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Research Article

Metaphors of *Reading* and *Teaching Reading*: Adult and College Educators' Readerly and Teacherly Identities

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Abstract

The purpose of this study was to explore possible implicit models of reading that drive curriculum and instruction in adult and postsecondary developmental reading contexts. This qualitative investigation explored faculty conceptualizations of reading via linguistic metaphors. Forty-six reading education professionals completed an online survey that gave two options for describing *Reading* and *Teaching Reading*: create an elicited metaphor through an open-ended statement or choose from a prescribed list of metaphors. Using metaphor analysis procedures, we identified conceptual metaphor categories. Results indicated interesting differences within the conceptualizations of these participants' readerly identities compared to their teacherly identities.

Keywords: metaphor, conceptualizations, reading

Almost a decade ago, Miller et al. (2010) wrote about the advances as well as the challenges that remain in adult literacy research, with a specific focus on adult *learners*. This is but one part of the equation, however, as a scholarly focus on adult literacy educators is equally important.

A key emphasis within this area is on educator beliefs, which have "an implicit influence on a teacher's practice" (Mishima et al., 2010, p. 769) and therefore directly impact the learner experience. In a review of literature on adult educators' beliefs, we discovered that instructors partially built their conceptual framework based on curriculum documents, while their personal beliefs, attitudes, and values were a much more significant influence in their instruction and decision-making (Kendall & McGrath, 2014). Similarly, Chapman and McHardy (2019) interviewed 19 adult reading teachers to understand their perspectives on why their adult students had reading difficulties. They discovered

four origins for the teachers' beliefs: the teachers' own personal experiences; their experiences as a teacher; their knowledge about teaching reading; and their knowledge about reading frameworks and theory.

Although these and other recent studies show how important one's beliefs are to teaching, there is limited inquiry in this area, and particularly so within the realm of adult literacy. This focus on instructor beliefs is especially valuable to adult literacy education because prior research has shown a deficit orientation in adult literacy (Perry et al., 2017) that centers on basic skills instruction perhaps to the detriment of other more contextualized aspects of literacy (Perry et al., 2017). Further, understanding how instructors conceptualize reading and teaching reading may lead to more productive and critical professional development that may nudge teachers toward identifying gaps between what they believe about reading versus how they are actually teaching reading. With these gaps in mind, the present study was designed to contribute to the existing knowledge on adult and college literacy educators' beliefs.

Metaphor Analysis

In the present study, teachers' conceptualizations were gathered through the use of metaphor analysis. Metaphor analysis is a methodological approach that is still relatively new to U.S.-based studies within literacy education. Even so, metaphor analysis studies in other forums and in other fields have demonstrated the utility of providing this methodological tool for explorations of student and educator metaphorical conceptualizations. For instance, some scholars have collected spontaneous and elicited metaphorical linguistic expressions (MLEs) and analyzed them as metaphorical representations

of participants' conceptualizations of complex concepts like teaching and learning in general. For example, in de Guerrero and Villamil's (2002) investigation of metaphors for ESL teachers, nine separate conceptualizations emerged, including a knowledge-provider, a nurturer, and a tool-provider. And, more specific to literacy, several metaphor studies have explored both learner conceptualizations of literacy (Cortazzi & Jin, 1999; Shaw & Mahlios, 2014) and educator conceptualizations of literacy (e.g., Konopasky & Reybold, 2014; Shaw & Mahlios, 2015).

It is in this latter space—educators' conceptualizations of *reading* and of *teaching reading*—that we focused the present study. According to Martinez et al. (2001), "Metaphors may stimulate the teachers to explore new conceptual territories visible from an alternative point of view, a perspective of classroom practice which they might not have otherwise considered" (p. 974). Indeed, metaphors offer educators an opportunity to express their roles and responsibilities in classrooms. One example of this type of research is Konopasky and Reybold's (2014) multiple-case study employing interviews of five adult educators (three part-time instructors and two full-time administrators), specifically focusing on their identity at significant junctures such as entering or exiting the adult education profession. The researchers analyzed the results thematically in three stages: stories, rhetorical moves, and metaphor. Results showed both uniqueness and commonality focused on access and space. "Access" referred to giving resources, information, and world access to the adult students. The adult educators served as gatekeepers with social power. Two adult educators also used 'space' as a metaphor to indicate they were the caretakers for their overwhelmed students. Interestingly, the authors

expected to find dissonance, but instead found cohesion. The five educators used metaphors to draw together the "dissonant contexts of their lives" (Konopasky & Reybold, 2014, p. 2).

Fenwick (1996) solicited learning and knowledge metaphors from 65 adult educators with a variety of positions who were taking university classes in adult and continuing education. The educators' assignment was to write a metaphor of practice. The educators then discussed the metaphors with guiding questions: "How are different learners viewed in this picture, and what is their role? What is the role of the educator? How is the learning process understood? What kinds of knowledge and ways of knowing are most valued?" (Fenwick, 1996, pp. 6-7). Metaphorical themes included being a tour guide, firestarter, outfitter, caregiver, and dispenser.

The Study

The present study is an exploration of educators' implicit models of *reading* and of *teaching reading* as interpreted through their metaphorical language. Our focus was on reading professionals who teach at the post-PK-12 level, and included college/developmental reading faculty and adult literacy educators affiliated with an adult literacy program, whether at a community college or a community center. For the purpose of concision, in this manuscript, our focal population will be referred to as "adult/college reading educators."

The study, a qualitative investigation utilizing metaphor analysis protocols (i.e., Cameron & Low, 1999; Lakoff & Johnson, 1980), was driven by the following research questions:

1. What conceptual metaphors of *reading* do adult/college reading educators hold based on their stated MLEs?

2. What conceptual metaphors of *teaching reading* do adult/college reading educators hold based on their stated MLEs?

Theoretical Framework

The theoretical framework for this study was built upon assumptions surrounding the connections between language and cognition (e.g., Bakhtin, 1981), especially that language is one avenue for exploring conceptualizations. More specifically, conceptual metaphor theory (CMT) allows the conceptualization of individuals' beliefs to be expressed through the use of metaphors (Kövecses, 2010; Lakoff & Johnson, 1980). Conceptual metaphors (CMs), by this perspective, are the cognitive structures that drive our understanding of the world by allowing us to understand one concept or domain through another (Cameron, 2010). According to Saban et al. (2007), "Metaphors act as powerful mental models through which people understand their world by relating complex or unfamiliar phenomena to something previously experienced and concrete" (p. 123). "Metaphors are the larger constructs under which people organize their thinking and from which they plan their actions on the multiple environments in which they participate" (Mahlios et al., 2010, p. 50). Specific to educational research this includes, to some extent, how faculty teach and work with students (Hardcastle et al., 1985; Kövecses, 2010; Lakoff & Johnson, 1980).

Methodology

Forty-six reading education professionals who work with post-PK-12 learners in the south-central part of the United States participated in the study. Eighteen educators were volunteer literacy tutors at a public library; 13 were certified teachers at a school district with an adult education program; and 15 educators

taught college/developmental reading courses at a community college. The participants were asked to complete an online survey that solicited their metaphor for *reading* and for *teaching reading*. The reason we selected to solicit both metaphors is the possibility that some may view the process of reading themselves differently than the process of teaching reading to others.

The survey began with an overview of metaphors, including the value of metaphors and how we use metaphors in life. Also included were an explanation and two sample metaphors. It was our goal that survey respondents could use these samples to generate their thoughts about *reading* and *teaching reading* and then effectively articulate those thoughts in metaphors. The survey did not ask the participants to focus either on their own reading or their students' reading, as it was assumed that the participants would generate/select their metaphor for the collective experience (personal and teaching) of what *reading* and *teaching reading* is.

The survey gave participants two options for *reading* and for *teaching reading*: they could create their own elicited metaphor through an open-ended statement (later described as an elicited metaphor or EM), or they could choose from a list of metaphors that had been developed based on a decade of research (i.e., Shaw & Mahlios, 2014) (later described as a prescribed-choice metaphor or PCM). Both options, described further below, involved a "because clause" (also called an extension in metaphor literature) in attempts to uncover participants' reasoning behind their metaphor choices, and to further shed light on their intended meaning (Shaw & Mahlios, 2015). Participants could peruse the entire survey before choosing to either generate their own EM or select a PCM.

Elicited metaphors (EMs). If participants chose to create their own metaphorical linguistic expression (MLE), they completed the statement "*Reading* is like...because..." followed by the statement "*Teaching reading* is like...because." In this scenario, participants generated their own language for both the metaphor and the extension. To illustrate the data yielded, below are a few sample EMs and extensions provided by participants in the study:

- *Reading* **is like** reading a map **because** it sometimes tells you how to get where you want to go, but you've got to figure it out, and everyone is using the same map to go to different places.

- *Teaching reading* **is like** planting seeds **because** one can offer skills and insights, but it takes time and nurturing for those skills and insights to grow into actual abilities.

Prescribed-choice metaphors (PCMs). The second option for respondents on the survey was to choose from a list of pre-written MLEs for *Reading* and for *Teaching Reading*. These options had been carefully crafted from systematic research studies that elicited metaphors from participants on *reading* and *teaching reading* (Shaw & Mahlios, 2014). The prescribed options were as follows:

Reading is like…

___ Growing a tree

___ Putting together pieces of a puzzle

___ Opening a door

___ Learning to walk

___ Climbing a mountain

Teaching reading is like…

⎯⎯ Planting a seed

⎯⎯ A juggling act

⎯⎯ Being a tour guide

⎯⎯ Coaching a sports team

Although respondents chose from this pre-populated list of MLEs, they were still prompted to provide an explanation for their chosen MLE in the form of a 'because clause.' To illustrate the data yielded, below are sample PCMs and extensions provided by study participants:

- [*Reading* **is like** growing a tree] **because** you learn so much when you read.

  Every time you read a book it's like adding another rung to the trunk. Your schema gets larger and the information connects.

- [*Teaching reading* **is like** being a tour guide] **because** an instructor must point out the most significant sights to see (the main idea, topic, supporting details).

Following data collection, we initiated the analysis process by first separating the MLEs gathered into four groups: EMs for *Reading,* PCMs for *Reading,* EMs for *Teaching Reading,* and PCMs for *Teaching Reading.* We created separate coding sheets for each grouping prior to initiating analysis, as described in the next section.

Data Analysis

We carefully considered issues of rigor and reliability throughout our entire analysis process by following Low's (2015) "practical validation model" for metaphor analysis studies, which emphasizes five points:

- The process of eliciting explicit metaphors presents challenges that need to be addressed;

- A carefully crafted procedure is needed for participants to identify their metaphors;

- Researchers need to justify the grouping and labeling of metaphors;

- Matching theories to metaphors does not align in a perfect one-to-one fit so classifications and justifications need to be clearly stated; and,

- If a participant says a metaphor, it does not always mean the metaphor is believed or practiced, so attributions need to be justified.

Our overall metaphor analysis process allowed for categorizing and grouping the MLEs into CMs, or the underlying cognitive structures that guide how we understand abstract or unfamiliar concepts (targets) in terms of more concrete or familiar ones (sources) (Kövecses, 2010). This multi-step protocol began with identifying the target and source for each metaphor provided, and then mapping features of the source onto the target. This process led to entailments, which are the characteristics that emerge from the mapping of source features onto a target; in other words, entailments are the 'conclusions' of the mapping process (Lakoff & Johnson, 1980). We undertook this analysis separately for the EMs and the PCMs.

Armstrong's (2007) analysis protocol guided us through this process:

1. Identify source and target for each elicited metaphor, including extension of the metaphor

2. List source features for each elicited metaphor

3. Map source features onto targets

4. Examine entailments

5. Group variants together into conceptual metaphors

6. Categorize the conceptual metaphors

The first three steps were completed independently by each member of the research

team. The last three steps were conducted independently by the lead researchers. To ensure intercoder agreement (Saldaña, 2015) we had one team member who was a "checker" of our work. We also met as a research team to discuss each step of the process including any divergences in our identification of sources, targets, extensions, entailments, and CMs.

Results

Throughout this document, and particularly as we report our results, the following typographical conventions will be used in attempts to be consistent with the extant metaphor analysis literature: Words in *regular italics* indicate the focal targets (in the case of this study, there are two: *Reading* and *Teaching Reading*); **bold italics** indicate the participants' provided sources, both elicited and prescribed-choice; and ALL-CAPITALS indicate the suggested conceptual categories underlying the metaphorical linguistic expressions (MLEs).

Results for *Reading* will be presented prior to results for *Teaching Reading* in the following organization: EMs first, then PCMs, and then synthesis of results across these data sets.

Reading Elicited Metaphors (EMs)

Following the procedures outlined previously, we examined each MLE with an initial goal of inferring a corresponding CM for each. The results of this procedure for all EMs provided for *Reading* are presented in Table 1. One example is the MLE of "*Reading* is like **opening a door to an unknown room** BECAUSE even if you think you know what you are about to get yourself into, you never really know til you are there." We categorized this conceptually as READING IS ANTICIPATING THE UNKNOWN. Another example is the MLE "*Reading* is like **looking**

through a kaleidoscope BECAUSE everyone sees something uniquely different. Like the reflective lenses used to create imagery in a kaleidoscope, readers rely on their own reflective lenses of background knowledge and lived experiences to create meaning in reading." We labeled this as READING IS VISUALIZATION for the CM.

Following analysis leading to CMs, we grouped these CMs into categories aiming to find convergences or divergences in the EM data set. We identified four broad categories for the CMs (n=13): discovery/exploration, journey, growth/health, and interpretive process.

The discovery/exploration categorization includes the following CMs: READING IS ANTICIPATING THE UNKNOWN, READING IS CLUE-SEEKING, READING IS A VALUABLE DISCOVERY, and READING IS NEW POSSIBILITIES. This categorization captures patterns in the CMs that included MLEs focused on activities involving seeking and finding, including not only discovering things (such as treasures), but also exploration of the unknown.

The journey categorization includes the following CMs: READING IS TRAVELING TO NEW PLACES, READING IS INFORMED NAVIGATION, READING IS A JOURNEY, and READING IS THE UNKNOWN. This categorization captures patterns in the CMs that included MLEs that were focused on travel and movement-related activities.

The growth/health categorization includes the following CMs: READING IS NOURISHMENT, READING IS EXERCISE, and READING IS GROWTH. This categorization captures patterns in the CMs that included MLEs that were focused on sustaining and nurturing necessary processes for life and growth.

The interpretive process categorization includes the following CMs: READING IS A SOLITARY ACTIVITY and READING IS CREATING A VISUAL. This categorization captures patterns in the CMs that included MLEs focused on solitary or individual attempts toward interpretation.

Reading Prescribed-Choice Metaphors (PCMs)

As with the EM data set, we started by analyzing each MLE to infer a CM. The results of that first phase of analysis are shown in Table 2. An example MLE, "[*Reading* is like **growing a tree**] BECAUSE you learn so much when you read. Every time you read a book it's like adding another rung to the trunk. Your schema gets larger and the information connects" is matched conceptually with READING IS GROWTH.

We also grouped the CMs derived from the PCMs into categories aiming to find convergences or divergences in the PCM data set. However, a major difference in this process is that because there were only four PCM options, all of which were pre-written by the researchers, there were fewer to categorize. However, anticipating the desire to look across these two data sets, we moved forward with this analysis. We identified three broad categories for the majority of CMs (n=11): exploration, process, and growth.

The exploration categorization included one CM: READING IS EXPLORATION. The metaphor of **opening a door** relates conceptually to seeing what is on the other side, and exploration of new possibilities and places.

The process categorization included two CMs: READING IS A PROCESS and READING IS GOAL-ORIENTED. **Learning to walk** is a process that takes time. It begins with movements such as crawling, then standing. Finally, walking is a natural process and children become comfortable

with walking and then they start to run. Likewise, reading involves learning basics such as sounds and letters then putting them together to read fluently. **Putting together a puzzle** and **climbing a mountain** are processes that result in an achieved goal. Likewise, reading is putting puzzle pieces together (reading words, fluency, comprehension), and can be challenging and requires hard work (mountain climbing). The end result is always worthwhile.

The growth categorization included only one CM: READING IS GROWTH. Planting a seed to grow a tree then requires the nurturing of care to ensure it grows. Likewise, for a person to become a reader, it often takes a nurturing educator who shares the joy of reading with the student.

Reading Full Data Set

Across both the EM and PCM data sets, we noted similarities in the categories, even though these categories were created separately. Indeed, the category of growth appeared in both data sets. Growth and nurturing metaphors are prevalent in metaphor analysis research that focuses on education, so this is not a surprise. As well, both data sets included an exploration (collapsed with discovery for the EM data) category. And, although the prescribed data set included a process category, this was slightly different for the EMs and categorized more specifically as interpretive processes. This offers some evidence that, at least for these reading professionals, reading is conceptualized as generative, not static or passive, in nature. Whether reading is conceptualized as movement, growth, exploration, or otherwise as a process, the continued-movement element of these CM categories is unmistakable.

Teaching Reading Elicited Metaphors (EMs)

We first analyzed each MLE in order to provide

an accompanying CM, as shown in Table 3. One sample is "*Teaching reading* is like **teaching a child how to learn new concepts** BECAUSE a child needs guidance to proceed." We labeled it with the CM of TEACHING READING IS GUIDING. We identified three broad categories—guiding, solving, and growing—for the CMs (n=10).

The guiding categorization includes the following CMs: TEACHING READING IS GUIDING, TEACHING READING IS TEACHING SELF-RELIANCE, TEACHING READING IS BEING A GUIDE, and TEACHING READING IS BEING A BEACON. This categorization captures patterns in the CMs that included MLEs focused on activities involving offering guidance or coaching, and that emphasized the *teaching* part of teaching reading.

The solving categorization includes the following CMs: TEACHING READING IS SOLVING A PUZZLE, TEACHING READING IS A NEVER-ENDING CHALLENGE, and TEACHING READING IS A LEARNING PROCESS. This categorization captures patterns in the CMs that included MLEs focused on the problem-solving nature of teaching reading to adults.

The growing categorization includes the following CMs: TEACHING READING IS GARDENING. This categorization captures patterns in the CMs that included MLEs focused on planting and growing something.

Teaching Reading Prescribed-Choice Metaphors (PCMs)

We first analyzed each MLE in order to provide an accompanying CM, as shown in Table 4. For example, one participant's MLE was

> [*Teaching reading* is like **coaching a sports team**] BECAUSE adult students need a lot of support. They need encouragement, patience, as well as instruction. While there is some nurturing (planting a seed) there is more instruction (like

> playing a sport). So I chose this one because it really is about building relationships with students to teach them. I want their peers in the class to be like a team of support and to share knowledge and insights with them through discussions about their reading.

We coded this conceptually as TEACHING READING IS GROWING [READERS]. We identified three broad categories for the majority of CMs (*n*=11): supporting readers, leading readers, and growing readers.

The supporting readers categorization included one CM: TEACHING READING IS SUPPORTING [READERS]. When "**coaching a sports team**" the coach often provides scaffolded instruction starting with what the players know, then teaching them new skills, and helping them be successful. In similar manner, teachers of reading scaffold, instruct and teach, and support the success of their students.

The leading readers categorization included one CM: TEACHING READING IS LEADING [READERS]. "**Being a tour guide**" is described as leading people through a learning opportunity that is exciting and full of exploration.

The growing readers categorization included one CM: TEACHING READING IS GROWING [READERS]. "**Planting a seed**" does not result in growth. Instead the sower must tend to the seed. Likewise, teachers provide readers with encouragement, positive feedback, opportunities, and support to develop.

Teaching Reading Full Data Set

Across both the EM and PCM data sets for *Teaching Reading*, just as with the *Reading* data set, we noted similarities. Stated simply, the category of growth appeared in both data sets with similar reference to planting and nurturing the seed. A more complex similarity was the idea

guiding (EM), supporting (PCM) and leading (PCM). Although we differentiated them, the commonality was that of guidance and support.

One categorical difference was noted, showing itself in the EMs but not the PCMs. Some educators created metaphors that focused on teaching reading as a problem-solving process. We took note of this because although the majority of these participants seemed to view the teaching of reading as one of growth and support, some educators responded about the reality of challenges, which will be unpacked further in the next section.

Discussion

This research extends the extant literature on conceptualizations of teachers (e.g., Chapman & McHardy, 2019; Kendall & McGrath, 2014) and on conceptualizations of literacy (e.g., Shaw & Mahlios, 2014) by connecting the two areas to provide an understanding of the perspectives that adult/college reading educators have about reading and teaching reading. Our analysis of these instructors' CMs for *reading* offer some evidence that they conceptualized reading as generative, not static or passive, in nature (what we previously referred to as continued-movement metaphors). We noticed that when asked about *reading*, the participants offered language that described positive, open, active, and engaged readers, and thus reflected their readerly identities. They spoke of open possibilities and newness of the unfamiliar that reading affords them. Here, they were unfettered, so positive and free that one could see their excitement. See Tables 1 and 2 for examples such as "*Reading* is like the dawn of a new day because it sheds lights on ideas...gives brightness…" and "*Reading* is like putting together pieces of a puzzle...once everything fits, everyone is happy!"

Similar to the *reading* responses that emphasized openness and discovery and a positive level of uncertainty, the *teaching reading* responses also expressed uncertainty, but in a more anxiety-laden way. The word choice made them seem far less freeing and positive, particularly the ECMs. See Table 3 and 4 for examples such as "*Teaching reading* is like leading students through a dark forest because students are confused and scared," and "*Teaching reading* is like coaching a sports team because adult students need a lot of support." This entailed their self-imposed teacher responsibility to help their students realize their potential for the future. Hence, one contrast we noted here was that they may view the teaching of reading as a problem-solving process. Indeed, when compared to the MLEs for *reading,* these MLEs stood out as having a very different tone.

We asked them about the act of teaching reading, which one might assume would elicit responses focused on the process of teaching or the emotions of a teacher. Instead, these participants shifted their responses to focus on their impact on students. In general, this tended to come through the nurturing or caregiver-type CMs; this is not surprising, as this has been identified in previous research as well (de Guerrero & Villamil, 2002; Fenwick, 1996). On the surface, this indicates that the majority of these participants seemed to view the teaching of reading as one of growth and support; however, there was an underlying, implicit deficit orientation (e.g., "there are more who need you;" "I have no idea what is going to happen with what I teach my students three years from now;" "most of my students have such a negative view of academic reading") that appeared to drive their responses. Specifically, their metaphors lacked a focus on what adult readers bring to the classroom. Instead, the MLEs focused on students' need for guidance and help.

Indeed, the provided MLEs tended to mimic growth/gardening, but they also had somewhat of a deficit tone because these educators seemed to express what they know/assume their students need (e.g., "you have all the materials/supplies you need to start planting the seed") and the teachers will go help them and change them. It should be noted that the MLEs were not overtly negative, but rather had suggestions of deficit orientations that, for example, do not take into account that adults have life and literacy experiences that can be leveraged; rather, there is a start-at-the-bottom, basic-skills assumption threaded throughout several of these. We would have gladly seen comments such as, "My students have learned/ experienced XYZ through their limited travel and I can build on these strengths."

Limitations

There are several limitations to this study. The survey was given to the participants with open perusing between the prescribed choice and elicited metaphors. It is possible that by allowing participants to review the entire survey before selecting a response approach, the elicited metaphors might have been influenced by their review of the prescribed-choice options. Also, we did not specifically ask the participants to identify their personal reading metaphor. This was assumed. With a limited number of participants in each of the adult education areas, we did not aggregate findings based on their teaching assignment. Neither did we solicit any background information on the teachers such as their theoretical beliefs. Finally, the survey was not context or content-dependent so if a participant would choose different metaphors for reading based on tasks (such as reading a bus schedule versus a novel), the participant was only allowed to choose/generate one metaphor overall for *reading* and another metaphor for *teaching reading*.

Next Steps

We offer methodological recommendations because this line of inquiry requires further attention before practical implications can be clarified. First, prior research (Massengill Shaw & Mahlios, 2011; Shaw & Mahlios, 2014) has concluded that adult/college students have diverse conceptualizations about reading and writing and oftentimes the instructor's or program's views are mismatched to students' views. Future research should take a broader approach by simultaneously exploring learners' and educators' conceptualizations to further examine differences in underlying understandings, as well as the resultant actions or non-actions. We believe such a study would yield interesting findings to inform our field. Additionally, a suggested study is to observe instructors in action to see if there is a link between their beliefs and teaching strategies. For example, would we see a connection between their "underlying implicit deficit orientation" and a skill/ drill teaching style? Connecting their beliefs with practice could significantly inform the selection of and professional development of adult/college literacy educators. From our perspective, such inquiries should continue to elicit metaphors for both *reading* and *teaching reading*, as we see value in more closely examining the connection. For example, why did the participants in this study give positive metaphors for *reading* but less positive metaphors for *teaching reading*? It would be helpful to conduct interviews with the participants to gain a more in-depth understanding of how metaphors influence educators' dissonance (Konopasky & Reybold, 2014) and identity (Fenwick, 1996). Finally, as this line of inquiry continues to get fleshed out, practical implications can be developed to drive what educators do in the case of misaligned conceptualizations between students and educators.

Conclusion

Our study has afforded a glimpse into adult/college literacy educators' perspectives about *Reading* and *Teaching Reading.* We discovered metaphorical themes that connected to previous research, yet we also discovered unique differences, particularly in how teachers viewed their readerly and teacherly identities. We advocate for understanding how instructors conceptualize reading and teaching reading because this conceptualization through metaphors may lead to better pedagogical practices when teaching reading. It may also help teachers identify gaps between knowledge of what they believe about reading versus how they are actually teaching reading.

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Table 1: MLEs and corresponding CMs for Reading EMs

MLE	CM
Reading is like **opening a door to an unknown room** BECAUSE even if you think you know what you are about to get yourself into, you never really know til you are there.	READING IS ANTICIPATING THE UNKNOWN
Reading is like **the key to Pandora's box** BECAUSE reading introduces you to everything and its (i.e., everything's) doppelganger. For example, a viewpoint and then the opposite of that viewpoint.	READING IS ANTICIPATING THE UNKNOWN
Reading is like **reading a map** BECAUSE it sometimes tells you how to get where you want to go, but you've got to figure it out, and everyone is using the same map to go to different places.	READING IS INFORMED NAVIGATION
Reading is like **traveling the world** BECAUSE you never know where it will take you, what you will encounter, or what new things you will learn.	READING IS TRAVELING TO NEW PLACES
Reading is like **treasure hunting** BECAUSE treasure hunters gather clues to discover the location of the treasure as readers gather clues through the reading process to discover the author's meaning and purpose. The better one is equipped on a treasure hunt, the more likely one is to discover the treasure. A complete novice is unlikely to discover anything.	READING IS CLUE-SEEKING
Reading is like a **never-ending journey** BECAUSE every time you read something, you travel to a place of new learning, participating in an activity, or enjoying something.	READING IS TRAVELING TO NEW PLACES
Reading is like **a trip to an unknown place** BECAUSE you may not know what to expect.	READING IS THE UNKNOWN
Reading is like **creating a visual image** BECAUSE readers can see an image which relates to their thoughts.	READING IS VISUALIZATION
Reading is like **eating** BECAUSE eating feeds and nourishes the body, while reading feeds and nourishes the mind and soul.	READING IS NOURISHMENT
Reading is like **eating healthy food** BECAUSE it will benefit your soul and body.	READING IS NOURISHMENT
Reading is like **exercise for the mind** BECAUSE it requires your mind to use different skills such as word recognition, comprehension, and critical thinking.	READING IS EXERCISE
Reading is like a **walk deep in the woods** BECAUSE I am alone with thoughts and interpretations.	READING IS A SOLITARY ACTIVITY
Reading is like **driving down a street or highway** BECAUSE the information read allows the reader to view in their mind a scene based on the words being read. As the pages of a book are being read, the landscape may vary throughout the story to the end of the journey.	READING IS VISUALIZATION

(continued on next page)

MLE	CM
Reading is like **a journey into interesting places** BECAUSE each author tells their stories from their own perspective as influenced by where they have lived and their sometimes exhaustive research.	READING IS A JOURNEY
Reading is like **the dawn of a new day** BECAUSE it sheds new light on ideas and comprehension and gives brightness and light to the world of words and stories and their beauty as the sun dawning on a new day does for the earth.	READING IS NEW POSSIBILITIES
Reading is like **looking through a kaleidoscope** BECAUSE everyone sees something uniquely different. Like the reflective lenses uses to create imagery in a kaleidoscope, readers rely on their own reflective lenses of background knowledge and lived experiences to create meaning in reading. Additionally, like in a kaleidoscope, a slight adjustment in perspective can change the perceived image.	READING IS VISUALIZATION
Reading is like **opening a door** BECAUSE it takes me places I could never imagine.	READING IS TRAVELING TO NEW PLACES
Reading is like **traveling** BECAUSE it takes you to new places.	READING IS TRAVELING TO NEW PLACES
Reading is like **traveling** BECAUSE it can take you places around the world and allow you to experience new things through details and imaginative pictures.	READING IS TRAVELING TO NEW PLACES
Reading is like **an unlimited adventure** BECAUSE the reader can go so many places and see so much.	READING IS TRAVELING TO NEW PLACES
Reading is like **travelling the world** BECAUSE a book can transport you anywhere.	READING IS TRAVELING TO NEW PLACES
Reading is like **a box of chocolates** BECAUSE you do not know what you are going to get. You have an idea of how the story is going to go either by word of mouth or the cover. It is not until you start reading do you find out what you get.	READING IS THE UNKNOWN
Reading is **finding a treasure** BECAUSE with reading valuable information is discovered.	READING IS A VALUABLE DISCOVERY
Reading is **planting a seed** BECAUSE at first progress seems slow, but with consistent work over time significant, lasting progress is made.	READING IS GROWTH

Table 2: MLEs and corresponding CMs for Reading PCMs

MLE	CM
Reading is like **growing a tree** BECAUSE you learn so much when you read. Every time you read a book it's like adding another rung to the trunk. Your schema gets larger and the information connects.	READING IS GROWTH
Reading is like **learning to walk** BECAUSE like learning to walk, it starts with the most basic movements; learning the letters/sounds is like learning to stabilize the body enough to crawl; then crawling is like learning the basic words; then walking is like actually learning to read fluently. The final step is running, which is akin to using reading for learning and to use reading for enjoyment.	READING IS PROCESS
Reading is like **opening a door** BECAUSE it opens a whole new world to the learner. Every sign, news feed, pamphlet, etc. is another door opened. They are no longer afraid to open that door with fear they may not be able to handle what is on the other side. They will continue to open doors and slowly walk through any door using the tools they have developed as their guide. There is celebration on the other side.	READING IS EXPLORATION
Reading is like **learning to walk** BECAUSE the more you practice and work at it, the better you get.	READING IS PROCESS
Reading is like **opening a door** BECAUSE you are privy to all that is inside the door.	READING IS EXPLORATION
Reading is like **opening a door** BECAUSE my father would say "there's the door it leads all parts of the world" reading is the same.	READING IS EXPLORATION
Reading is like **opening a door** BECAUSE reading gives one insight to new and different experiences. One can gain new knowledge or one can expand their imagination. Reading is like opening a door and stepping into a new adventure or getting a breath of fresh air.	READING IS EXPLORATION
Reading is like **climbing a mountain** BECAUSE every step you take gets you closer to your goal.	READING IS GOAL-ORIENTED
Reading is like **opening a door** BECAUSE it will provide the individual with many opportunities in the future.	READING IS EXPLORATION
Reading is like **putting together pieces of a puzzle** BECAUSE it seems simpler than it is, one has to have all the "pieces" to see the full picture, and once everything fits, everyone is happy!	READING IS PROCESS
Reading is like **learning to walk** BECAUSE the development is a process whereas you have to crawl before you walk.	READING IS PROCESS

Table 3: MLEs and corresponding CMs for Teaching Reading EMs

MLE	CM
Teaching reading is like **teaching a child how to learn new concepts** BECAUSE a child needs guidance to proceed.	TEACHING READING IS GUIDING
Teaching reading is like **doing a maze** BECAUSE student's skills can be at varying levels.	TEACHING READING IS THE UNKNOWN
Teaching reading is like **opening a door** BECAUSE you are showing the students how to "open" the meaning of something.	TEACHING READING IS TEACHING SELF-RELIANCE
Teaching reading is like **planting seeds** BECAUSE one can offer skills and insights, but it takes time and nurturing for those skills and insights to grow into actual abilities.	TEACHING READING IS GARDENING
Teaching reading is like **trying to unravel the Gordian knot** BECAUSE no matter how many you help realize their potential, there are more who need you.	TEACHING READING IS AN IMPOSSIBLE TASK
Teaching reading is like **planting a seed** BECAUSE I have no idea what's going to happen with what I teach my students three years from now.	TEACHING READING IS GARDENING
Teaching reading is like **ice skating** BECAUSE as soon as I get comfortable or think I know what I am doing, something happens and I crash or fall, but I continue to get back up and try something new.	TEACHING READING IS A LEARNING PROCESS
Teaching reading is like **leading students through a dark forest** BECAUSE students are confused and scared; they want and need someone to listen to their fears and then point them in the right direction as well as to trust someone when what they've known to this point is distrust and/or disengagement with their needs.	TEACHING READING IS BEING A GUIDE
Teaching reading is like **trying to turn the light on into that room** BECAUSE most of my students have such a negative view of academic reading. They might as well be standing in the dark as to how much power they already have to conquer their tasks.	TEACHING READING IS BEING A BEACON
Teaching reading is like **driving a stagecoach** BECAUSE horses have differing dispositions and speeds that must be adjusted so that they run together as a team.	TEACHING READING IS GUIDING

Table 4: MLEs and corresponding CMs for Teaching Reading PCMs

MLE	CM
Teaching reading is like **coaching a sports team** BECAUSE adult students need a lot of support. They need encouragement, patience, as well as instruction. While there is some nurturing (planting a seed) there is more instruction (like playing a sport). So I chose this one because it really is about building relationships with students to teach them. I want their peers in the class to be like a team of support and to share knowledge and insights with them through discussions about their reading.	TEACHING READING IS GROWING [READERS]
Teaching reading is like **being a tour guide** BECAUSE I can watch the joy of opening new worlds.	TEACHING READING IS LEADING [READERS]
Teaching Reading is like **coaching a sports team** BECAUSE it takes the inexperienced and walks them through the basic steps of their sport, helps them to master the nuances of the game, and leads them to the finish line and their goal where they can feel like winners.	TEACHING READING IS SUPPORTING [READERS]
Teaching reading is like **planting a seed** BECAUSE you have the materials/supplies you need to start planting the seed. Teaching phonics, word syllables and comprehension are all parts of the growing process. Once the seed is planted, it will continue to grow with repetition and their vocabulary will multiply.	TEACHING READING IS GROWING [READERS]
Teaching reading is like **being a tour guide** BECAUSE you are also trying to make the process of learning an exciting exploration.	TEACHING READING IS LEADING [READERS]
Teaching Reading is like **planting a seed** BECAUSE you are presenting many ways to make your seed grow. The seed must be nurtured and cared for in order to gain the fruit of the seed.	TEACHING READING IS GROWING [READERS]
Teaching Reading is like **planting a seed** BECAUSE you reap what you sow!	TEACHING READING IS GROWING [READERS]
Teaching Reading is like **planting a seed** BECAUSE it needs to be nurtured and have continued care to reach maturity.	TEACHING READING IS GROWING [READERS]
Teaching Reading is like **coaching a sports team** BECAUSE a coach starts off teaching each player the basics of the game. Once the player knows the basic moves/plays, then the coach can expand or modify the plays as needed to win the game. Teaching reading begins with teaching the basics, followed by bringing in more challenging words or ideas that expand on what the reader now knows from the basics.	TEACHING READING IS SUPPORTING [READERS]
Teaching reading is like **planting a seed** BECAUSE it takes lots of patience and care to see the results.	TEACHING READING IS GROWING [READERS]
Teaching reading is like **planting a seed** BECAUSE the more you water it the greater it grows.	TEACHING READING IS GROWING [READERS]

Research Article

Probing the Interface Between Learning Theory and Practice in Adult Basic Education

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Abstract

This essay tracks and expands upon critical exchanges with graduate students in a course for adult educators, highlighting conflicting perspectives among participants on the relative value of theory in enhancing practice. An underlying focus of the course consisted of comparing constructivist and cognitive perspectives on learning theory and their relationship to corresponding models of instructional design. To gain further insight on the theory/practice dynamic, the essay also highlights Dewey's functional theory of learning underlying his pragmatic philosophy of inquiry. Participants *implicitly* embraced practitioner research frames of reference, drawing out the insider perspective—a topic *explicitly* discussed below—as an essential counterpoint to an outsider stance, that typically orients academic research. The essay calls for critical intermingling of research traditions to facilitate collaborative approaches to problem solving in adult basic education.

Keywords: adult educators, learning theory, instructional design, John Dewey

As I read through these theoretical papers, I feel the professional academics get to dream as big as they want to, but the actual classroom teacher is the real-life practitioner who takes what might be great in theory and translates what she can into her actual working situation.

As one immersed in 37 years of classroom experience and academic discourse on the relationship between pedagogy and the political culture of adult literacy, I have experienced anxieties similar to the student, above, in my course on curriculum development for adult educators in efforts to work through pervasive theory/practice tensions. This strain has underlain my ambivalence in assigning a second week on learning theory, in a course where I wrapped around several key topics, including adult education philosophies, learning theory, and instructional design. This concern echoed those of other class members of this graduate course I designed and taught from 2009-2017 in the Virginia Commonwealth University's Online Certificate in Adult Literacy Program. Members consisted mostly of seasoned ABE, ESOL, and GED preparation teachers, many of whom worked in corrections facilities. Student reflections cited in this essay are from the 2014 and 2017 semesters.

I highlighted several nationally prominent programs to facilitate discussion on curriculum issues. We concentrated 1 week on the CASAS Competencies (2008), which focus on consumer economics, community resources, health, employment, and government and law. We dedicated another week to the Equipped for the Future's (EFF) program with its "progressive mastery of the knowledge demands of key social roles" (Demetrion, 2005, p. 153) at home, work, and the community, processed through transferable content standards in the areas of communication, decision-making, interpersonal and life-long learning skills. We also studied the revised 2014 GED test which is based on "a thinking curriculum, teaching adults how to *reason* [emphasis added] in the context of real-life reading texts, science concepts, social science and writing" (GED Test Curriculum Blueprint, 2013, p. 3). This orientation represented a significant contrast to prior versions of the test centered more on mastery of a set body of knowledge in the academic content areas. Our primary textbook (*A Guide for Planning and Implementing Instruction for Adults*) used an integrated theme-based approach, which "places the learner's life contexts at the center of the instructional process" (Dirkx & Prenger, 1997, p. xiii) and proved a key resource in our exploration of critical issues in adult education curriculum studies.

I included a 2-week unit on the curriculum literature, itself, which seemed to lack a sufficiently robust theoretical framework to serve as the course's intellectual center. This assessment led to my topics in curriculum studies approach, which included strong emphasis on learning theory stemming from the central role constructivism plays in shaping the direction of adult education pedagogy. I also drew on the cognitive learning literature, which provided a more structured

instructional approach that many participants came to view as a valuable counterpart to the more radical strains in constructivist learning theory. We discussed many of the sources cited in this article.

Several students questioned the focus on learning theory, while others found it stimulating. One thought, "a great deal of the learning theory is hair splitting" and wondered why theorists failed to consider "the students," the alleged subject of their reflections. She noted, "each theory will include" relevance for certain students in specific contexts, but she had "yet to find a theory [that applies to] all the people all of the time." Another expressed a similar perception that no singular learning theory depicted the full range of relevant learning in all contexts; she, nonetheless, explored the topic for what it opened up of better grasping the learning process of her students. This also contributed to a deeper understanding of her self-learning. In sum, she started "asking questions about these theories and how all of this theory fits into my world." This encouraged her to think more intentionally about what "learning looks like." Others expressed similar thoughts, while shifting their perceptions throughout the semester on the relative value of theoretical knowledge in light of other areas that merited close attention. Recapped by one student, "[t]he theories learned were important, but it might be helpful" to infuse their insights throughout the topics we studied.

I shared some of these concerns. However, I did not want to shortchange the significance of the key differences among the learning theories, which bring out distinctive aspects of learning through the particular lens that each of them illuminates. I decided, therefore, to grapple with the discomfort while now considering, as the previously cited student recommended, more critically gauging the

relationship between learning theory and practice throughout the topics explored should another opportunity to teach this course arise.

Students raised provocative issues on what they took as persistent incongruities between theoretical depictions—primarily of constructivism and cognitivism—and practical application. Most participants opted for a self-evident eclecticism; nonetheless, some leaned toward one theory or another, while doubting that any intellectual construct contains sufficient complexity to adequately account for the many variables that factor into the dynamic and range of learning experienced by their students.

In characterizing this ambivalence, one participant "concentrate[d] on cognitivism for a very pragmatic reason. I thought that shaping my project around the theory I most passionately believe in—constructivism—would not allow me to develop a project that could actually be implemented." In her search for "practical application," cognitive modes of instruction, "grounded in a more organized and systematic manner of building on existing knowledge … help[s] [students] grasp and make sense of new learning." Viewed as a kind of "scaffolding," "cognitive theory" provides an essential bridge "toward the ultimate goal of self-directed learning." Rather than "compromis[ising]" her "constructivist approach to teaching," such reinforcement thickened it by connecting the need for structure through direct instruction to metacognitive learning. For any future redesigns of the course, insights such as those identified above have provoked me to consider moving toward a more interactive dynamic between learning theory, instructional design, and participatory engagement within a more integrated focus on curriculum studies.

Adult Learning Theory: An Overview

Focusing primarily on constructivist and cognitive approaches to learning, I incorporated a wide body of work on adult education principles, practice, and theory, throughout the course, that broadly draws on these perspectives. For example, the impetus of humanistic psychology, which accentuates the individualistic thread within constructivism, underlies the adult education theory of "andragogy" (Elias & Merriam, 2005; Henschke, 2016; Knowles et al., 1998), while what Brookfield (2004) and others refer to as a more "critical constructivism" (Kincheloe, 2008), is rooted in dialectical social discourse. We explored these tensions within constructivism through critical interpretations of andragogy and self-directed learning in the second week through Brookfield's (1995) essay, "Adult Learning: An Overview" and supplemental articles by Merriam (2001, 2017), which place these concepts in more favorable light while maintaining a critical perspective.

The cognitive emphasis on informational processing informs Sticht's (1997) two-fold model linking "the mental processes that people use to acquire knowledge...to the knowledge that has been acquired using these mental processes" (p. 38). Rooted in his functional context theory (FCT), such information is typically grounded in widely recognized bodies of knowledge in the academic disciplines and practical realms. What the mind internalizes as an informational processor depends on how much knowledge the individual has assimilated in any given domain, the more of what is relevant, the better. Merrill (2002) embodies this perspective in his essay, "First Principles of Instruction," which we studied, along with Sticht's work.

 In sum, the constructivist pole within learning theory is linked to the inherently subjective notion commonly identified as meaning making—

an "emergent, developmental, nonobjective" concept rooted in "self-regulatory process(es)" that mediates the space "between existing personal models of the world and discrepant new representatives and models of reality" through "culturally developed tools and symbols" (Fosnot, 2005, p. ix). Fosnot and Perry (2005) offer additional insight on constructivism by drawing on Piaget's concepts of "accommodation, assimilation," and the formation of new "equilibrations" to explain the progressive resolutions of these tensive modes of learning through "internalizing, self-organizing behavior" (p. 20) worked out through new frames of thought within ever-expanding experiential horizons. The educational payload emerges from "cooperative social activities, discourse, and debate" within the framework of particular "communities of practice" (Fosnot, 2005, p. ix), leading to further knowledge expansion among individuals and groups of inquiring learners.

Those on the more "extreme" edges of constructivist learning theory draw a sharp line between such self-regulatory approaches and more traditional ways of learning based on "objectivism" (Cunningham, 1992). Whether the contrast is with cognitivist or behaviorist methods of learning, the critique centers on the "transmission" theory of knowledge acquisition "that learners can incorporate exact copies of teachers' understanding for their own use, that whole concepts can be broken into discrete subskills, and that context can be taught out of context" (Fosnot, 2005, p. ix).

Emerging as an outgrowth of behaviorism (Tennyson, 2005), learning theorists and instructional designers rooted in the "cognitive revolution," insist this depiction of "objectivism" is a caricature. Merrill (1992) refers to a second wave of instructional design (ID_2), which incorporates

many facets of "moderate constructivism" (p. 113) through models of instruction that build on existing student knowledge and foster dynamic student engagement throughout the learning cycle (Merrill, 2002). In line with constructivists, Merrill (1992) accepts the validity of "mental models," which are "modified with every new experience," while rejecting claims that there is "no shared reality" "completely idiosyncratic to each individual" (p. 103).

In agreement with Merrill, Sticht (1997) notes that efficacious instruction needs to sharpen the focus on enabling learners to master commonly established tasks and content in the various practical spheres that absorb their attention. In his early work, Sticht applied his FCT model to military-based and workplace contexts. His more recent studies range widely across the knowledge domains, as identified in the major national adult education programs and initiatives, from the 1975 Adult Performance Level life-skill categories to various 21st century initiatives of the current period. In his numerous engagements with major policy initiatives spanning over a 50-year career, his functional orientation has remained constant. Namely, as learners internalize well-established content in the spheres of health, civics, parenting, employment, and financial management, they also expand their basic reading, writing, and computational skills, which are usefully taught in context.

Behaviorist- and cognitivist-oriented learning theorists accept the importance of mastering *information* gleaned from the external environment based on recognized bodies of knowledge in the academic disciplines and the practical realms. The primary difference is that cognitivists visualize students as active learners whose mental framework is central to the potential

mastery of such learning while rejecting rigid transmission models. In contrast, behaviorists assume an associational psychology dependent on the strength and persistence of a stimulus/response dynamic, based, in its simplest form, on an automatic "drill and practice" (Mayer, 1996, p. 152) model resembling a more objectivist epistemology, without the need, in principle, for cognitive processing. In stressing information processing and schema development, "[c]ognitive theories focus on the conceptualization of students' learning processes and address…. how information is received, organized, stored, and retrieved by the mind" (Ertmer & Newby, 2013, p. 51).

In linking certain strands of cognitive and constructivist learning theory in her instructional design model, Derry (1996) points to schema theory as an integrative concept through frames of reference that individuals build in the process of assimilating new spheres of knowledge in given areas of focus. These can be simplistic, in which expanded learning is limited, or "higher order" (p. 167), enabling learners to incorporate new knowledge within a given domain, resulting in more comprehensive mental frameworks.

Mayer (1996) builds on a similar quest in identifying earlier and later work on informational processing models of assimilating knowledge. The former, which he refers to as a "literal" mode, is based on a linear, mechanistic understanding of "mental representations" (that of simply picking up discrete pieces of information). Against this, he posits a more sophisticated model, based on "memory representations" visualized in terms of broader acquisition in which "knowledge can be schematic" (Mayer, 1996, p. 156). In the shift from earlier to later models of information processing, there is more of an emphasis on "active search[ing] for understanding in which incoming experience

is reorganized and integrated within existing knowledge" (Mayer, 1996, p. 156).

Derry (1996) and Mayer (1996) blend some of the more sophisticated aspects of cognitive learning theory with its linkage to constructivist approaches, which offer intriguing potential for instructional designers and educational practitioners to draw widely in shaping curricula, syllabi, and instructional methodology. As similarly argued by Çeliköz et al. (2016), such convergences between cognitive and constructivist models of learning make a radical separation between them "impossible" (p. 42). Nonetheless, there is reason for constraint in any too-ready embrace, as their primary metaphors point in different directions. While the more recent work in cognitive learning theory shares with constructivism an emphasis on dynamic, active learning, it is still beholden to a model of mind in which learners take in given information from the external environment based on the efficacy of memory retrieval. The difference between this orientation and that of reconstructing knowledge from more meaning-making, social, cultural, and self-regulatory frames of reference is significant in identifying what is most critical to learning and in corresponding modes of instruction. How practitioners and theorists grapple with this tension in ideal theory construction in light of important commonalities at the level of instructional implementation will likely shape some of the more important research in adult learning in the coming years.

Scholarly and Applied Theory/Research Distinctions

The commonly perceived tension within the theory/practice relationship in education is broadly akin to that between the academic

researcher and medical practitioner. Unlike the research scientist, who typically seeks to resolve theoretical sets of problems, the health professional draws on formal medical research to deal with more practical types of problems, such as what drug (if any) and dose to prescribe to a given patient. Based on this pragmatic impetus, "it is making the sick man better or worse … which determines the knowledge value of certain findings of fact and certain conceptions as to modes of treatment" (Dewey, 1916/1954, p. 21). Stated otherwise, the interactive relevance of the data, as sifted through various suggested explanations (working ideas) of causation or influence, is discovered in resolving, meliorating, or gaining a better understanding of the issues involved in contending with the immediate problem at hand.

Such field-based aptitude is further honed through comparative analysis of critical cases through discussions with colleagues, special seminars, and keenly scrutinizing medical journals for relevant information. The specialist keeps attuned to research pertinent to his or her specialty and draws on it to assess some practitioner-based issue rather than to resolve theoretical ones, as such, in which "ideas…are anticipations of possible solutions." Based on this instrumental logic, ideas function "to guide and organize further observations, recollections, and experiments" (Dewey, 1916/1944, p. 160) in working out, in this case, a viable diagnosis to a medical problem.

Classroom instructors have valid reasons for focusing on direct application, given the self-evident assumption that unless its insights lead to enhanced practice, it is difficult for most teachers to conclude what formal scholarly insight offers them. This critical discernment is underplayed in the scholarly literature which practitioner researchers seek to rectify. Notwithstanding this

piercing critique, academic scholarship—ideally, in dialogue with critical practice—can open up frames of reference by which to structure learning activities through its explicit directional focus that otherwise might "not even have been noticed" (Dewey, 1929/1958, p. 5), even in the most critical common-sense reflection lacking formal theoretical input.

Sifting through these tensions calls for much acumen. In the course under discussion, students probed the learning theory literature with particular attention to its diverse applications to their unique classroom contexts. Underlying this complexity, one student typified a widely shared view that "in practice, the best approach is to draw on whatever theory/strategy works best in a given situation." In making such judgments, how one envisions the learning situation is a critical matter, in which the practitioner researcher or academic scholar, alone, is likely to possess only partial insight. The ideal, then, is for mutual inquiry, in which "practitioners" participate as "knowledge generators, as collaborators with university-based and other researchers in exploring practice-based issues" (Cochran-Smith & Lytle, 2009, p. 160).

Tennyson (2005) offers a bridge by highlighting the centrality of instructional design. In his call for "an interactive network of metatheories," he contends that "[i]nstructional designers… will increasingly choose to apply a particular learning and/or instructional theory only to those narrow learning outcomes which it works most effectively." Such judgment requires addressing various "skill[s]" and "subskill[s]" needed in mastering the wide range of processes, problems, and topics students confront within the various learning environments they engage. This includes "alter[ing] each of the original [learning] models used" (Tennyson, 2005, p. 233) based on rigorous analysis of needed micro-skills, along with the

metacognitive resources required to enhance the capacity of students to think and act in integrative ways in working through any complex matter.

While emphasizing the pragmatic impetus of efficacious learning, Tennyson (2005) calls for educators to grapple "with the lack of a means of defining a philosophy and learning theory by which instructional design methodology can be driven" (p. 234). That bow to theory, notwithstanding, the extent to which to place primary emphasis on learning theory rather than instructional design in any given context, remains a critical matter requiring much discernment among the various stakeholders. This is so because the very definition of what counts as significant in any specific situation is a matter of contestation among participants in determining the extent to which a paradigmatic (typically more theoretical) shift in learning or a more incremental design issue is most desired.

The Deweyan Contribution

Whether formally identified as such, dependence upon theory as a directive force guiding any investigation is an essential task of the classroom teacher. Advocates of practitioner research contend, field-wide transformation is a distinct possibility when it becomes a matter of course for instructors to initiate theory construction from their own frames of reference (Cochran-Smith & Lytle, 1993, 2009). A closely related sensibility is that of teachers contributing to current scholarship on learning and instructional theory by drawing on their own classroom experience in raising critical issues and identifying their own points of reference. Most seminar students responded to these challenges by drawing out facets of learning theory germane to their own classroom contexts.

Some referred to Knowles' work on self-directed learning and accompanying philosophy of education identified as andragogy (Henschke, 2016; Merriam, 2017). Sharing a close affinity with this instructional model, various participants identified constructivism as central to adult education practice while recognizing that in certain task-based contexts, cognitive and behaviorist emphases gain increased saliency. Several found a new theoretical taproot in their own discovery of the "cognitive revolution" in education.

In assigning readings from *Democracy and Education*, I brought to the fore Dewey's (1916/1944) concept of "growth," as the "cumulative movement of action toward a later result" (p. 41), an imaginative frame of reference through which I have sought to build a "middle-ground" adult literacy practice (Demetrion, 2002). Dewey (1916/1944) premises such growth on the plasticity of human nature underlying the efficacy of human power and potentiality enacted in the midst of change. This "ability to develop" (Dewey, 1916/1944, p. 42) unleashes the potentially of learning as a creative force. It is

> the power to retain from one experience something which is of avail in coping with the difficulties of a later situation. This means the power to modify actions on the basis of the result of prior experiences, the power to *develop dispositions* [original italics]. Without it, the acquisition of [a fruitful set of educational] habits is impossible. (Dewey, 1916/1944, p. 44)

In sum, Dewey's growth-focused pedagogy is rooted in a naturalistic type of inquiry that mediates the gap between a pressing problem of some existential significance and its proximate resolution, in which ideas, as increasingly refined suggestions, interact with the relevant facts of the matter to modulate the problem situation throughout the investigative process (Burke, 1994).

Consider an adult learner returning to class after an unsatisfactory job interview. The student

carefully reviews what worked well and what re-adjustments are required for better results, including determining whether the problem lies in some needed interpersonal competency, additional job-specific skills, or another career focus. With a plausible diagnostic as a guiding framework (a working theory), the student is better situated to re-assesses a given position and better poised to develop whatever soft or hard skills require additional attention. In the case at hand, the student has obtained a more nuanced understanding of the needed skill sets in light of the range of jobs for possible consideration, along with, perhaps, an enhanced set of presentation skills designed for better job interview performances. This student "acquires a [better] habit of learning. He learns to learn" (Dewey, 1916/1944, p. 45).

Throughout the past century, educational philosophers have drawn on Dewey's work (Cherryholmes, 1999; Garrison, 1997; Gert et al., 2004), which has much untapped potential in enhancing adult education theory and practice (Stewart, 1987). While largely absent in the contemporary learning theory literature, Dewey established a sophisticated form of inquiry in philosophical pragmatism in the searching quest for progressively resolving problems through the rigorous process of establishing more viable learning and social environments, whether in formal schooling or in the broader socio-cultural realm.

Over the past few decades, a major revival of philosophical pragmatism has emerged in the professional literature, initiated by Rorty's (1979) *Philosophy and the Mirror of Nature*. Extending beyond education in its narrower definition, the movement includes contemporary pragmatic studies in the realms of art, politics, religion, ethics, metaphysics, and inquiry (Cochran, 2010). I have sought to raise the significance of Dewey's

philosophy for the field of adult literacy studies, including practitioner research (Demetrion, 2000, 2002, 2012). With these factors circulating in my mind, I chose to incorporate the pragmatic perspective into the course work, which added an important, yet somewhat neglected dimension to the more widely recognized focus on constructivist and cognitive frames of reference.

Theory/Practice Nexus

Notwithstanding significant convergences, each of the theories highlights different aspects of learning and implications for teaching. Cognitivism, constructivism, and pragmatism function as hypothetical constructs empowered by their overarching metaphors: informational processing, meaning making, and Dewey's Darwinian model of growth through progressive problem solving. The argument put forth here is not that learning theory drives the focal point of learning. That grounding orientation belongs to the search for adequate resolution of problems that emerge from the interaction between the relevant facts and provisional ideas, as suggestions and increasingly refined inferences in any given context (Dewey, 1916/1954, 1938/1991). Thus, regardless of how the theory/practice dynamic gets worked out in any given context, the driving force in an investigatory process remains the resolution of a given learning problem, in which theory, as an orienting idea, functions as an indispensable guide. The following discussion is intended with this understanding in mind.

Insights gleaned from constructivist learning theory are useful in encouraging students to expand their thinking when the topic draws out the sensibility of empathy in strengthening bonds among learning communities, or for critical probes into different points of view that rely, to a significant degree, on self-reflection. Critical

probing of alternative perspectives in the analysis of fiction, historical interpretation, contemporary social issues, and personal narrative reflection depends extensively on acute constructivist sensibilities, though other modes of learning also come into play.

Instructional strategies that draw from cognitive approaches can help students progressively master a series of tasks about new work processes, starting a business, or mastering the fundamentals of algebra. While a nearer-term, skill-based knowledge acquisition focus may necessitate well laid-out learning sequences, longer-term development requires subtler internalization of a range of tasks and objectives, in which one's identity as a competent knowledge user becomes positively reconstructed as part of the ongoing process of applied learning in real-world contexts. Thusly viewed, cognitive learning principles merge into constructivist ways of knowing, as Merrill (1992, 2002) and Sticht (1997) exemplify, even as both veer toward a "common sense" cognitive orientation in their emphasis on integrated skill-based mastery through "moderate" incorporation of constructivist propensities into an "informational processing" model of learning.

While superseded in many ways, behaviorist theory opens the importance of automaticity in facilitating phonemic awareness or in mastering the fundamentals of basic arithmetic, where practice through engaged repetition is one of the critical skills that can lead to independent learning. These activities are typically enhanced by a cognitive sensibility that helps students internalize schematic frameworks needed for long-term memory processing (Çeliköz et al., 2016). Such efforts logically lead to competent self-perception that serves an invaluable, legitimizing role enhancing learner persistence when

challenges are difficult, yet potentially in reach for student realization (Bandura, 1994).

Pragmatic modes of learning support learning encounters emerging out of some deprivation in felt experience—such as unexpected job loss—in the pivotal challenge of progressively overcoming the gap through forms of knowledge that lead toward attaining a more desirable end. Competent problem solving, as determined by engaged participants, orients the fundamental purposes of a pragmatic-focused mode of inquiry (Demetrion, 2012; Dewey, 1938/1991). Constructivist predispositions reinforce this pragmatic impetus by bolstering intrinsic motivation, which in turn can strengthen commitment to the sequential mastery needed for some complex set of tasks required to meet the challenges of coping effectively with a new learning challenge.

There is much to consider in grappling with learning theories, such as the emphasis on constructivism in current adult education theory, as well as confronting the various contexts where its utilization may be limited or counterproductive. On the latter, Merrill's (2002, 1992) work on principles of instruction and second level instructional design and its correspondence to Sticht's (1997) FCT model, argue for well thought out sequenced learning modules for attaining proficiency in a wide array of practically-oriented realms. In sifting through Merrill's ID_2 perspective and Sticht's FCT model, course members gained a better sense of the differences and similarities between moderately constructive, cognitive perspectives and that of the main textbook's (Dirkx & Prenger, 1997) more radical constructivist-oriented, theme-based perspective. A fundamental dividing point does not center on the value of theme-based instruction, nor on the importance of knowledge internalization, which Merrill and Sticht fully

share with Dirkx and Prenger. A primary difference is the ways that learning and supportive teaching take place between Dirkx and Prenger's model, in which direction emerges organically from goals and themes identified by students, and Merrill and Sticht's top-down instructional pre-planning approach based on the expert knowledge of the teacher and instructional designer.

On the matter of who sets the selection of topics and teaching methods, Dewey (1938/1997) rejects either/or approaches. On his argument, the teacher vigorously participates as a full classroom partner based on interpersonal competence, teaching facility, and subject matter knowledge, while simultaneously encouraging direction to emerge from the background, talents, and knowledge base of the students. For Dewey, it is less about who provides initial guidance than that the learning community moves from any current knowledge base toward progressive realizations of mutually identified outcomes in a manner that facilitates optimal learning.

Concluding Remarks

A concerted effort has emerged in recent decades to establish creative dialogue between learning theorists and instructional designers, beginning, in force, with our course's second major text, *Constructivism and the Technology of Instruction* (Duffy & Jonassan, 1992). In this pioneering work, the editors sought to overcome the enduring gap between the two fields stemming from "a general lack of familiarity with each other's work" and "even lack of interest in the work of the other" (p. ix). In its range of theoretical explorations and practical applications, this text is wide-ranging in opening up critical dialogue between learning theorists and instructional designers. Its more descriptive chapters provide various concrete examples on the ways in which constructivist and cognitive modes of instructional design can be intricately interwoven (Duffy & Jonassan, 1992), with which course members most resonated, while those chapters primarily focused on theoretical issues put greater stress on the significance of the philosophical differences of divergent learning theories. Students engaged this text with much discernment as they worked though the numerous insights of the contributors in light of their own varied teaching challenges. However, this landmark study only partially overcame the persisting tension between the commitment to an unalloyed constructivism, held by most of the learning theorist contributors, and persistent behaviorist and cognitivist models that continue to exert strong purchase in the operative assumptions of the instructional design authors (Duffy & Jonassan, 1992). This was somewhat mitigated through various distinctions between "moderate" and "extreme" perspectives underlying the constructivist vision and the willingness of the invited instructional designers to draw in aspects of moderate constructivism while remaining anchored to an implicit cognitive learning theory.

The dialogue continues. Mayer (1999) proposes an approach to teaching based on "well designed direct instruction" (p. 143) rooted in informational processing and retrieval modes of learning. Specifically, he offers a model of reading instruction designed to stimulate "working memory" (Mayer, 1999, p. 148). Buttressed by text-based, study-skill prompts such as "advanced organizers, illustrations, worked out examples, and elaborative questions" (Mayer, 1999, p. 155), the instructor assists students in building up their working memory as an essential baseline to enhance their meaning making aptitude at higher levels of potential applicability. Such scaffolding enables students to "identify useful information, to understand how the material fits together, and

to see how the material relates to prior knowledge" for "selecting, organizing, and integrating" (Mayer, 1999, p. 152) what is important in any given learning setting.

He maintains that directive learning processes substantially enhance students' learning and knowledge-based development needed to effectively grapple with content that transcends mastery of the specific skills or knowledge attained. In this, Mayer (2004) provides a mediating pedagogy from the side of instructional design in arguing that "a dispassionate review of the relevant research… shows that discovery-based practice is not as effective as guided discovery" (p.18).

Hmelo-Silver et al. (2007) offer a similar convergence from the side of constructivist learning theory. Specifically, the authors challenge the contention by cognitive load theorists that pedagogical models founded in constructivism and "minimally guided instruction" (Hmelo-Silver at al., 2007, p. 99), downplay more directed instruction needed to enable learners to effectively manage informational flow. Kirschner et al., (2006) hone their critique by claiming that discovery-based models of learning, such as Problem-Based Learning (PBL) and Inquiry Learning (IL) limit minimal guidance. Hmelo-Silver et al. (2007) argue that PBL and IL modes of learning do incorporate the necessary scaffolding to bridge the gap between what students currently understand and what they need to know to master the learning challenges these approaches open up. In thus arguing, the authors seek to include critical features of cognitive load theory within an overarching constructivist model by utilizing certain aspects of direct support, such as straightforward "just-in-time" instruction, "once students experience a need to know the information presented" (Hmlo-

Silver et al., 2007, p. 100).

One seminar student noted that the Kirshner et al. (2006) essay caused her to question constructivism while, in her words, agreeing with Hmelo-Silver et al. (2007), "that there are ways to infuse constructivism into the curriculum" that nonetheless challenges the latter's emphasis on "just in time" instruction. Specifically,

> What are we teaching? Is it background knowledge that the students need in order to complete the project or one aspect of the project? Is it new information that was not given? Is it steps in the project that may not have been clearly laid out, that the teacher is then going back to correct?… It felt to me that, Kirschner et al. were not negating the fact that PBL and IL are not scaffolded, but that they put too much strain on the working memory of students. If students are working through the project but need information that they have not been taught, they must remember the process of the project and this new information. If the process of the project is something that is being repeated at various intervals of the semester, students will eventually recall the process of problem solving, but if important information is only given to them in just the right moment, will they remember that information when they'll need to eventually recall it?

In short, this student called for a robust approach to learning through modes of internalization reflective of constructivism and metacognitive learning strategies while maintaining the central cognitive emphasis on memory enhancement to facilitate long-term knowledge development.

Hmelo-Silver et al. (2007) also referenced the challenges of educating "lifelong learners and citizens in a knowledge society." Applying the complexity of this ambition to the many constituencies invested in contemporary models of education, the authors called for "deeper and more detailed understandings of the interrelationships between various instructional approaches and their impact on learning outcomes in different contexts" (Hmelo-Silver et al., 2007, p. 105).

This cautionary note extends to the broad tent of adult education. Given the range of constituents served—from low-level literate adults of all ages, to those preparing for high school completion, transition to college, and worker preparation programs—no single learning model, no overarching curriculum, will uniformly apply. While, perhaps appealing, no all-encompassing mode of preparing workers and citizens for the 21st century will do.

Models abound within the U.S. adult education sector: the National Institute for Literacy's founded Equipped for the Future (EFF) Project and the Partnership for 21st Century Learning (P21 Framework Definitions, 2009) provide among the broader initiatives in linking critical knowledge development in basic and core academic skill mastery with thoughtfully engaging the informational challenges of a post-industrial and global economy, society, and culture. Critical thinking, communications, career planning and the development of interpersonal competency, stream across both programs, along with mastery of information and communications technology and the metacognitive aptitude for knowledge transference across learning domains. Disciplines range from global, health, environmental awareness, and financial and business literacy (P21) to worker-based, civics, and family education (EFF). Both frameworks are intended to prepare students for meeting the learning challenges of thriving in the 21st Century.

The Common Core State Standards (CCSS) provide the underpinning for the College and Career Readiness Standards for Adult Education (CCR) and the revised 2014 GED test. These programs focus on academic development in the language arts, social studies, biological and physical sciences, and mathematics through selective content mastery and critical

reasoning skills that provide the baseline knowledge competence to meet the "the rigors of postsecondary training, work, or citizenship" (Pimental, 2013, p. 1).

The CCR project author identifies "complexity of text" mastery as "the greatest predictor of success in college and careers" (p. 9), requiring programs to exponentially raise the content level of reading material in current use. To prepare students, teachers need to build in "academic vocabulary" and incorporate content and approaches to learning that cut "across the disciplines of science, history, and the arts" (p. 9) with an increase focus on "content-rich informational non-fiction" sources (p. 10). The revised 2014 GED test parallels these emphases while providing pinpointed content and attentiveness to key intellectual practices in each of the subjects, and two major focusing themes in the social studies and sciences (GED Test Curriculum Blueprint, 2013). These challenges call on learners to draw on an array of learning styles, approaches, and sensibilities that no singular learning theory or instructional design can provide. Rather, such proficiency requires considerable concentration, which builds on memory and informational processing activities, integrative schematic restructuring, knowledge expansion, and problem-solving aptitude.

Convergence between learning theorists and instructional designers get at some of the contemporary complexities of the knowledge building challenges adult learner communities confront. A critical missing piece remains—the insights of the classroom teacher that Cochran-Smith and Lytle (1993, 2009) bring to the fore through the underappreciated field of practitioner research. As they note, "the insider status of the [practitioner] researcher is…an asset to be capitalized on and mined, given the emic perspective, the unique insight" (Cochran-Smith

& Lytle, 2009, p. 101), not readily available through an outside or etic perspective (Cochran-Smith & Lytle, 1993), one that is essential to the vitality of any comprehensive theory of learning.

No doubt, pursuing such an ambition includes "[t]he potential for silencing" in light "of issues of power and control" on who or what sets the agenda for determining the scope of academic legitimization; one that simply "come[s] with the territory" (Cochran-Smith & Lytle, 2009, p. 103) of engaging in such interdisciplinary work. More positively put, such cross-disciplinary critical dialogue offers much opportunity for deepening our understanding of the many contexts that impinge on the dynamics of learning in meeting constituent challenges of our current setting.

Discerning the ways in which practitioner researchers could interface with learning theory and instructional design communities of scholars would logically be as diverse as the situations under review warrant. Within such collaborative milieus, the critical factor raised by the practitioner research scholarship remains; the centrality of emic viewpoints in light of more etic, or outsider perspectives of the learning theorists

and instructional designers, as discerningly probed in given investigatory processes. Such exploratory research would invariably remain an open issue, one that offers much potential for enhancing the learning process and identifying the knowledge that matters to the students we engage in our classrooms and schools in their interaction with the society and culture that envelops their current and future lives.

In taking a leaf from its roots in experimental learning (Stewart, 1987), the adult education field holds the potential to pioneer such an interdisciplinary dialogue. Such work is especially crucial for a society that has become increasingly defined as postindustrial, pluralistic, global, and knowledge based—an increasingly inclusive learning society, in which how and what we learn plays such a central role in the quality of our personal and public lives in the midst of the many challenges that impinge against them. This essay represents one partial effort toward moving in this direction. The attempt to reconstruct the course under discussion here, as suggested through a more inductive and integrated approach, would provide a practical litmus test, the results of which can only remain speculative at this point.

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Report from the Field

Reflections from Teaching Basic Adult Literacy

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Abstract

Teaching reading to adults who struggle with literacy learning is a difficult task, and there is a paucity of evidence-based programming designed especially for them. Three research teachers describe their experiences while teaching an evidence-based reading program to adult literacy students. This article provides an overview of the program content delivered to adult learners, an account of teachers' experiences teaching this program, a description of the learners' responses to the program, and a portrayal of what the learners' responses revealed about their educational needs.

Keywords: reading intervention, adult learners, evidence-based reading programs

Teaching reading to adults who struggle with literacy learning is a difficult task, and there is a paucity of evidence-based programming designed especially for them. Research comparing the results of one instructional approach to another, or to a control condition has yet to identify the benefits of any one approach over any other. This lack of evidence is further exacerbated by not knowing enough about their greatest learning challenges.

This article describes the experiences of three research teachers (Inga Einarson, Christine Miller, and Devi Rodgerson) working for an adult literacy research and development center (csal.gsu.edu). The overall center objectives are to better understand the reading strengths and weaknesses of adult literacy learners and to develop and test an instructional program to help them acquire foundational literacy skills and improve their reading. Our goals for this paper are to provide an overview of the

program content delivered in our classes, share our experiences teaching this program, describe the learners' responses to the program, and to consider what the learners' responses reveal about their educational needs.

Our classes were held in established adult literacy program sites in Metro Atlanta and in the Greater Toronto Area. The intervention offered approximately 100 hours of reading instruction. Classes typically met twice a week, for approximately 3 hours. Class size varied from 6-16 learners. Typical of most adult literacy programs (Greenberg, 2008), learners varied in gender, age, race, educational history, and native language status. They read at a 3.0 through 7.9 grade level equivalency (determined by their adult literacy programs).

We delivered a hybrid curriculum. The three teacher-led components included a decoding and spelling strategy program (Adult PHAST), word study (Vocabulary Bridge), and a reading comprehension program (Adult PACES). These components were modeled on research interventions developed for children and adolescents and evaluated by Lovett and colleagues (Lovett et al., 2000; Lovett et al., 2008; Lovett et al., 2012; Lovett et al., 2014; Lovett et al., 2017; Morris et al., 2012). The classes also included AutoTutor, a computer-based intelligent tutoring system, developed by Graesser and colleagues (Graesser, 2011; Graesser & McNamara, 2010) designed to further consolidate learning of the Adult PACES comprehension strategies and content. Independent Reading allowed learners to practice the strategies taught with self-selected texts. We focus attention here on the Adult PHAST instruction, a class component typically taking approximately 45 minutes.

The Adult PHAST Program

Adult PHAST consists of 30 scripted lessons that teach three metacognitive decoding and spelling strategies: Sounding Out, Peeling Off, and Vowel Alert. Metacognitive strategies are important to all aspects of reading development (Liberman & Shankweiler, 1991; Perfetti et al., 2005). Strategy acquisition, application, and self-monitoring are essential to learning and are crucial to positive remedial outcomes. The three decoding and spelling strategies, as well as their prerequisite skills, are taught sequentially, each skill building on the previous, and practiced cumulatively. Once these strategies are acquired, learners are taught the Game Plan, a metacognitive framework designed to help learners select, apply, monitor, and evaluate their application of the strategies. Daily worksheets and text reading provide opportunities to apply the strategies utilizing the Game Plan. Lessons are scripted to allow consistent implementation of all aspects of the instructional design.

The first strategy introduced is the Sounding Out Strategy. First, learners are taught the correct pronunciation and identification of the English phonemes. Although all of the sounds are introduced by the 15th lesson, they are practiced throughout the intervention to facilitate consolidation and ease of retrieval. Learners are also taught how to blend and segment individual sounds in monosyllabic (e.g., *r/a/m/p*) and syllables in multisyllabic (e.g., *sub/stance*) words. All skills are presented and practiced orally before moving to print representations.

As the phonological skills progress, the Peeling Off Strategy is introduced. Learners are taught that many long words consist of affixes and roots. They learn to identify, pronounce, and segment prefixes (e.g., *pre-*, *un-*, *mis-*) and suffixes (e.g., *-ing*, *-less*, *-tion*) from the root of a word, thereby

facilitating the process of reading and spelling longer multisyllabic words. Learners practice the Peeling Off Strategy on worksheets and while reading text.

The Vowel Alert Strategy is the third and final strategy introduced. This strategy focuses on vowels, especially vowel teams, and is introduced halfway through the lessons. Learners are taught to apply a flexible approach to decoding and spelling words containing individual vowels and vowel teams; they try the most frequently occurring pronunciation first, the next most frequent second, etc. For example, when encountering the unknown word *scowl*, the learner would be taught to recognize that *ow* has two pronunciations (*ow* as in *glow* and *ow* as in *cow)* and taught to be flexible when reading the word *scowl.*

Once learners have practiced the three strategies, the Game Plan is introduced. The Game Plan is a metacognitive organizational structure designed to help learners *select* strategies based on clues in a word, *apply* the strategies correctly, *monitor* application of the strategies, and *evaluate* whether they were able to successfully read or spell a word. When unsuccessful, they are taught to select and apply another strategy. Learners are given many opportunities to practice the Game Plan, using a variety of activities and texts, and are praised for being flexible and trying a second strategy if the initial strategy did not reveal the unknown word.

The Experience of Teaching the Adult PHAST Program

As teachers, we participated in considerable professional development before we began to implement the teacher-led components. The intervention developers conducted intensive three-day workshops, and continued mentoring was

provided for over a year. Our mentors periodically observed our classes and provided constructive feedback and ongoing support. Regular phone and videoconference meetings enabled us to discuss our experiences and receive additional support.

Delivering a scripted program was new to all of us, but with practice, we became more confident and soon saw its benefits as it became more internalized and natural. Scripted lessons ensured that delivery was fast-paced, and strategies were presented consistently. The scripted lessons also ensured that the learners got the maximum benefit from the well-documented research upon which the program is based.

Teacher modeling of each of the skills and strategies supported correct use of strategy dialogues and applications. Adult PHAST also called for learners to respond on cue as they practiced the preskills for the strategies. Learner responses, especially with skill practice, were often voiced in unison. This has many benefits; it ensures that learners initiate their own response, helps the teacher hear if learners are articulating a sound incorrectly, allows for group corrective feedback, and maintains a fast lesson pace. Some of the more reluctant learners participated more and showed willingness to respond when prompted this way. We also found that the repetitive dialogue along with the scaffolded structure of the program proved beneficial to the learners and supported retention of newly learned material.

In all of our classes, there were learners with cognitive limitations, health issues, absences, learning disabilities, and those who spoke English as a second language making differentiation in our class sessions important. Yet, due to time constraints, it was sometimes difficult to implement. However, we were able to provide differentiation daily when learners worked

individually on the Adult PHAST worksheets. We also had the flexibility to access simpler or more complex words for spelling dictation. For more struggling learners, we directed them to easier tasks and expected them to complete less than more capable learners. The built-in practice and cumulative review were helpful in keeping learners on task and supported learning.

Feedback from the Adult Learners

The majority of learners demonstrated a high level of engagement and motivation in the program. Their goals, shared during their first week of class, included being able to read to their children or grandchildren, get their high school equivalency diplomas, enroll in post-secondary education, meet educational requirements for specific careers, and be able to read medical information when visiting the doctor. We believe that the motivation to accomplish these personal goals, helped create a sense of community, fostering nurturing, supportive attitudes towards each other. Learners regularly encouraged one another with supportive comments. We also found that community building helped learners, who may have otherwise felt reluctant to articulate and blend sounds out loud or take turns applying the strategies in front of their peers, feel more comfortable doing so.

Although most learners were enthusiastic from the start, there were a few who felt that the program's initial focus on foundational phonological skills was too simplistic and considered dropping the class. However, after the first few classes, they noticed that their learning needs were being met, and Adult PHAST became their favorite part of class. One ESL learner, having had post-secondary education in her native country, shared that she found the Adult PHAST component helped her decoding accuracy and reading fluency. Another learner read monosyllabic words easily but

found it very difficult to read multisyllabic words fluently. She said the Sounding Out and Peeling Off Strategies were particularly beneficial. Many learners with lower reading capabilities shared that all aspects of Adult PHAST were helpful. Others commented that they had never been taught how to read this way and expressed appreciation for this approach. This has helped us reflect on how critical it is to teach basic, foundational skills to struggling readers so that they are better equipped for higher-level skill building.

We found that when classes ended, however, some learners continued to struggle with certain Adult PHAST skills. Recalling all of the affixes, single vowel, and vowel team sounds, as well as applying the Game Plan independently were some of the challenges experienced. There are many possible explanations for this, such as absenteeism and the program's time limitations. Likely, learners were unable to consolidate the over 100 affixes taught between Lessons 10-30 within the time available.

The Vowel Alert Strategy was also challenging. Although learners could recognize the importance of being flexible with vowel and vowel team sounds, many found it difficult to apply this strategy independently. Finally, many learners found it difficult to apply the Game Plan. Due to the amount of content taught, further practice with the skills and strategies and more time for consolidation would have been beneficial. In fact, after the intervention classes ended, many learners wanted to continue working on the Adult PHAST skills and strategies. In some sites, review classes were offered and proved very popular. Learners were also eager to take home copies of the support materials used in class, for further practice.

Despite the challenges, by the end of the program, most learners demonstrated that they were often able to apply the Adult PHAST strategies

when decoding or spelling new words. Learners showed increased reading and spelling abilities and reading confidence. This was apparent as learners shared that they were reading more, helping their children with homework more, and teaching what they had learned to others. One learner shared that, upon arriving in the airport after an international flight, he was able to read and accurately fill out a customs declaration card, something he previously needed help with. Another learner happily reported that she had read aloud and helped write signs at work; these were activities that she never volunteered to do prior to attending class. A math teacher who taught some of our learners noted learners' improved ability to read math problems.

Conclusions

Although no generalizable claims can be drawn from our experiences, we found that delivering the Adult PHAST Program was an enlightening experience. The professional development we received as a feature of the Adult PHAST Program was highly beneficial. This training ensured that

we had the required knowledge and skills to implement the program effectively. Furthermore, the mentoring support we received while teaching also provided us with the additional guidance we needed as we progressed through the lessons.

We learned how critical it is to teach basic foundational reading skills and how eager most adults who struggle with literacy are to receive this instruction. Even our higher-level learners (reading at 6th-7th grade equivalency levels) benefitted because they sometimes had phonological knowledge gaps. We also learned how beneficial it is to carefully sequence the skills and strategies taught so that learners can retain and build on what they learn at a pace suitable to their needs.

Despite the learners' heterogeneity, their motivation was, generally, very high. They were hungry for more instruction on sounds, affixes, syllables, word meanings, and eager to participate in review classes when available. It is important to address these needs and fill learning gaps, and it is never too late to improve on these building blocks of literacy and fluent reading comprehension.

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Introduction to the Forum

Co-Editors, *Adult Literacy Education*

It would be impossible to put out an issue of the *ALE* journal without addressing the COVID-19 pandemic. Its impact has been sweeping, deep, and as we have so often heard, unprecedented. As we write this, it has been with us for about year. Program shutdowns began in mid-March 2020 and have been with us to a varying degree, depending on locale and infection rates, ever since. Programs have dealt with the circumstances in a great variety of ways, but generally with commitment, energy, and ingenuity.

Now the number of Americans who have been vaccinated is steadily rising and the light at the end of tunnel, however dim, is thankfully in view. Although many people may feel that much of how we conduct our day-to-day lives will be changed forever in the aftermath of the pandemic, what the "new normal" will look like in adult education, as in many other sectors, is quite unclear.

We editors decided to devote this issue's Forum feature to a discussion of this very topic. We asked our authors to describe where they see the impact of COVID-19 shut downs on the field as they are now (March 2021) from their vantage point after a year of learning and adjusting and refining, and where they hope the field will go as we enter the post-pandemic "new normal." By asking a state director (Trenia Miles), a practitioner-researcher (Sasha Lotas), and a national policy expert (Judy Mortrude), we believe we offer you an interesting and diverse set of ideas about what should come next.

Forum: COVID-19 and the Future of Adult Education

(Part 1 of 3)

Adult Education: A State Director's Perspective
Where Are We Now? Where Are We Headed?

Trenia Miles, State Director
Division of Workforce Services, Adult Education Section, Arkansas

Since 1964, adult education has played a pivotal role in helping adults improve their lives and advance economically. According to the *Federal Adult Education—A Legislative History, 1964-2013*, when an influx of immigrants started arriving in the United States in the 20th century, language became a barrier for many to fully participate in the work and economic opportunities the country began to offer (Eyre & Pawloski, 2014). In response, states met this challenge by providing instruction to help immigrants learn English. Today, the field of adult education continues the pattern of evolving to meet the needs of its respective community and the nation. For example, family literacy classes are offered to help improve the economic outlook of families and assist parents in supporting their children's academic needs. Workplace classes provide an opportunity for employees to improve basic academic skills and increase work productivity on the job. Additionally, correctional education gives those in institutional settings a chance to earn their high school equivalency diploma so that, upon release, they can reenter society and increase their chances of obtaining a job.

When adult education centers closed during COVID-19 pandemic, the adult education community found itself evolving once again, in unexpected ways, as teachers found creative ways to continue providing instruction to students. For instance, teachers held classes outside in parking lots, delivered course work to students at their homes, and provided academic assistance and instruction both synchronously and asynchronously. The adversity of the moment revealed the character—one of resiliency, ingenuity, and adaptability—of the adult education community. Since students were no longer physically coming to the adult education centers due to the spread of COVID-19, programs experienced a decline in student enrollment compared to the previous fiscal year. For example, during the 2019-2020 program year, close to 22,000 Arkansans came to the adult education center for services, which is a 5% decrease compared to the previous year. As of February 2021, student enrollment in adult education centers across the state is 3,365 compared to 6,448 students during this same time period in 2020, prior to COVID-19. The question of the hour is how to continue to adapt to an environment in which student enrollment is at an all-time low. An approach to consider is one that comprehensively fosters student-centered environments, provides professional development for teachers, promotes adult education, and builds and expands partnerships.

Impact of the COVID-19 Pandemic on Adult Learners

The COVID-19 pandemic has shown us the increasing economic and physical vulnerability of many Americans. We have also witnessed a surge in poverty, housing insecurity (e.g., evictions and homelessness), food insecurity (e.g., hunger and food access issues), long-term unemployment, and challenges with health care access and use. While these hardships transcend demographics (e.g., age, race, ethnicity, gender, socioeconomic status, etc.), workers without a high school diploma or from a lower socioeconomic background are often the ones most adversely impacted. This is partially due to the tendency of this population to work in service industry jobs (e.g., food service, delivery, hospitality, retail, etc.)—many of which closed to minimize or stop the spread of COVID-19—where instability and unpredictability are common. Just as employment access can be problematic for this population, especially during the current pandemic, education access can also be challenging. Prior to the COVID-19 pandemic, competing factors, such as family, work, and school, routinely played a role in adult learners frequently starting and stopping their educational journey. With the presence of COVID-19, many parents made the difficult decision to leave the workforce for generally either safety reasons, to help their children with remote learning, or because childcare was not available. Many adult learners were also unable to attend class, especially during the day, for the same reasons. Overall, it is understandable that the priorities for much of this population has shifted increasingly from education to basic survival.

In the hierarchy of needs, Maslow (1943) describes the first two basic human needs as physiological and safety. Physiological needs include the need for food, water, and shelter, whereas safety needs include having job security and being free from harm. Adult learners who suddenly find themselves unemployed with limited or nonexistent financial resources available are more likely to be primarily concerned with survival, rather than with attending school. Being aware of these dynamics, and how they often contribute to the decline in student enrollment, may aid adult education providers and administrators in better leveraging tools and resources to provide more student-centered education that potentially minimizes the impact of disruptions to the education process.

Student-Centered Environment

When the adult learner fails to attend class consistently or stops attending altogether, the common perception is that they are lacking motivation or are not committed to their educational goals. Although this may be true for some, the reasons adult learners may fail to attend class consistently is as diverse as the adult learner. Nonetheless, judgments about why the adult learner stops attending classes seem to be based more on assumptions, rather than facts gleaned from direct conversation with the adult learner. As such, assisting adult learners may first require suspension of judgment and redirecting focus to cultivating a student-centered environment, where the needs of the adult learner are central.

This also includes strategically considering when and where classes are offered, how often they are offered, who participates, and what polices and/or practices support or hinder the adult learner in completing their educational goal. The hours of operation for many adult education centers are an example of a factor that determine who can participate in the education process and when that can occur. Although programs offer some evening classes, the bulk of student attendance happens during the day.

Offering distance learning is an example of how adult education programs can become more student centered. Students who are unable to attend school due to family and work responsibilities can continue their education with little or no interruptions. When centers closed due to the pandemic, student enrollment was negatively impacted. Distance learning became a viable solution to help combat declining enrollment, but not without challenges. In general, both teachers and students lacked the basic digital literacy skills to successfully navigate and implement online learning. Other challenges faced by staff and students were broadband and internet access, especially in rural or remote areas. Adult education centers whose teachers were trained and equipped to teach online were able to retain some of its students through distance learning. Despite the availability of distance learning, student enrollment remains low due to the pandemic.

Distance learning may become an integral part of how adult education operates beyond the pandemic. Consider the number of colleges that offer online degrees as an option for the working adult. Why should adult education be any different? During the pandemic, many programs have allowed adult learners to complete the intake form and orientation process online, complete pre- and post-test using a remote proctor, receive instruction virtually, and take the high school equivalency exam without coming physically to an adult education center. Many barriers could be removed if more adult education programs began to virtually offer, as a possibility, the entire high school equivalency process from start to finish. Of course, distance learning is not for all students, but it is certainly a viable option for those who are self-directed and time conscious. Unfortunately, distance learning may not always address the issue of access. For example, students

who are motivated, but lack the financial resources to purchase a computer and internet access, may not be able participate in distance learning opportunities. Although distance learning allows students to access education remotely and improve their odds of moving forward, some students will still be at a disadvantage due to the lack of resources. During the pandemic adult education centers purchased Chromebooks and laptops with data cards for students to check out to use, but due to limited financial resources, programs were only able to purchase a few. Therefore, students who had access to the internet were able to continue their participation in adult education.

The pandemic made the digital divide very concrete, especially for those who are of lower socioeconomic status or who live in rural communities. Students who have wanted to continue their education during COVID-19 are unable to do so remotely if they have neither the digital literacy skills needed to navigate learning remotely, nor the access to technology. This issue will need to be addressed if online learning is to be fully accessible and sustainable for all learners.

Professional Development for Teachers

In order to adequately foster a student-centered environment, it is important that adult education center staff are knowledgeable or equipped with the resources and services that are readily available to assist these learners. Staff may have professional development needs that go beyond instruction. They may also require professional development in areas such as distance learning—how to integrate technology into the curriculum, as well as how to use it. The pandemic brought to the forefront the lack of distance learning preparation in our learning centers. Since centers were not initially holding face-to-face classes during the pandemic, distance learning provided

a great learning alternative for those students that could and were willing to access it.

Although the number of teachers trained in distance learning has increased, they continued to struggle not only with navigating remote learning, but also utilizing educational technology tools. Teachers wanted to learn how to integrate technology, but it was challenging for many of them to learn it remotely, especially if they had fears regarding technology. The ability to successfully implement distance learning is an area for improvement for many adult educators.

Although digital literacy skills should be integrated into the curriculum, providers must ensure that basic technology skills are an integral part of the student academic program given that many students also lack digital literacy skills and/ or do not have access to technology. Teachers must also demonstrate their ability to integrate technology into the curriculum even if classrooms return to normal. We know that digital literacy is a necessary 21st century skill set for many employers. Therefore, it is important that both staff and students have basic technology skills.

Promoting Adult Education and Building Partnerships

Under the Workforce Innovation and Opportunity Act, adult education plays an important role in the workforce development system. Although earning a high school equivalency diploma is a critical part of upward mobility, it is only one of many steps toward economic sustainability. Adult education needs to be able to offer more to learners. Recall that adult learners are constantly prioritizing based on competing life factors. Not only must we give adults a reason to come to our centers, but we must also give them a reason to stay that does not conflict with external responsibilities.

Many of our adult learners are facing economic hardships. Businesses that closed during the pandemic have no plans of reopening, which means that for some Americans, they no longer have a job. While some jobs are not coming back, new jobs, which require higher skill levels, have been created. Adult education centers could utilize employment needs as an opportunity to recruit and retain students by marketing workforce preparation and training along with academic skills instruction.

Adult learners often need assistance with transportation and childcare and are experiencing housing and food insecurities. By establishing bidirectional partnerships with social service programs, such as the Supplemental Nutrition Assistance Program Employment and Training, Temporary Assistance for Needy Families, Housing for Urban Development, and Title I Adult, Dislocated Worker, and Youth Program, we can help reduce barriers for the adult learner, which makes completing a high school equivalency diploma possible. In turn, these partnerships can ensure that populations accessing the abovementioned services are able to obtain information about and access to wraparound services that include adult education.

Final Thoughts on the Direction of Adult Education

Adult education is a field that continues to evolve over time. The coronavirus pandemic has impacted us both personally and professionally, while at the same time, it has given us an opportunity to evaluate who we are and where are we going as a profession. As many have witnessed, student enrollment has significantly declined during the pandemic. Yet, we know that students need our services even more now in these economically challenging times.

How do we redesign adult education without changing the essence of who we are? What should be the core of our focus? Are there policies that serve as a barrier to adult education programs and learners that need to be eliminated or modified? How can we maximize our resources in a cost-effective manner?

What services, support, and strategies can adult education provide that will reduce or eliminate barriers for students? Instead of adding to the angst of our learners in making them choose between other competing factors, how can we best support adult learners so that they are able to address their basic physiological and safety needs and continue their education with as minimal disruption as possible?

Adult learners want to be able to provide for their families but may not always have the means or the know-how to do so. Adult education professionals can bridge this gap by being more student-centered in providing educational services students truly need in ways that are as supported and accessible as possible. Time is the adult student most precious resource. Besides helping the adult learner improve basic academic skills, we need to be asking what additional resources and support can we provide them that will also help increase our retention and inevitably, their success?

As a State Director, maintaining a positive attitude and being flexible are two attributes that have helped during this pandemic. It is also important to be supportive and encouraging to providers as they are working very hard to meet the needs of students. None of us has all the answers and most are learning as we go. We do not truly know how long this pandemic will last or if life will ever go back to normal. However, what I do know is that life goes on and we are no stranger to challenges in the adult education field. We will continue to evolve and meet the needs to today's learners.

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Forum: COVID-19 and the Future of Adult Education

(Part 2 of 3)

The COVID-19 Pandemic from an Adult Literacy Practitioner-Scholar Perspective: *Where We Were, Where We Are, and Where We Should Be Going*

Sasha V. Lotas, Academy of Hope Adult Public Charter School

In March 2020, Academy of Hope (AoH) Adult Public Charter School, an adult education and workforce development program in Washington, D.C., abruptly shifted — as did most schools in the nation — to a full distance learning model. This suddenness necessitated a huge teaching and learning cultural shift: In only one week, AoH transitioned from an in-classroom learning environment augmented by digital learning tools to a remote learning environment reliant on digital learning tools.

Almost a year later at the time of this writing, AoH is still navigating this shift, while also learning from and becoming catalyzed by it. I write this reflection as an adult literacy practitioner-scholar — one who was deeply involved in the sudden orchestration of "lock-down" virtual schooling for adults, as well as one who has struggled with negotiating the tension of conflicting paradigms in adult literacy education, such as the tension between a Freirian-based model and a workforce-readiness model (Demetrion, 2013). While this unprecedented pandemic-year has greatly challenged all fields of our educational system, it has especially challenged the adult literacy education field. Yet, it has also shed more light on the value of the field, as well as on the value of tolerating and learning from the field's tensions as it grows and evolves in both a pandemic and post-pandemic world (Roumell, 2021).

Background

Founded in 1985, Academy of Hope began as a small grassroots adult GED program. Over the next 29 years, AoH grew from two volunteers, four students, and four GED books, to serving more than 500 students annually with over 70 active volunteers. In addition to GED preparation, AoH subsequently added the National External Diploma Program (NEDP), technology training, career counseling, and workplace literacy.

In 2014, Academy of Hope became the eighth adult public charter school in the District of Columbia. (The District is rare in that it is home to over 10% of adult charter schools in the nation (Simpson-Baird, 2020).) The decision to evolve from a grassroots adult literacy program to an adult public charter school was fueled by

the changing adult education landscape: both a revised common-core based GED exam and NEDP, as well as changes mandated by the statute that provides federal funds for adult education, the Workforce Innovation and Opportunity Act (WIOA) which superseded the Workforce Investment Act (WIA).

By becoming a charter school, AoH was better able to both prepare for adult education's demanding new role in the 21st century knowledge economy, while also remaining committed to holistically serving adult learners. We hired professionally-trained teachers and enhanced the programming offered to our learners, including workforce training and college transitional services. At the same time, we were also able to invest in critical support services: After years of experience in the adult literacy education field, we recognized that literacy classes, alone, could not sufficiently address the inequitable societal and systemic barriers facing many of our learners.

COVID-19 Pandemic: Building Infrastructure to Meet our Learners' Academic Needs

Understanding that adult learners could not afford to put their education or career training on hold for the duration of the pandemic, our transition to distance learning was swift and expansive. We converted 44 in-person classes into both analog and digital remote classes in the spring of 2020, allowing us to continue serving both lower and higher-level ABE learners.

Our transition was also extremely challenging. Like many other adult literacy programs in the nation, one of our greatest challenges was learners' lack of access to devices and broadband (Belzer et al., 2020). When the COVID-19 crisis began in March, nearly 75% of AoH learners

reported they did not have the digital tools needed to fully participate in distance learning. Of those with devices, many relied on their cell phones to participate in virtual learning, and others shared devices with their children, who were simultaneously participating in their own virtual learning.

In addition, transferring classroom-based instruction to virtual instruction was complicated, as was navigating among various digital learning tools, causing staff and student frustration and some learner disengagement. We quickly understood that adult literacy virtual teaching and learning necessitates more than just teachers, learners, and technology; it also requires a robust behind-the-scenes infrastructure that connects and supports all three.

Fortunately, the summer break allowed us some time to better prepare for distance learning in the fall. With much fundraising and advocacy work, we were able to provide every learner with a Chromebook and internet access, and we were also able to offer technology bootcamps so that learners could receive intensive and individualized digital literacy support.

We also invested in a learning management system (LMS) in order to virtually provide an effective and meaningful teaching and learning experience. By hosting and integrating an array of digital tools, the LMS has helped to create a complete online classroom; AoH instructors can post -- in one virtual space -- a module's full lesson components: video, notes, practice assignments, and assessments. In addition, learners are able to upload completed assignments, and instructors are able both to provide feedback and store assessment scores.

And, simultaneously, we fast-tracked the rollout of a new database, ensuring that we had a

uniform way of tracking attendance and learner information. This also enabled us to provide and virtually house an email address and password for every learner, as well as to sync with the Clever learning platform which allows learners easy access to over ten learning applications and other digital resources used in their classes.

COVID-19 Pandemic: Providing Support to Meet our Learners' Social and Emotional Needs

While developing the infrastructure to support the academic needs of our learners was time-intensive, stressful, and exhausting for all AoH staff, providing social and emotional support for learners was even more so for our student support and instructional staff. The COVID-19 crisis has disproportionately impacted the learners we serve, the majority of whom are African-American and living below the poverty-line, exacerbating already existing societal and systemic barriers. In spring 2020, our student support team logged 1,361 contacts with learners after transitioning to remote learning. Support services suddenly included tasks such as assisting learners who suddenly lost housing, as well as helping learners arrange funerals for family members who had died from COVID-19.

As the pandemic spotlights the child safety-net role of K-12 schooling, it also does so for adult literacy education's essential wrap-around services (such as housing support, mental health services, and connection to local and federal resources). Yet, these are the services most difficult to fund. This pandemic-spotlight warrants increased research studies on adult literacy education's broader social mission in order to demonstrate the essentialness of student support services within the narrative of the adult literacy field.

Pandemic Successes

Despite these intense challenges, we were successful in many ways. Learners who had never turned on a computer prior to the pandemic are now effortlessly Zooming; learners who had never used email are now emailing completed homework assignments to their instructors.

Also, between March 2020 and January 2021—while on lockdown —we proudly helped 25 learners earn their high school diploma through the National External Diploma Program (NEDP) and the GED Testing Service. Due to its flexibility as a self-paced online competency-based assessment program, the NEDP proved to be more immediately effective at helping learners earn their high school credential during the on-set of the pandemic. However, once the online proctored GED test launched over the summer, our GED-ready learners were able to take advantage of this option.

In addition, our health care workforce program was able to thrive. We designed a successful hybrid model for our newly developed Integrated Education and Training-Based Certified Nursing Assistant (CNA) program (the only CNA program in the District to enroll learners without a high school credential), and learners are just now able to complete the clinical portion of the class as these clinical settings are slowly reopening. In the spring, we are launching a phlebotomy track, which – like our CNA program – will also be based on a hybrid model, allowing us to offer even more health care career pathway options to our learners.

Moving Forward and Tolerating Unknowns as an Adult Literacy Professional

Although this year was full of challenges, it was also a catalyst for AoH. Academy of Hope has

long held the goal of offering distance learning for adult students, allowing our programming to better fit the realities of adult learners' busy lives. The pandemic has now forced us to build the infrastructure needed to effectively offer both hybrid and fully remote programs as we move forward.

The year was also full of unknowns, and what we did - and what we are doing - seemed impossible only a year ago, strengthening my resolve to tolerate my *own* unknowns. As a committed adult literacy practitioner, administrator, and researcher, I have often struggled with the uncertainty of knowing how to balance different adult literacy educational goals, such as the Freirian-inspired goal of providing participatory-literacy education with the goal of preparing learners for high-stakes standardized tests (high-stakes for both learners and programs under WIOA (Roumell et al., 2020). This struggle has often "pulled me up short" (Kerdeman, 2003); as voiced by Branch (2007), I have wrestled with questions: By working to serve individual students, do we suggest the correctness and justness of the institutions and systems that they find themselves in and that we support with our work?" Or, conversely "by working to address the manifest injustices in such a system, do we neglect the individual lives presently caught within it?" (p. xi).

As we slowly move towards a post-pandemic world, I am now more willing to reflect upon these questions, as doing so may better help the field build its capacity to productively host the multiple - and sometimes conflicting - goals of both the adult literacy education field (Demetrion, 2013; Roumell, 2021), as well as of the broader U.S. educational system (Labaree, 1997).

Historically, participation in adult education and workforce programs rises dramatically during economic recessions. According to the National Reporting System, D.C. saw a 25% increase in adult students between the 2006-2007 and the 2009-2010 school years when the Great Recession occurred. Post-pandemic, it is likely that enrollment in adult literacy programs will also rise as adult learners seek to gain credentials and career training to make them more marketable.

Post-pandemic, a goal of the adult literacy education field should be investing in multi-leveled Integrated Education and Training (IET) programs to help adult learners achieve their career goals. Simultaneously, however, a post-pandemic goal should also be about helping to ensure that the jobs that IET program participants prepare for have an entry-level family-sustaining wage and lead to meaningful, purposeful careers. In addition, a goal should include serving the needs of all learners, especially those testing at lower ABE-levels, as well as for those not seeking employment.

And, finally, a goal of post-pandemic adult literacy programs should be about facilitating educative spaces "where the potential for an expanded form of learning and the development of new knowledge are heightened" (Gutiérrez, 2008, p.152). This pandemic year, as I immersed myself in learning new technologies, systems, and policies to help quickly orchestrate distance learning, I was reminded of the worth of educative spaces. I remembered the power of such spaces to develop expansive learning, enabling both past and present voices to timelessly connect to one's own, fostering the growth of human potential. Post-pandemic, let this be one of the field's most valuable goals.

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Forum: COVID-19 and the Future of Adult Education

(Part 3 of 3)

Adult Education - Facing the Future

Judy Mortrude, World Education, Inc.

Over the past year, the field of adult basic education has mounted a strong response to COVID-19's disruption of classes and educational practices. As we begin to think about the long-term consequences of this disruption, it might be useful to consider the ways that these changes and innovations could be built upon. In the first place, some of the innovations developed by programs and institutions address important structural problems in adult education programming. Additionally, the pandemic will increase the need for adult education as so many more people have experienced "interrupted or deficient education" and some subset of those will remain disconnected from K12. In order to understand these issues, I first outline some of the key policy issues that have become clear over the past year and then make a plea to adult educators not to return to business as usual.

Initial Responses: Emergency Remote Teaching and Learning

As COVID-19 necessitated community-wide closures beginning in March 2020, adult education joined the international natural experiment in emergency remote teaching and learning. Like many other educators, adult educators tackled challenges and developed new skills, strategies, and program models with energy and commitment. Some of these responses were documented by a collaborative of adult education researchers and practitioners who conducted interviews with practitioners, administrators, and state staff just weeks into the school shut down orders, producing a snapshot of the pandemic's immediate impact on adult education (Belzer et al., 2020). Vanek and Mortrude (2020) followed up the initial studies by convening multiple researchers with the task of looking across their findings to identify cross-cutting themes. Some common issues that emerged include:

- the importance of leadership providing timely communication and supportive policy and practices;

- the need for and practitioners' intense engagement in high quality, multi-layered professional development;

- strategies for supporting access to devices, connectivity, and non-educational resources for learners and instructors;

- the resilience and creative problem solving that emerged among practitioners to meet learners' immediate needs; and,

- recognition that although much was lost without daily face to face interactions, much had been gained in terms of learning to support students across time and distance.

As 2020 wore on, it became clear that while many adult educators had adjusted to remote teaching, there was inadequate funding for the kind of programming shifts necessary to sustain

their work and ensure high quality instructional and programmatic delivery. For example, the Federal CARES Act funding for education did not specifically allocate resources for adult education. Instead, the decision about using funds for adult education was left to the states, setting off advocacy campaigns to convince governors to provide the needed funds for adult education, especially for expanding adult access to devices and connectivity.

Local adult education programs – like their K12 and post-secondary colleagues – often whiplashed between opening and closing restrictions. In addition to trying to meet the needs of their students, they had to comply with the various state and federal regulations and procedures. Testing companies developed remote proctoring processes so that programs could restart assessment and accountability procedures, but barriers related to training, cost, and equipment remained for many programs and learners. Stories like that of a young woman 5 hours into an online test in her bedroom closet who was interrupted by her toddler needing attention and then told her test (and time) were invalid made educators wonder what this system they had created was designed to do.

At the federal level, there were attempts to provide needed guidance and support and extend funding. Specifically, the U.S. Department of Education allowed states to apply for a waiver to extend the deadline on expending Adult Education and Family Literacy Act (AELFA) funds, allowing programs that temporarily closed to use grant dollars longer into the future. The Department also released a series of FAQs pertaining to policy (U.S. Department of Education, 2020). As 2020 drew to a close, state adult education directors sought to capture all these challenges in year-end narrative reports to the agency responsible for monitoring federal adult education funds.

We look forward to the U.S. Department of Education's release of a public facing report on adult education's COVID-19 response distilled from these narratives.

Moving Forward: Changed Work and Changed Education

In 2021, uncertainty prevails, and a sense of stasis grips the adult education field that seems both ready to retreat to the status quo as soon as possible and, at the same time, open to reinventing itself whole cloth. What have we learned? How can we prepare for the future? While only time will provide answers, there are lessons from the past and signals from the present to guide us.

The pandemic accelerated and exacerbated economic trends that have been developing for decades. The first such trend describes the changing job market and the need for training and retraining. A second, related trend, is the continued replacement of workers with automation. Prior to the pandemic, discussions about the future of work often mentioned increasing automation and the elimination of many jobs, particularly affecting workers with less education and income who are disproportionately Black, Indigenous, and people of color. COVID-19 has accelerated this phenomenon as workplaces have invested in automation as a means of continuing operation with less human intervention. Early data suggest this will outlast the pandemic (Toland & Huddart, n.d.). Thirdly, recent data reveals that declining employment growth because of COVID-19 is almost exclusively in jobs that require a high school diploma or no diploma at all, meaning adults with the least educational attainment are hit hardest now and into the future (Kolko, 2021).

Because of all these economic changes, it is

essential that adult education play a critical role in building not only occupationally specific skills through integrated education and training but also what are often called personal and workplace success skills *(National College Transition Network, n.d.)*. Concentration on these types of skills – employability skills, academic, and career skills – is not new for adult education, but it is time to update them with thinking afresh about the types of human skills needed in our accelerating artificial intelligence and machine learning economies (Weise, 2021). COVID-19 has taught us all that we will continually need to adapt to changing work environments and hone our abilities to communicate and collaborate. We need an adult education system that values this skill building as much as reading level gains.

Finally, adult education has been consistently concerned that its learners *and practitioners* do not possess the digital skills needed for now and the future. The problems of providing remote education during the pandemic underscored this issue. If the field of adult education is to play a vital role in the education ecosystem into the future, we will need an increased focus on digital skills and digital resilience in life, family, and at work along with critically important human-centered skills. In order to achieve this goal, adult education needs to actively create its space in the spectrum of education.

Policy Initiatives for Building Digital Skills and Human Skills

The pandemic revealed great disparities in digital access. It has clearly demonstrated that lack of access to high-speed internet connections, internet-enabled devices, and digital skills training disproportionately affect low-income adults and members of Black, Indigenous, and people of color communities everywhere. For

instance, while overall 7.4% of Michiganders have only smartphone access to a computing device, the rate in Wayne County, where Detroit is located, is 10.7%. Further, fully 70% of Detroit's school-age children do not have internet access at home. Additionally, deep mapping by the University of Michigan reveals the pattern of Black neighborhoods as dramatically under-resourced in access and devices (Urban Collaboratory at the University of Michigan, 2019).

These disparities reveal adult education's critical role in addressing digital access and digital skill building within the context of racial equity. The first purpose of adult education according to the Workforce Innovation and Opportunity Act (WIOA) is to *serve individuals with barriers to employment*, which means people confronting multiple barriers to educational and economic opportunities. These individuals are disproportionately represented in Black, Indigenous, people of color communities, and so are disproportionately represented in adult education programs. Adult education is the title in WIOA under which digital literacy is defined, included as a component of *workforce preparation,* and designated an allowable activity within WIOA Title II adult education funds. However, increasing digital literacy is not currently fully recognized or rewarded by federal and state funders as a key activity in adult education classrooms.

Digital literacy is essential for our ever more digitized world. While WIOA Title II funds allow for expenditures on digital literacy, there has been no way within the WIOA Title II National Reporting System to document digital literacy skill gain. This means that hours of time spent teaching valuable skills for learning, working, and living online have been essentially worth nothing in the WIOA Title II federal accountability system. Adult education needs to be fully prepared

to provide digital skill building and 'count' the work in our accountability system. A recent open comment period on adult education's National Reporting System included powerful calls for rethinking distance education reporting and WIOA performance accountability (Coalition on Adult Basic Education, n.d.) and important changes are underway to document these skill gains. With WIOA reauthorization talks beginning, this targeted advocacy needs to grow.

The pandemic has highlighted not only the need for a federal role in expanding broadband access to all regions of the country, but also the need for investment in educational technology. Adult educators now clearly see the value in always having a digital classroom as a complement to face-to-face work. An online presence allows them to mitigate transportation, childcare, and work schedule barriers; to use a blended learning strategy through a flipped classroom approach; and to both prepare adult learners to support children's learning and their own entry to postsecondary education where digital skills are required.

Beyond WIOA, there are powerful ways for adult education to collaborate widely as a way to promote digital equity, digital inclusion, and digital resilience. One example of this is Digital US which is a growing cross-sector coalition, led by World Education's EdTech Center, which includes educators, advocates, employers, and workforce professionals putting their efforts together to meet the digital equity imperative. The Digital Navigator model "addresses multiple layers of digital inclusion. Its goal is to ensure residents receive on-demand tech support and relevant information to secure connectivity and devices, as well as access to foundational digital literacy skills, learning and job training" (Digital US, n.d.). In this model, communities develop their own cadre of Navigators, including adult education providers,

who can provide just-in-time, individualized support via a variety of communication methods that best serve the adult learner.

Adult Education as Integral in Community-Wide Education Solutions

Over the past year, it has become clearer than ever that adult education needs to be an integral part of community-wide educational solutions. The Biden FY22 budget commits to large-scale investments in education at the K12 and postsecondary levels, and calls out adult education within the context of community schools designed to meet holistic family needs (Young, 2021). This is critical work for adult education, but yet again, the federal adult education reporting and performance accountability system fails to capture adult education's role in a community-wide education strategy. Adult education leaders across the country need to center adult basic education's critical place in a community's education services continuum, and it is important to look at not only what happens in the classroom but also at the system itself.

One promising approach was developed in New Hampshire during COVID-19. The education system invested in a common learning management system platform across K12, adult education, and postsecondary education, thus weaving adult education into the educational fabric of the community. In this way, New Hampshire was able to show the value of adult education within the whole family and to the whole community. Another illustration of leveraging adult education to support a communitywide education strategy comes from Northstar Digital Literacy. Started by adult educators in Minnesota and now used nationally and even internationally, Northstar recently developed standards, curriculum, and an assessment for *Supporting*

K-12 Distance Learning with CARES Act funding (Northstar Digital Literacy, n.d.). These solutions demonstrate the importance of having adult education at the table when developing a communitywide education strategy.

In the future, adult educators need to be included in a broader discussion about educational investment. For example, when the Biden administration makes an equity investment in ESSA Title I schools for low-income children, it should also provide resources to build an equitable educational opportunity for the adult parents and family members of those children who are experiencing barriers to economic mobility. The National Coalition for Literacy (Kennedy, 2021) requested that the new administration:

> Integrate adult basic education into an intentionally coordinated lifelong, formal education and training system that spans childhood through adult years and works at every level to disconnect the far-too-predictable links between race/ethnicity, English language proficiency, socioeconomic status, and education outcomes. A fully integrated education structure would provide clear, well-articulated paths and benchmarks for development of the skills and knowledge needed to obtain and retain quality employment, support family wellbeing, and participate fully in their communities, and it would make these services available to all adults who need them. Many of the pieces of such a system are already in place, and the field has good models of how coordination among those pieces can work. Federal investment in a sustained effort to bring the system together in locally appropriate ways throughout the country will increase the effectiveness of all of its parts (p.2).

The pandemic has clearly highlighted the interconnected nature of our education systems. Without parents or caregivers with digital access and skills, children could not fully participate in remote learning. (Of course, this is true of non-remote learning as well.) Children whose parents or caregivers need digital access and skills are at a disadvantage. Adult education needs to be an integral part of designing community wide education strategies.

Future Facing Adult Education

As we look to a future free from COVID-19, I urge adult educators to resist inertia and the pull to go back to the way it was. I am hopeful that adult educators will be bold in reimagining their future program design. We need to be ready for WIOA reauthorization hearings in the spring of 2021 and demand the performance accountability system we need to show adult education's true value within the full spectrum of education. We also need to honor adult education's ability to meet community members where they are and to support individualized learning. Finally, we should articulate the value of adult education not only for the individual but for the community.

By building on what we have learned during the pandemic, we can focus more resources on building practitioners' and learners' digital and uniquely human skills which can, in turn, support resilience within the family, at work, and in local communities. By joining forces with other education stakeholders in our communities, adult education can be a partner in communitywide education solutions. Among the many consequences of COVID-19 may be yet more individuals with interrupted learning who will need adult education services. Let us prepare to meet the future.

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Forum: COVID-19 and the Future of Adult Education

Conclusion to the Forum

Co-Editors, *Adult Literacy Education*

Although each Forum author comes to the question of what should come next as we return to normal and see most programs routinely open up to face-to-face instructional, there were also common themes across their essays. An undergirding assumption they shared is that, although the field may be able to do so, it should resist returning to the status quo. The authors suggest that what we have learned about the benefits and opportunities of remote learning and the reality of a changing world of work demands that we move forward to support and expand digital access and instruction even when we can and do exercise the option to teach and learn in face-to-face settings. Additionally, while the focus is clearly on preparing learners for new employment demands, we should not lose sight of a learner-centered approach that addresses the many other reasons adults seek basic education. The authors also indicated that we can no longer operate with a crisis mentality. Instead, adult educators, funders, and policy makers must find ways to ensure appropriate supports are in place to offer high quality instruction regardless of whether it is in-person or remote. To do so, we need appropriate technical support, professional development, effective learning management and learner tracking systems, expanded access to hardware and software for learners and instructors, and innovative strategies for ongoing student support services even from afar. The authors also noted that the challenges brought on by providing services during the pandemic as well as the gaps created point to the importance of partnerships across education and service sectors that make adult education an integral part of learning across the lifespan and throughout the community. There is much ahead that is unknown, yet the Forum authors agree that taking these steps will guide the field into a "new normal" that can better meet the needs of all learners.

Research Digest

Risk Literacy: What Can Adult Literacy Education Learn from the Decision Sciences?

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Choices, like which health/car insurance plan best meets both needs and budget, whether to evacuate for a hurricane or shelter in place, whether to participate in a protest during a global pandemic, or even which politician serves their communities' interests in an upcoming election, all require adults to determine the risks and/or rewards associated with alternative outcomes of these multifaceted, socially, and culturally embedded real-world problems (Gresch et al., 2013; Saal, 2015; Saal et al., 2020). Adults bring prior experiences, knowledge, and existing skills of inductive reasoning and evaluation to "not only effectively tackle these situations at an individual level but also to take part in public debates and make fair judgments on how the authorities deal with these issues at a local or global level" (Fang et al., 2019, p. 427).

According to the Workforce Innovation and Opportunities Act of 2014, literacy refers to "an individual's ability to read, write, and speak in English, compute, *and solve problems* [emphasis added], at levels of proficiency necessary to function on the job, in the family of the individual, and in society" (Title 2, §203). Yet, according to the Programme for the International Assessment of Adult Competencies (2017), over half of American adults are ill prepared to solve problems that include: two or more steps or processes, interpret simple statistics and data, integrate two or more pieces of information, or use reasoning to compare and contrast information across print and digital texts. Because adults navigate their literate world with their own experiences, solving novel complex problems where background knowledge may be limited or inaccurate/biased (like many risk literacy frameworks/domains) is a particular challenge (Greenberg & Feinberg, 2018).

Yet, in adult literacy education, how often do we consider explicitly teaching problem solving in risk domains? This kind of problem-solving skill is also referred to as risk literacy, or "the ability to evaluate and understand risk" (Cokely et al., 2018, p. 481) in the context of literacy events (Purcell-Gates et al., 2011)? This research digest focuses on using an interdisciplinary approach to teaching risk literacy in adult literacy education settings by applying findings and recommendations from decision science research.

Risk Literacy – Utilizing Structured Decision-Making Processes

Health, natural hazard, consumer/financial, and civic literacy frameworks/domains permeated with authentically complex literacy and numeracy context and content are all ripe opportunities to

teach and practice problem solving (or risk literacy skills) in adult literacy educational spaces (Purcell-Gates et al., 2002). All adults can improve their risk literacy. Yet, improving skilled decisions (or problem solving) in high-stakes circumstances requires a structured approach to decision making. This three-step approach typically involves: first, activating and questioning prior knowledge including formulating the decision-making space; second, advancing and implementing a decision-making strategy which utilizes probabilistic or inductive reasoning; and third, metacognitively evaluating the decision making process (Arvai et al., 2004; Fang et al., 2019).

Skilled decision makers are able to consider and integrate multiple perspectives and utilize tradeoffs where appropriate (Fang et al., 2019; Gresch et al., 2013). Those with high-risk literacy are similarly able to use critical literacy skills to identify bias, power dynamics, inequities, and injustices embedded in both the problem/question and potential solutions/options (Yacoubian, 2018).

An example of a risk literacy framework/domain that has received more attention in research and practice is health literacy. Health literacy is an evolving concept but traditionally defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (Institute of Medicine, 2004, p. 2). However, the construct of health literacy is evolving to additionally include the socially and culturally embedded skills and practices needed to act with agency for yourself or your community using health-related information (Rudd, 2015). Adults with high health literacy are able to formulate questions, seek valid information for their decision making, and critically read and analyze health related information (Feinberg et al., 2019). In short, those with high risk literacy in

the framework/domain of health literacy are able to implement a structured approach to decision making which limits risk and uncertainty in their personal health management and associated care.

Traps and Roadblocks of Risk Literacy

Nevertheless, when adults make complex, risk-laden decisions in health, natural hazard, consumer/financial, and civic frameworks/domains, there are many traps and roadblocks. In addition to the complexity of risk domain texts themselves (Saal, 2016), common barriers are framing effects, heuristics, and a lack of statistical numeracy skill.

Framing Effects

Decisions are framed by how an adult defines a problem as well as the prior knowledge, values, and habits they bring to the decision (Tversky & Kahneman, 1981). Framing is when people make a choice, a decision based on two or more options, grounded on whether options are presented with positive or negative orientations (Tversky & Kahneman, 1981). Specifically, people tend to avoid risk when positive frames are presented. Conversely, adults make riskier decisions when negative frames are presented. For example, hypothetically, adult learners are more likely to register for education programs early when a late registration charge (penalty) is emphasized when compared to when early registration is presented as a discount (benefit). These kinds of framing biases are common, particularly in political, health, and financial contexts and their impact increases with age (Thomas & Millar, 2012; Tversky & Kahneman, 1981).

Heuristics and Biases

Across decisions (high and low risk), adults rely heavily on a series of heuristic principles (and frequently accompanying biases) that

reduce complex judgments to simpler tasks for efficiency and coherence (Kahneman et al., 1982). Four common heuristics include: availability, representativeness, anchoring with insufficient adjustment, and overreliance on affective judgement. However, when adults are making risk laden (high risk) decisions around complex topics, simplification strategies for making decisions like how easily they can recall previous instances of the problem (availability) or how closely a problem resembles another (representativeness) invite significant biases into the decision-making process (Arvai et al., 2004). How/if adults adapt decisions based on initial information (anchoring) or allow the feelings they have about a topic or decision (affective) to influence decision making correspondingly showcase how adults' heuristic principles can become an impediment to effective decision-making (Arvai et al., 2004). Relatedly, strongly polarized beliefs, especially morally relevant biases, can endure even among expertly skilled decision makers (Schulz et al., 2011).

In a risk literacy context, the consequences of biases associated with these heuristics can be dire. Take, for example, an adult deciding not to evacuate during a hurricane because, in their personal experience, hurricanes have not been life-threatening events. The adult does not necessarily take into consideration the differences in hurricane categories and their impact or how their current physical location may raise (or lower) their associated risk of injury or death. Many of these exact heuristics and biases detailed above, coupled with inaccurate risk communication by public officials and institutional racism and associated poverty, led to the untimely death of many during Hurricane Katrina (Cole & Fellows, 2008).

Low Statistical Numeracy Skills

A final significant barrier for adults in effective

decision making in high-risk situations is insufficient statistical numeracy skills (Cokely et al., 2018). Statistical numeracy is strongly related to skilled decision making across risk literacy frameworks/domains since both tasks involve practical probabilistic reasoning and skillful metacognition (Coakley et al., 2018). In today's hazardous and ambiguous world, practiced inductive logic, or rigorous analysis which moves from principles to inferences including probability of uncertainty, can provide better chances of positive outcomes.

Yet, to employ these decision-making strategies, adults must possess a working understanding of probability. Unfortunately, 63% of U.S. adults have low numeracy skills (U.S. Department of Education, n.d.). Even expert decision makers, like surgeons, have been shown to lack adequate statistical numeracy skills to achieve high levels of risk literacy (Garcia-Retamero et al., 2016).

Risk Literacy in the Adult Literacy Classroom – Decision Making Supports

> Any situation in which some individuals prevent others from engaging in the process of inquiry is one of violence. The means used are not important; to alienate human beings from their own decision making is to change them into objects (Freire, 2018, p. 85).

The decision sciences offer three types of decision-making supports which adult literacy educators could utilize to better scaffold inferential decision making more generally and risk literacy skill specifically. The first possible instructional support is teaching learners the three strategies (or procedures) most commonly used to make studied decisions. Second, instructional support in decision making should include specific inferencing strategies. Finally, instructional support in assisting adult's risk literacy development involves scaffolding statistical

numeracy skills in probability and graph literacy. Taken together, all three instructional supports could significantly improve learners' comprehension of complex, real-world problems and potential solutions.

Teaching Three Common Decision-Making Strategies

One of the biggest obstacles to skilled decisions is step two of the structured approach to decision making - advancing and implementing a decision-making strategy which utilizes probabilistic or inductive reasoning (Arvai et al., 2004; Fang et al., 2019; Sadler & Zeidler, 2005). Adult literacy education professionals should begin by asking adult learners to describe and detail their current strategies for decision making. Then, following corresponding group discussion, adult literacy educators may decide to supplement adult learners' knowledge of decision making with one or more of the three typical options/strategies for decision making: compensatory, non-compensatory, and/or combined.

Compensatory. Compensatory strategy considers that benefits and drawbacks of each potential decision choice/option could compensate for one another. Therefore, in compensatory strategy, the decision maker should take all criteria into account for each option and consider options as equally legitimate (Jungermann et al., 2005). Further, important criteria can and should impact the decision more than others. To complete this strategy, first, brainstorm the criteria that will apply to every option. Next, rank the criteria in order of importance. Finally, list the criteria in order of importance under each option and identify the information for each criteria – comparing and contrasting the options based on all of the information.

In an example which could be used in the adult

literacy education classroom, the teacher could provide learners with detailed information about two different financing options for the same car. Next, the learners brainstorm the criteria for the two options (length of the loan, interest rate, number of payments, payment types accepted, total cost of the loan, service quality, length of time they expect to keep the car, etc.). The brainstorming of criteria is a key metacognitive skill and should be initially scaffolded and then done with less support over time. Then, have learners use the text (and any necessary research) to provide the data for each criteria for each loan. Finally, have the learners compare choices, identify their choice, and provide a rationale for the decision. Compensatory strategy can be repeated for many choices like insurance selections, whether to recycle, or when to retire.

Non-compensatory. In a non-compensatory strategy, the decision maker begins with the premise that options may not be equally legitimate and illegitimate options should be eliminated based on ranked criteria (Jungermann et al., 2005). To complete this strategy, first, brainstorm the criteria that will apply to every option. Next, rank the criteria in order of importance and set minimum standards for each criteria. Finally, for each criteria, starting with the most important, rule out the option(s) that do not meet the minimum benchmark set for effectiveness/appropriateness. Then, move through each criterion, in order of importance, continuing to rule out options until only one is left.

In another example which could be used to further develop adult learners' risk literacy, the teacher could provide learners with a question like, "who should you support for the mayoral election?" Next, the learners brainstorm the qualifications they find important in a local official. Components like years/history of public

service, views on working with the community, views on public services, views on taxes and regulations, and views on working with the business community may be included. Again, brainstorming criteria is a key metacognitive skill and should be initially scaffolded and gradually released. Next, have the learners rank the criteria in order of importance and create the minimum standard for each to meet their or their communities' needs. Subsequently, have learners research the data/information for each candidate. Then, by criteria in order of importance, have the learners rule out (or remove from consideration) candidates who do not meet their or their community's needs until they are left with a single choice. Finally, have the learners identify and justify their choice.

Combined. Often, compensatory and non-compensatory strategies are combined. According to Beach (1990), the most common way the two strategies are combined is for the decision maker to first utilize the non-compensatory strategy to remove all objectionable options. Then, if more than one option remains, the compensatory strategy can be used to analyze the choices that are left in order to decide on the best option.

Teaching Specific Inferencing Strategies

Teaching specific inferencing strategies is common in literacy education (Ozgungor & Guthrie, 2004). Nevertheless, adult literacy educators could use the risk literacy frameworks/domains and corresponding multimodal text types to practice inferencing for collaborative discussion and decision making. Specifically, as adult learners interact with real-world risk literacy texts, like political and consumer ads, educators should provide explicit instruction on

analyzing the framing effects and corresponding heuristics and biases for the literacy events. Learners should be provided time to dialog with their colleagues to learn from/about multiple viewpoints and experiences.

Teaching Statistical Numeracy Skills

Finally, adult literacy educators should evaluate their curriculum to identify when/where the essential skills of risk literacy (inferencing and the numeracies of probability and graph literacies) are taught. According to the College and Career Readiness Standards for Adult Education (2013), components of inferencing and graph literacy are not incorporated into ELA standards until learners have reached Reading Anchor 1 - Level C. Further, the numeracy skills of probability and corresponding graph literacy are not addressed until Level D (U.S. Department of Education, 2013). Considering the print-based literacy and numeracy skills of many adults enrolled in adult literacy education programs fall significantly below these levels, revisiting decisions about where and how these essential skills should be taught in the scope and sequence of curriculum is vital and pressing.

Conclusion

While many adults lack exposure to instruction in risk literacy, almost everyone has the motivation and incentive to make well-informed decisions for themselves, their families, and their communities. By emphasizing risk literacy instruction and corresponding strategies from the decision sciences, adult literacy education can positively impact learners' and communities' health and well-being. The risks involved in shifting our practices and curricula are worth the potential rewards.

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Book Review

Review of *Writing on the Move: Migrant Women and the Value of Literacy*

Janet Isserlis, Adult Literacy Practitioner, Providence, Rhode Island

In *Writing on the Move: Migrant Women and the Value of Literacy*, Rebecca Lorimer Leonard articulates ways in which migrant women's uses of literacies and language move and shift through immigration and resettlement, and how ideological, economic, and cultural forces value, devalue or otherwise shape their use of language and literacy. The book's first chapter explores why writing matters; chapters two through four focus on *fluidity*, *fixity* and *friction*, with the fifth chapter analyzing the deep contradictions in the value(s) of literacy that the writer has gleaned from her research.

Leonard engages 25 multilingual writers from 17 countries in a qualitative study and explores how multilingual women encounter and navigate other people's complicated expectations of their abilities and knowledge within English-speaking contexts. The women of varied ages, occupations, and nationalities, whose lives inform the study, share commonalities and differences in their paths and journeys from their home countries to the United States, where the study is based. Through guided and open-ended interviews and conversations, Leonard learns how her participants' expectations are both met and left unfulfilled as they navigate academic, work and community settings. Participants discuss the range of strategies they have developed within work and academic settings in order to utilize language and literacy to meet the needs and purposes of the contexts in which they find themselves. They describe family expectations and challenges, and articulate how they draw on their own sets of language and literacy use in addition to their concomitant abilities to read and understand culture and cultures.

Leonard articulates ways in which heritage languages, colonialism, and other external forces compel women to use one language or another, to navigate different registers in response to
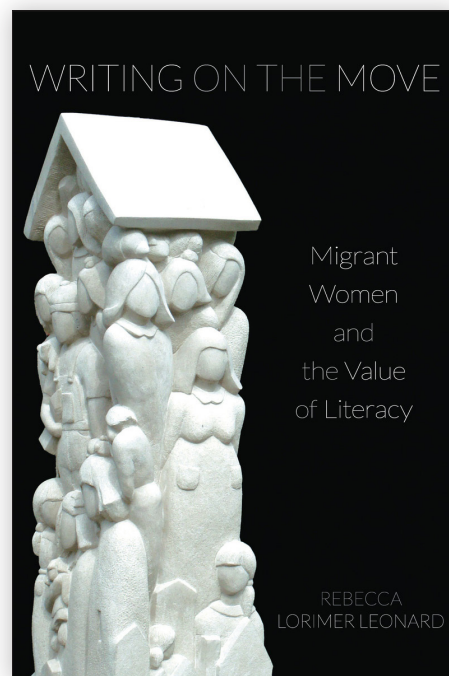
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interlocutors, power, and context. She learns that literacy *itself* is mobile – a notion that may ask readers to re-conceptualize our own beliefs about the power – or lack of power – that literacy (and its deployment) may carry for multilingual, non-English dominant writers. She explores tensions, names contradictions, and lays out ways in which educators, employers, scholars, and writers can consider the strengths that multilingual writers bring to their studies, work, and communities. In one context, a writer may do well as a multilingual resource (providing ad hoc interpreting services, for example), while in another context she may be challenged by a hospital administration that requires nurses to speak in unaccented English while doctors' abilities or credentials are rarely – if ever – questioned because of their own ways of speaking accented English. Leonard (2017) "found that literate lives are not simply mobile or immobile, free or fixed, successful or failed, but are instead lived at a nexus of prestige, prejudice, and power that creates multiple mobilities, simultaneous struggle and success" (p. 5).

While much of the book's content is illuminating, I did have two other reactions while reading. First, Leonard's focus on literacy's multiple mobilities of *fluidity*, *fixity* and *friction* is complex, overlapping and was – at times – challenging for me to follow. The text requires close attention and rewards its readers with a layered analysis of thick description gleaned from hours of conversations, reflection, and feedback with the author's informants. In addition, my expectations of this book as a literacy practitioner whose primary work has been with basic level English language and literacy learners, were that Leonard would explore ways in which migrant women made their way through English-speaking contexts, using the literacy and language strategies available to them. Instead, Leonard presents complicated and layered accounts of the

intricacies of women's lives – many of whom are more "advanced" in their use of English language and literacy than the basic level learners with whom I generally work. I had not expected to read about women whose academic accomplishments surpass those of the students I work with (please note I don't privilege those "higher" levels of language and literacy; I do notice that the women profiled in this text have studied in more academically-focused settings, where students I generally work with have focused more closely on communicative skills for work, family, community, and daily life).

While the primary audience for this book might be scholars and those engaged in academic research, the author presents important insights for adult educators across the board as we prepare learners for advanced study, and even if we do not. In her concluding chapter she points to ways in which systemic patterns of valuing particular sorts of literacy and language use can both support and harm immigrant speakers in that these patterns reify and reinforce common expectations of how non-English speakers perform and interact with interlocutors who appear to judge these speakers' abilities based on assumptions about non-English speakers. *Accented English? Female speaker? Hmm.* I found myself recognizing – and not being proud of – my own assumptions about immigrant women with whom I am in daily contact in a healthcare setting. As educators we pay lip service to valuing everyone's strengths (*they know things, they just may not know them in English)*; this book shakes us by the shoulders and says *there's more to know and understand*. The strength of this book lies in helping us to understand the intricacies of language and literacy on the move, in stasis and in conflict. The book carries implications for policy in workplaces, the academy and within our advocacy for and amplification of voices of learners and colleagues for whom English is not a first language.

Resource Review

Review of *Teaching Effectively with Zoom: A Practical Guide to Engage Your Students and Help Them Learn*

Rebecca Eller-Molitas, Elgin Community College

In its first edition, *Teaching Effectively with Zoom*, provides timely information on effectively engaging adult learners in synchronous instruction via Zoom. This work is based on the experience of the author, his students, and his colleagues at Harvard University as well as research-based principles for effective adult learning. The resource is not a guide to the larger ecosystem of online teaching and acknowledges that live instruction may be only one component of the online teaching and learning experience. This text is targeted toward educators who have at least basic familiarity with Zoom and want to deepen their practice with actionable tips focused on increasing student engagement.

Teaching Effectively with Zoom is organized into four parts. Part I, "Key Ideas," introduces the text and articulates five principles that guide the author's work – including a commitment to student centered instruction which is evident throughout this work. Part II, "Ways Your Students Engage," covers the use of Zoom tools that engage students in instruction by allowing them to interact in various ways. Part III, "Ways You Engage," examines Zoom features that correspond to instructor engagement in synchronous instruction. Finally, Part IV, "Putting it All Together," explores ways to blend synchronous and asynchronous instruction and to build community in the Zoom classroom. Because Zoom technology is rapidly evolving, the author has created a companion website (**https://www. teachingeffectivelywithzoom. com/**) that is updated regularly as implementation strategies change. The site also includes links to additional resources.

At only 12 chapters and 198 pages, this book is an effective starting point for personal development
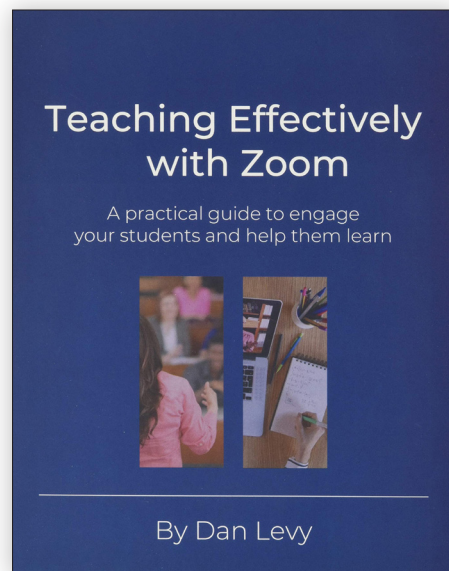
Levy, D. (2020). *Teaching Effectively with Zoom: A Practical Guide to Engage Your Students and Help Them Learn.* Dan Levy. 198 pages. $12.99 paperback. ISBN: 978-1-7353408-1-4

or for program staff who wish to train instructors and tutors in the use of Zoom as a teaching tool. The language used is accessible to tutors who may not have an academic background in education, and ample white space and font size make the text visually appealing. This resource is friendly to educators who are not digital natives because both explanations and images are provided when new technical vocabulary is introduced.

Each section begins with a description of what will be covered and the target skill's usefulness in the virtual classroom. A helpful summary of the chapter's key points follows. For example, Chapter 8, "Present," begins with a brief paragraph on why an educator may want to present during synchronous instruction followed by a bulleted list of presentation tools that will be covered in the chapter such as PowerPoint and Google Slides, Zoom's Whiteboard feature, internal/external video, document cameras, connected smartphones or tablets, and shared audio. Each tool is individually addressed and complemented with screenshots. Throughout the chapters, readers will find "In Practice" boxes which share experience and tips from faculty and students who use the targeted feature. To further expound upon popular tools, this chapter's "In Practice" section includes both a "high tech edition" and a

"low tech edition" example which may be useful to educators who have varying comfort with integrating technology into the classroom.

In conclusion, this resource is appropriate for use by adult education teachers, tutors, and staff who want a hands-on, practical guide to the ways synchronous Zoom instruction can be made more accessible and engaging. Practitioners who lack in-depth experience facilitating Zoom learning and those with some experience who wish to increase their skills will find it useful. The book is logically organized and scaffolded. However, readers may find the lack of an index disappointing as it is not easy to quickly identify all resources related to a particular topic of interest. The inclusion of screenshots and illustrations makes the resource easy to navigate, and educators will appreciate that successful use does not require an extensive time commitment. It should be noted that there are no color images in the print book. Quality of the grayscale images is inconsistent, and print screenshots are not always as clear as one would like. The companion website is updated regularly, so screenshots and videos there remain up-to-date as Zoom evolves and are of a higher quality. *Teaching Effectively with Zoom* is unique in both its timeliness and thoroughness; there are few other texts available like it.

Technology Solutions for Adult Basic Skills Challenges

BlendFlex and HyFlex Models to Increase Student Engagement and Retention

David J. Rosen, Newsome Associates

The focus of each Technology Solutions for Adult Basic Skills Challenges column begins with a common challenge facing adult basic skills practitioners. Solutions offered for these challenges, at least in part through the use of technology, include hardware, such as desktop and laptop computers, smartphones, electronic tablets, VR goggles, robots, and electronic whiteboards; software applications such as websites, course management systems, learning management systems, and databases; and apps for mobile devices. Each article begins with a description of a challenge and examines one or more solutions that use technology.

Description of the Challenge:

In this issue, we offer a technology solution to two large and related challenges: student engagement and student persistence, which, from a program or school perspective, is often described as student retention in or completion of a program. The technology solution we are exploring for these two problems is Flex learning models, specifically HyFlex and BlendFlex.

What Are HyFlex and BlendFlex?

HyFlex and BlendFlex are new models of teaching and learning made possible by digital technology.

They offer adult learners more control to make courses fit the demands of their lives, especially when they are complicated by pandemics or natural disasters, when in-person learning may be difficult or impossible, and when shifting from in-person to remote learning must be easy and seamless.

Purdue Shares Look Inside HyFlex Classroom — Campus Technology

To put Flex learning in perspective, here is a short summary of decades of change in instruction delivery in the United States and in many other countries. Before the digital revolution, there were only group or one-on-one, in-person learning, in a physical teaching/learning space, usually a classroom or a tutoring space; this is now often referred to as traditional in-person classroom teaching or tutoring. There was also paper-

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based distance education, usually referred to as correspondence courses. In the twentieth century, courses were also delivered at a distance through radio and television technology. With digital technology -- including computers, portable digital devices such as smartphones, and the internet and its worldwide web -- online distance education, often now referred to as remote teaching and learning, has grown enormously; it includes massive open online courses, known as MOOCs, but also many other online courses offered by secondary schools, post-secondary institutions and adult basic skills schools and programs. Remote teaching and learning are now provided synchronously (in scheduled "real" time) and/or asynchronously (available any time). We have seen hybrid modes, a combination of remote/online and in-person teaching and learning and, more recently, some programs or schools have chosen an integrated kind of hybrid mode known as blended learning, where what one learns online and in-person addresses the same curriculum content standards, but with both in-person and online teaching and learning approaches.

Now we have Flex learning, an especially convenient and adjustable kind of hybrid or blended learning. There are two kinds of Flex learning, HyFlex and BlendFlex. "Hy" refers to "hybrid", and "Blend" refers to "blended" learning.

In a HyFlex course, students can attend face-to-face or online synchronously or asynchrously. Brian Beatty, Associate Professor of Instructional Technologies in the Department of Equity, Leadership Studies and Instructional Technologies at San Francisco State University, when he was Associate Vice President for Academic Affairs Operations, called the new mode he was developing in the mid-2000's "hyflex." HyFlex has also been implemented at Purdue, the University

of St. Thomas in Minnesota, and in many other colleges and universities.

From Beatty's (2019) perspective, here are four fundamental values or principles of HyFlex (see p. 52):

1. *Learner Choice: Provide meaningful alternative participation modes and enable students to choose between participation modes daily, weekly, or topically.*

2. *Equivalency: Provide learning activities in all participation modes which lead to equivalent learning outcomes.*

3. *Reusability: Utilize artifacts from learning activities in each participation mode as "learning objects' for all students.*

4. *Accessibility: Equip students with technology skills and equitable access to all participation modes.*

How Does BlendFlex Differ from HyFlex?

Although Beatty has described BlendFlex as very much the same as HyFlex (2019) in some BlendFlex implementations there is less flexibility. It is common in BlendFlex, for example, for instructors to pre-assign students' face-to-face attendance on certain days. On other days they may choose how to participate, for example whether to attend remotely, watch a recorded session or complete an online module.

Where Is BlendFlex Used?

BlendFlex is now increasingly used in both community colleges and universities, for examples: BlendFlex has been pioneered at the 2-year Central Georgia Technical College, University of Central Florida, Nova Southeastern University Florida, Florida Gulf Coast University, and at Seward County Community College, in

Kansas. Several community colleges in Illinois have been planning BlendFlex models, and some of these include adult basic skills classes in their plans, for example, Lewis and Clark Community College and the College of DuPage. Pima Community College in Arizona is also including adult basic skills classes in its Flex plans.

In a January 2018 Inside Higher Ed article, "Introducing a New(-ish) Learning Mode: Blendflex/Hyflex," Brian Beatty is cited as estimating that approximately 20 institutions had experimented with variations on BlendFlex or HyFlex. Now there are many more higher education institutions doing this, but how many is unclear.

How are colleges and universities implementing HyFlex or BlendFlex?

Most colleges and universities start with a limited number of HyFlex or BlendFlex implementation courses, perhaps with one or two pilots first, to work out the challenges. A curriculum that may have been used only for in-person classes, even if proven successful, may need to be adjusted so that it is equally successful in online synchronous and asynchronous approaches. Training for instructors in addressing the complexities of delivering a curriculum with three approaches is essential, especially when the goal is to help students achieve the same kinds of successful results regardless of which approach(es) they choose.

In both the BlendFlex and HyFlex mode there may be new technology that needs to be mastered, a mobile robot video camera for example that follows the instructor around an in-person classroom so that students participating remotely can see the instructor and perhaps the students. One example of this technology is the **SWIVL**. In many implementations, first steps include

involving instructors who want to be early adopters, who may also participate in the design of the Flex modes and curriculum. The institution, agency, school, or program may decide not to have all classes delivered in a BlendFlex model. For example, occupational training courses, or other classes in which hands-on practice, observation and assessment are essential, may not lend themselves easily to a Flex model.

Some benefits of BlendFlex and HyFlex to students, teachers and programs

- Students choose the course approach(es). For example, they can learn synchronously but remotely from home or work if they have reliable broadband Internet access, a computer or other suitable Internet-accessible digital device, and videoconference software. They can learn asynchronously if they have access to an online learning management system. Of course, many students will need not only Internet access and digital devices but also digital competence, confidence – and in some cases, courage — to use these kinds of remote instruction well.

- Videorecorded lectures are available to students in an online archive for all class sessions.

- Students who want to be very engaged with teachers, as well as those who don't, have a choice; they can attend a synchronous in-person or remote class with a teacher, or they can complete their assignments asynchronously largely on their own. In a HyFlex mode, they can easily switch back and forth if they wish.

Although teaching in an integrated BlendFlex or HyFlex mode may require more work for instructors, some have found it easier using one of these modes than teaching the same course using separate in-person, online synchronous, and

online asynchronous approaches. A BlendFlex teacher at the University of St. Thomas in Minnesota, for example, wrote, "With blendflex, I have one section with one Blackboard shell, and all my assignments, emails, discussions and course materials are the same for the BlendFlex class and are all located in this one class section, and [it] is so much easier to manage and maintain. Where I had 35 students in three classes, I now have 105 in one class." (Lieberman, 2018, para. 15)

- Flex modes can offer opportunities for student engagement by allowing them to choose when they need in-person instruction and when online synchronous, or asynchronous, instruction.

- Using Flex modes also means that students can stay enrolled in the class when they cannot attend in-person for some period of time but can engage remotely with content that addresses the same content standards until they can return to the class in-person. That can increase student persistence/program retention and course completion.

Some Challenges of BlendFlex and HyFlex Models

- Students generally are not familiar with a Flex model when they begin instruction; it can be jarring at first. To help address this, Central Georgia Technical college has built BlendFlex into its student orientation and trained student advisers to explain how to use it. This includes how the expanded choices and flexibility enable them to meet their needs, but also that students must still be accountable for completing assignments or they may be removed from their course.

- There may be significant costs for equipment, and training teachers how to use it.

- A year-long planning effort may be needed to prepare the Flex curriculum so it can be

seamlessly used by the teachers and students in-person, remote synchronously and remote asynchronously.

Reflections

Flex models appear to be expanding in higher education; in several community colleges in Illinois, as mentioned earlier, BlendFlex models are being adopted for some classes, and some of these include adult basic skills education programs. You may wonder, have flex models been proven to work? There is not yet much research. Are they best practice? Some colleges believe they are for some courses, but this is largely untried in adult basic skills programs. How difficult or expensive are Flex models? That depends. Some community colleges purchase high-end equipment to assure top notch video streaming from the classroom, including robot video cameras that can follow the instructor around the classroom, and speakers and microphones in the classrooms that allow students to be easily heard by those at home. This could be complicated and expensive to do well; however, flex models may work well enough without elaborate and expensive equipment. In some cases, a simple version might work well enough, for example, one that equips the classroom teacher with a battery-operated lapel microphone connected to a laptop computer connected by a hotspot to the Internet.

Flex models could be a boon for the adult basic skills field. For many years, our field has had a challenge with student retention and completion of classes or courses (Lieberman, 2018). In the research literature, three kinds of barriers to retention are often described:

- Situational, for example when students lack childcare or transportation to get to an in-person class,

- Motivational, for example when students lack confidence, "grit," or a compelling personal reason or goal for the class or course, and

- Institutional where, because of the institution or organization policy on class attendance, the days and times classes are offered, or a requirement for in-person attendance at a class, well-intentioned students find they can no longer attend class, and must stop out for a time, or drop out altogether.

The growth in education, from solely in-person, to hybrid, to blended, and now to Flex models, offers significant ways to reduce these institutional barriers to retention, and to better fit course delivery to adult learners' lives, and especially the emergencies that adult learners often face. With Flex modes, especially HyFlex, which provides students with the greatest opportunities to make choices that fit their course experience to their life and learning needs, we have the potential to greatly increase class or course retention and completion. If so, this would benefit students, education agencies and institutions and, once teachers get the hang of delivering Flex instruction, possibly for them as well.

However, this is all very new; we do not yet know if, in fact, retention will be improved, or if Flex instruction actually delivers on its other proclaimed benefits. We need evaluation and research over time to know.

Further Reading

Hybrid-Flexible Course Design (Updated 07/07/20), free and online at **https://edtechbooks.org/pdfs/mobile/hyflex/_hyflex.pdf**

7 THINGS YOU SHOULD KNOW ABOUT ... ™ The HyFlex Course Model **https://library.educause.edu/-/media/files/library/2020/7/eli7173.pdf**

What Students Need to Know About BlendFlex (University of Central Florida) **https://digitallearning.ucf.edu/newsroom/keeplearning/blendflex-model/**

What Faculty Need to Know About BlendFlex (University of Central Florida) **https://digitallearning.ucf.edu/newsroom/keepteaching/blendflex-model/**

Preparing for HyFlex Instruction **https://go.playposit.com/blog/preparing-for-hyflex-instruction**.

External Evaluation Positive results achieved in a BlendFlex math course **https://members.aect.org/pdf/Proceedings/proceedings19/2019/19_32.pdf**

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