gives his writing a clearer, more objective tone. While Carl gives general information about assessing progress and reading activities with his students, more details about this aspect of tutoring would have been interesting to readers who are involved in adult basic education. In addition, Carl provides many details that are not related to literacy, such as information about the community and his own life. The details are not tightly connected to the tutorial relationship and therefore at times the descriptions are a bit tedious.

This book is best suited for individuals who are unfamiliar with adults who have difficulty reading and who want to learn more about the experience a tutor can have with a learner. The book concludes with ideas about places where volunteers can help others with reading including community programs, schools, libraries, community colleges, and faith based organizations. There is a section at the end of the book which provides a list of adult literacy resources. I recommend this book for those who are not familiar with adult literacy learners and tutors. Through his tutorial relationship with Eldo, Carl Walworth connects the dots between literacy, education, healthcare and poverty in blue collar, Middle America.

Research Digest

Fostering Transformative Learning in Educational Settings

Lisa M. Baumgartner, Texas A&M University

The word "transformation" evokes images of profound change such as caterpillars turning into butterflies or humans shape-shifting into werewolves. Transformative learning refers to a perspective transformation or change in worldview. Teachers in literacy education and adult basic education as well as GED instructors can learn how to foster transformative learning. These techniques can help learners engage in critical thought and discussion with others and may gain a broader, more inclusive view of themselves and their world.

There are scholars that discuss transformative learning using a variety of frameworks such as Freire's social-emancipatory framework or Daloz's developmental framework. However, it is Mezirow's framework that has been used in many empirical studies. Specifically, Mezirow (2000) describes a 10-phase process that results in a change in world view or perspective transformation. This begins with a "disorienting dilemma" which is an event or series of events that jar a person from their previous ways of thinking (Mezirow, 2000, p. 22). Most often, it is seen as a single event, such as a death or divorce, that causes a person to critically reflect on his or her previous assumptions about the world although a series of events can also lead to a perspective transformation (Mezirow, 2000). Questioning the issue itself, or what Mezirow

calls *premise reflection*, most often results in perspective transformation. Questions such as: "Why is getting my GED important?" Why am I in this job?" are the types of questions that trigger perspective transformation (Cranton, 2016). In addition to critical reflection, individuals engage in *reflective discourse* or dialogue. Mezirow (2003) defines discourse as "dialogue involving the assessment of beliefs, feelings, and values" (p. 59). Questions from others help individuals think through their new beliefs. Through critical reflection and talking with others, people change their perspectives on the world. In Mezirow's (2000) view, this change in how one sees the world is permanent.

Cory's experiences may exemplify a perspective transformation. Cory dropped out of school in 10th grade. At age 25, he married, and he and his wife had a son. Cory knew he needed more education to obtain a better job to support his family. However, he was extremely anxious about returning to school to obtain his GED due to his previous schooling experiences which led him to believe he was not smart enough to complete a GED. He asked himself, "Why is this anxiety overwhelming? Aren't lots of people anxious?" (Cranton, 2016). He attended his first GED class and realized, after talking with other classmates, that many people were nervous about returning to

a formal classroom setting. Thorough interactions with others and the support of his instructors, Cory gained increased confidence in his academic abilities and began to see himself as a smart, capable student.

Elements that Foster Transformative Learning

Cory's transformation from an anxious to a confident learner was fostered through critical self-reflection, dialogue with others, and a supportive educational environment. Mezirow believed that fostering transformative learning was "a central activity" of adult education (Taylor, 2000, p. 5). Mezirow stated that dialogue fostered transformative learning. He noted conditions that helped facilitate transformative dialogue including: creating a safe environment where trust can be established, having accurate information, using student-centered approaches in the classroom and examining issues through "problem solving activities and critical reflection" (Taylor, 2000, p. 5).

Taylor (2000, 2009) reviewed empirical studies that discussed fostering transformative learning in an educational setting. The studies confirmed Mezirow's ideal conditions for engaging in dialogue. A more recent study concerning prison educators' views of facilitating transformative learning also noted that having a respectful relationship with students and serving in a counseling role where dialogue could occur, and students could "risk what they do not know" encouraged transformative learning. Using humor in the classroom helped cultivate these trusting relationships (Keen & Woods, 2016).

In addition to confirming Mezirow's ideal conditions for encouraging transformative learning, Taylor (2009) uncovered six interdependent elements that nurture transformative learning in educational settings. First, individual experience, including a learners' prior experiences as well as what he/she is experiencing in the learning situation is necessary to stimulate transformative learning (Taylor, 2009; Taylor & Laros, 2014). Taylor found that nurses with more experience may be able to take in new points of view more easily that those with less experience (Craigg, Plotnikoff, Hugo, & Casey, 2001 as cited in Taylor, 2009). Having value-laden course content is important. Discussions about topics such as spirituality, abortion, and death can create the conditions for transformative learning to occur (Taylor, 2000). For example, medical students' attendance at a session on palliative care that allowed students to interact with families of dying patients prompted critical reflection (MacLeod, Parkin, Pullon & Robertson, 2003, as cited in Taylor, 2009). This activity provided a catalyst for change as well as the opportunity to talk about the experience with others and gain self-awareness—all of which is integral to the transformative learning process.

Second, critical reflection promotes transformative learning. Critically reflecting on a situation means "questioning the integrity of deeply held assumptions and beliefs based on prior experience" (Taylor, 2009, p. 30). Kreber's (2004) study that looked at the content, process, and premise reflections of teachers confirmed that asking premise reflection questions of teachers increased meaning-making (as cited in Taylor, 2009). Instructional aids that promoted critical reflection include journal writing as this method encourages individuals to record and reflect on experiences (Taylor, 2009).

A third component that aids transformative learning is dialogue that emphasizes "relational and trustful communication" (Taylor, 2009, p. 31). Analytic discussions are important, but teachers

also need to attend to "learners' attitudes, feelings, personalities, and preferences over time, and as signs of change and instability begin to emerge, educators can respond accordingly" (p. 31). Taylor, Duveskog, and Friis-Hansen (2012) investigated the transformative learning of participants who attended Field Farmer schools in Kenya. These schools were "community-led [non-formal education programs] . . . where farmers met regularly to study farming" (p. 725). Interviews with participants revealed that individuals' experiences and group dialogue fostered transformative learning.

Understanding transformative learning as a holistic process is also an important element. This perspective accounts for feelings and relational ways of knowing (Taylor, 2009). Using music, drama, dance, and storytelling are ways to engage the whole person (Taylor, 2009). Hoggan and Cranton (2015) completed a case study that looked "the role of fiction in promoting transformative learning in content-based courses" (p. 8). The students read a "short story that incorporated metaphor and symbolism to explore the concept of the personal construction of knowledge" (p. 12). After reading a story, participants reported that the story evoked emotions, helped them open their eyes to new perspectives, and engage in critical reflections on past experiences (Hoggan & Cranton, 2015). Hoggan and Cranton (2015) concluded that fiction can "provide an intellectual and emotional catalyst by which readers can fully engage in processes that are at once empathic, as well as reflective and imaginative" (p. 20). Fiction prompted emotion and "allowed for an emotional distancing that made it easier for readers to question deeply engrained ways of thinking and being" (p. 21). Further, after reading fiction participants new perspectives were more holistic.

Next, teachers need to understand the part that personal and sociocultural factors play in the transformative learning process. This includes what is happening in the learning event, the prior experience of the learners, and how that might influence their learning. Transformative learning and perspective transformation take time because "the very conditions that foster transformative learning—a democratic process, inclusiveness of agendas, striving for consensus, critical reflection, dialogue—create a high demand for time" (Taylor, 2009, p. 33).

Last authentic relationships promote transformative learning. Carter (2002) examined women's mid-career work-related relationships and found four types of relationships: utilitarian (acquire skills and knowledge), love relationships (friendship or relationships that enhance self-image), memory relationships (relationships with deceased individuals), and imaginative relationships (self-relationships or meditation). It is the last three—love, memory, and imaginative relationships that fostered transformative learning (as cited inTaylor, 2009). Authenticity as it applies to teaching includes strong awareness of oneself as the teacher, how learner interests and needs may differ from teacher needs and interests, being genuine and open with others, looking at how context shapes teaching practice and critical reflecting and self-reflecting about practice (Cranton & Carusetta, 2004, as cited in Taylor, 2009).

Practical Advice for Fostering Transformative Learning in Educational Settings

How can an instructor translate these elements into the classroom? Cranton (2016) provides advice for fostering critical self-reflection which can encourage transformative learning. As noted by Mezirow (2000), content, process, and premise questions can serve as a catalyst for transformative

learning. *Content questions* "serve to raise learner awareness of assumptions and beliefs" (Cranton, 2016, p. 108). An example of a content question is: "What do you know or believe about yourself?" (p. 108). *Process questions* "help learners find the source of an assumption or belief; sometimes it is useful to ask people if they can recall a time when they did not hold a particular belief and then work forward from that time" (p. 109). Questions like: "Can you recall how you came to hate reading?" is an example of this type of question. As previously mentioned, *premise* reflection questions focus on our core beliefs. A question such as "Why is it relevant what your extended family thinks about your decision to pursue your GED?" exemplifies this type of question.

Individuals can participate in consciousness-raising activities that may help them see things differently. *Role-playing* is a method used to do this. Cranton (2016) says that typically the purpose of the role-playing activity is described and people are given different roles and they improvise. She recommends that role-plays be "co-constructed with the educator" (p. 111) and that debriefing occur so people can discuss their experiences. *Simulations* can be helpful also. For example, equipping students with devices that simulate the sight lost due to macular degeneration or glaucoma may help students understand the physical challenges faced by older adult learners. Likewise, giving learners a minute to read a paragraph where the letters are reversed, transposed or inverted may provide students a window into some of the challenges experienced by individuals with dyslexia.

Journaling activities can foster critical self-reflection. Cranton (2016) provides specific suggestions for journal writing such as dividing the page into two sections and writing thoughts on one side and feelings on the other, exploring

themes related to the course, and making sure learners know they don't have to worry about spelling and grammar. Educators can read these journals and provide additional questions or comments that can foster transformative learning and a dialogue between the educator and learner can occur.

The critical incident technique, originally a method used in qualitative research and adapted for education, is another technique. Learners are asked to think about a positive or negative event that happened in the last year. They describe the event, indicate why it was particularly positive or negative, and the insights they gained. Cranton suggests that educators consider modeling the critical incident and having students question it, having learners share critical incidents in pairs, coaching learners on what questions to ask, and "including some action planning in the discussion by asking, 'What would you have done differently?'" (p. 117).

Cranton (2016) also advocates for arts-based activities that encourage creativity and imagination. She recommends such activities as having students create a collage that "represents the critical questioning of a social norm or an assumption in the field of study" (p. 119), writing fiction or poetry that "critiques a point of view. . . instead of the traditional essay or paper" (p. 119), or having students write a play "to represent conflicting or alternative points of view on an issue" (p. 119).

In addition to activities that can foster transformative learning, there are ways that educators can support transformative learning. As previously mentioned, authenticity can promote transformative learning. Authenticity is shown through showing interest in students' learning, sharing stories from their own lives,

learning from students, asking if students are comfortable or need help, and being accessible. Groups can support and foster transformative learning also. Supportive groups have some common characteristics: they are committed to the group goals, loyal to the group, have good communication amongst each other, accept each others' opinions, and have the ability to endure frustration" (Cranton, 2016, p. 126). Third, learner-networks can promote transformative learning. Learner networks are relationships among learners in an informal or formal setting or a relationship outside that group. Cranton says that peer-teaching, referring learners to each other for answers to issues, encouraging study groups, forming project groups and using small group activities can foster learner groups.

Cranton (2016) reminds educators of the ethics of fostering transformative learning. She says it is important for educators to ask themselves what right they have to encourage people to question what they believe. When does this type of activity become an imposition? She reminds educators to be mindful of the power differential between learners and educators and to respect learners' values while still providing activities that question them.

In summary, researchers found six elements that promote transformative learning. These elements are: individual experience, critical reflection, dialogue, seeing transformative learning as a holistic experience, the importance of sociocultural and personal factors, and authenticity. Some tools that teachers can use to foster transformative learning in an educational setting include: asking questions that cause learners to reflect on what they are doing and why they are doing it, role-playing, simulations, arts-based activities, using the critical incident technique, and encouraging learner support groups and group-based activities. These elements and activities will provide learners, such as Cory, opportunities to expand their worldviews.

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Technology Solutions for Adult Basic Skills Challenges

The CrowdED Learning Solution

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The focus of the Technology Solutions for Adult Basic Skills Challenges column is common challenges of adult basic skills practitioners, expressed, for example, in the LINCS Integrating Technology group for which I am the moderator, in other LINCS groups, in my national and state conference or webinar presentations, or privately in face-to-face discussions or by phone or email. Solutions include: hardware such as desktop and laptop computers, smartphones, electronic tablets, VR Goggles, and electronic whiteboards; and digital software applications such as websites, course management systems, learning management systems, databases, and apps for mobile devices. Each article will begin with a challenge and will examine one or more possible technology solutions.

Description of the Challenge

Finding high quality, free or open education resource teaching and learning resources on the Internet is a common challenge for adult basic skills (including ESOL/ESL) teachers. Several years ago, there weren't many instructional resources on the web; now that problem has been solved, but teachers complain that it is difficult to sort out among the many instructional resources the ones that are high quality, that are for the subject they teach (e.g., numeracy/math, reading, writing, science, social studies or ESL/ESOL), for the levels of their students, and that cover the particular content standards they must address, for example the College and Career Readiness Standards for Adult Education (CCRS). There are many websites that address this challenge for K-12 teachers, including those that align lesson plans and other instructional content with the Common Core State Standards, but, in my role as moderator of the LINCS Integrating Technology group, I am often asked if there is one specifically for Adult Basic Skills teachers. Until now, my answer has been "no."

A Possible Solution

There isn't yet a fully developed, comprehensive, web-based solution to the problem. Most adult basic skills publishers have aligned their online instructional materials to the CCRS. Many of these proprietary sites offer high quality instructional materials, and it is usually easy to determine the subject and level of these materials; however, no publisher has attempted to bring all the adult basic skills online curricula into one easy-to-use comprehensive site. Adult basic skills teachers can find free or Open Education Resources for adult learners, notably in the **OER Commons** "Adult Education" level, and there have been some efforts to create new lesson plans for adult learners by teachers using a Google Documents tool and a HyperDocs template. While all of these are useful efforts, none have a vision that is large enough to address the challenge, to meet the needs as teachers describe them.

One promising solution that will provide a free searchable database of OER, free and proprietary

instructional resources, and that enlists adult basic skills teachers' support in creating and/ or recommending existing free or OER adult basic skills education lesson plans and other instructional resources, is being proposed by **CrowdED Learning**. This article is a review of CrowdED Learning's current website, how it came to be, what the project is intended to accomplish, and what free services it offers adult basic skills teachers now. We also look at the free SkillBlox tool to be developed in 2019 to take on this challenge more comprehensively.

What is CrowdED Learning?

On its website, it is described as "a non-profit organization determined to help adult educators and learners realize the promise of free and open educational resources by better aligning amazing content to the competencies and skills needed by learners and job-seekers." It is the passion of one educator, founder Jeff Goumas, and his small board of adult education advisors. As he puts it, the two problems they are trying to solve are "a surge in the creation of amazing free educational tools" but that for teachers "sifting through countless resources to find things that are effective, aligned to required skills, and easy to implement can be a daunting task." His solution is crowdsourcing, in this case, the "collective expertise (of adult basic skills teachers) to help adult learners and educators more easily connect with the best resources available, aligned specifically to the goals and needs of learners."

He favors Open Education Resources and writes that "OER can democratize learning...Great ideas are everywhere. Great thinkers are eager to share their expertise and knowledge with the world. By establishing protocols for identification, curation, creation, and delivery of resources in a more effective manner, we can make the promise of

OER a reality."

He believes that CrowdED Learning can increase the capacity of the adult basic skills education system to serve more individuals in need. "Roughly 36 million working-age Americans read at 'below basic' levels, and this number nearly doubles with numeracy. Limited education prevents 88 million of 150 million working-age adults from entering into a 21st Century career pathway, yet formal adult education serves just over 4 million learners annually. We believe universal access to free easy-to-use tools and resources that promote lifelong learning is one way increase capacity of the adult education system."

What Does the Name *Crowded Learning* Mean?

It has a dual meaning, representing both the challenge and proposed solution. The first, "crowded", as in the Internet is crowded with instructional resources, a "paradox of choice" problem that makes it hard for a teacher with limited time to sort out what is worthwhile; "crowdED" also means that, through teacher crowdsourcing, in this case ideally with the help of a large number of adult basic skills teachers, there is a solution to the problem, that teachers, curriculum developers, professional developers and others can learn from teachers which instructional resources they find worthwhile.

For Whom Has CrowdED Learning Been Designed?

Adult basic skills teachers and tutors are the primary audience, but curriculum developers, professional developers, researchers, and program managers may also find it useful. At present this does not include as a primary audience adult ESOL/ESL teachers, although the **Communication Skills Directory** does include some resources that may be useful for English

language teaching. According to Jeff Goumas, as new ESL standardized tests are developed to align to the **English Language Proficiency standards for adult education**, ESOL/ESL teachers will find more English language learning content on the CrowdED Learning website.

What Features does CrowdED Learning Offer Now?

1. Skill Directory

https://www.crowdedlearning.org/explore/skill-directory

This is a collection of web-based instruction and learning resources suitable for adult basic skills education. It includes academic, workplace and 21st Century Competencies. It does not at present include English language learning competencies for immigrants. Each of the eleven competency areas has a clickable icon that opens a downloadable PDF with resources for that subject area. Each PDF includes a link to a shared Google document version that enables teachers to add their own resources if they wish.

Academic Competencies

Reading   Writing   Mathematics   Science   Social Studies

Workplace Competencies

Communication   Essential Skills   Career Pathways

21st-Century Competencies

Digital Literacy   Financial Literacy   Health Literacy

2. Content Repositories

https://www.crowdedlearning.org/explore/content-repositories

These currently include links to three major free or OER content repositories that include:

OER Commons is a comprehensive repository of content across many subjects. OER Commons includes authoring tools, content hubs, and the ability to create groups which allows for members to organize content, discussions, and more.

Skills Commons is a free and open library of workforce training materials developed as part of the federally-funded TAACCCT grant program. Resources are searchable by industry, and it includes open courseware and showcases of model curricula and resources.

Curriki is a library of resources, both free and OER, across many subject areas, it includes curated collections of content from content partners, and organizational features that allow teachers to create, organize, and share personal libraries and groups.

3. Links to work-related professional Development Resources

This currently includes three major professional development resources for career pathways and employability skills.

https://www.crowdedlearning.org/explore/professional-development

LINCS | Adult Career Pathway Online Courses

https://lincs.ed.gov/state-resources/federal-initiatives/adult-career-pathways/online-courses

Set of courses for establishing career pathways programs in Adult Education. Courses available in Building Strategic Pathways, Developing Effective Bridge Programs, Designing Contextualized Instruction, Integrating Career Counseling and Planning, and Engaging Employers in Adult Career Pathways.

LINCS | Learning Portal

https://courses.lincs.ed.gov/1/

The Adult Career Pathways Training and Support Center, part of the federally funded Designing Instruction for Career Pathways initiative, provided a free professional development network for practitioners and programs interested in designing and implementing high-quality Adult Career Pathways (ACP) systems. The resources developed through this initiative were designed to help state and local adult education providers develop and deliver Adult Career Pathways systems that would successfully transition low-skilled adults to postsecondary education and employment.

AIR & RTI International—Integrating Employability Skills

https://ccrscenter.org/technical-assistance-networks/professional-learning-modules/integrating-employability-skills

From the American Institutes for Research and RTI International, this professional learning module, *Integrating Employability Skills: A Framework for All Educators*, was developed collaboratively by the College and Career

Readiness and Success Center (CCRS Center), the Center on Great Teachers and Leaders (GTL Center), and RTI International. Resources include downloadable PDFs of a **facilitator's guide** and **participant handouts**, as well as a PowerPoint presentation for facilitating the training course.

Additional Features Planned for 2019

Based on the **"SkillBlox" brief**, this is "a learning plan generation tool… being developed to support skill-based, personalized, lifelong learning for adult learners." It is intended to help teachers and tutors generate standards-aligned learning plans for individuals, groups of students or entire classes that can incorporate both commercially-published instructional resources and high-quality free or open education resources. SkillBlox is being designed to help teachers provide adult learners with "multiple options for learning, aligned to core skills and competencies needed for self-reliance and career mobility. SkillBlox is intended to enable teachers or tutors to: 1. Select learning resources they currently use, 2. Enter learners' levels, (defined by standard levels, grade level equivalency, or NRS levels) and/or select topics, and then from this information 3. Generate learning plans with proprietary and/or open education resources that can be downloaded, printed, or shared." In a **CrowdED blog article**, **SkillBlox** is described this way: "This alignment work is the first step in our being able to take the great resources that are out there—from various sources and in various formats—and begin curating them and aligning them to standards and frameworks that are meaningful to adult

learners and instructors. By focusing on skill-based alignment of resources, we hope to increase use and integration of free and open resources and support the continued use of quality existing resources within adult education classrooms."

Reflections

CrowdED Learning is experimenting with ways to provide effective solutions to the challenge, and they are advocating for and promoting high quality free and open education resources. The evolving website is a vehicle by which they are organizing and delivering the existing instructional resources suitable for adult basic skills education, the tools they are developing, and their findings over time. Some parts are developed, such as the Skill Directory, and the Content Repositories, at least to some extent; other needed parts, such as the *SkillBlox* feature, are being developed now, for rollout sometime in 2019. The important differences between this website and others that may appear similar include: a focus on instructional materials suitable for adult basic skills education, not higher education or K-12; the attempt to engage

a large number of adult basic skills teachers in crowdsourcing good commercial, free or OER instructional materials; and the plan to bring these together with a tool that helps teachers to easily produce individually customized or group-customized learning plans that include these instructional resources. With his background in teaching and 15 years in education publishing— more than half of which was spent at McGraw-Hill Education as the Director of Product Management for Adult and Workforce Education—Jeff Goumas has been able to secure the interest of major adult basic skills publishers in participating. His challenges may be achieving sustained funding while holding to the project vision, and getting the numbers of talented and committed volunteer adult basic skills teachers needed to attain the crowdsourcing vision; however, he has already demonstrated significant interest from both potential funders and from teachers, and in a short period he has been able to produce useful results in the Skill Directory and the Content Repositories. I look forward to seeing in 2019 the *SkillBlox* learning plan development tool.

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