

Adult Literacy: The State of the Field

by Daphne Greenberg

Adults who have difficulty with reading are a heterogeneous population. They are diverse in all facets of their backgrounds, such as, age, gender, race, ethnicity, language backgrounds, sexual orientation, employment histories, incarceration histories, family dynamics, religion, and history of disabilities. In my orientation to adult literacy, I often explain to my graduate students that if one visits an adult literacy program in one neighborhood and then visits another program in a different part of the country, it is very likely that the class composition will look very different—basically reflecting the community where the class is situated. Although these differences bring important cultural diversity to the field, it can make research and teaching very difficult.

Adult Low Literacy in the United States

Unfortunately, the topic of adults who struggle with reading is not a subject discussed at great length, nor is it an area that receives much funding. This lack of attention is a great disservice to the individuals who have difficulty with reading, their families, and society. People are often surprised to hear how prevalent low literacy is in our country—often relegating this concern to developing countries. However, according to the 2003 National Assessment of Adult Literacy (Kutner et al., 2007), more than 90 million adults over the age of 16 in the United States (more than 40%) have low literacy skills. According to ProLiteracy (2013), 14% of adults over the age of 16 read at or below a fifth-grade level, with only 29% reading at the eighth-grade level. In addition, 75% of state prison inmates and 59% of federal prison inmates have not graduated from high school or can be described as having low literacy skills. Twenty percent of adults have literacy skills that are considered inadequate for the workplace (Comings, Reder, & Sum, 2001). Those who have difficulty reading are also reported to have less Internet access and lack the knowledge of how to effectively use the digital technology that has become so integral to contemporary life (ProLiteracy, 2013; Zickuhr & Smith, 2012).

These figures come at a high cost to society. For example, low literacy skills are estimated to contribute to \$230 billion of the United States' annual healthcare costs, \$225 billion of non-productivity in the workforce each year, and the loss of tax revenue due to unemployment (ProLiteracy, 2013). Although the prevalence of low literacy skills in the United States is high, advocates of adult literacy bemoan that the lack of funds devoted to research, professional development of teachers, educational materials, and program infrastructure historically has been neglectfully poor (e.g., Greenberg, 2008). Despite this lack of focus, there are individuals throughout the world who have devoted their professional lives to conducting research in this area, developing curriculum, opening adult literacy programs, and teaching adult literacy learners.

Research Issues in Adult Literacy

An intriguing question that has plagued reading researchers is whether or not children and adults who read at the same grade level possess the same underlying reading skills. So, for example, if one compares a child who reads at the third-grade level to an adult who reads at the third-grade level, do they possess the same underlying skills? In 1997 and 2002, my colleagues and I found that this question has a complicated answer (Greenberg, Ehri, & Perin, 1997; Greenberg, Ehri, & Perin, 2002). On the one hand, we found that the same *orthographic* (i.e., awareness of visual and spelling patterns of words) and *phonological* (i.e., awareness of letter-sound relationships) knowledge was important in explaining word and nonword reading performances of the participants; but on the other hand, compared to the children, the adults were more deficient in their phonological skills (such as decoding nonwords) and stronger in their orthographic skills (such as reading sight words). In addition, when error analyses were conducted on their reading and spelling mistakes, compared to the children, adults relied less on phonological cues and more on orthographic cues. For example, in a task of nonword reading, compared to children, adults read these items significantly more often as real words, while the children used more decoding strategies to read the nonword items.

Another area of interest of mine has been the oral language skills of adults who read at or below the fifth-grade level. A commonly held belief used to be that the oral language skills of adults who struggle with reading would be more advanced than their reading levels, due to their greater daily experience using oral language (e.g., Hoffman, 1978). However, my colleagues and I have been finding that this is not necessarily the reality. Adults who have low literacy skills also exhibit difficulties with oral syntax, receptive vocabulary, and expressive vocabulary tasks (e.g., Greenberg et al., 1997; Hall, Greenberg, Laures-Gore, & Pae, in press; Taylor, Greenberg, Laures-Gore, & Wise, 2012). In other words, these adults often have difficulties with advanced vocabulary and sentence structures. This phenomenon may be explained within the context of what is known about the connection between oral language and reading. Researchers such as Chall (1983) and Stanovich (1993) have noted that compared to, for example, conversational language and language heard on television, reading provides an individual with exposure to language that is much more complex and rich. Therefore, although adults with low literacy skills are exposed to adult oral language experiences, they are not exposed to the complexities of difficult vocabulary and complicated syntax patterns that are apparent in advanced reading materials.

An added layer of intricacy to research in the field of adult literacy is the fact that many of the research findings

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(including my own) are based on commonly used reading tests that are not age appropriate for adults who read at very low levels. Instead, these tests are standardized on younger individuals. However, they are the only means available to assess the elementary reading skills of these adults. It is an empirical question whether the assessments that are typically used to study the underlying processes of reading of younger individuals can be used to effectively assess adult struggling readers' abilities in a reliable, valid, and discriminating way (Greenberg, Pae, Morris, Calhoun, & Nanda, 2009). One could argue that some of the potential complexities that may arise are similar to out-of-level testing, which refers to testing a student who is at one grade level on a test designed for students at a different grade level. (Minnema, Thurlow, Bielinski, & Scott, 2000). As Salvia and Ysseldyke (2004) state, "...a person's performance on a test is measured in reference to the performances of others who are presumably like that person in other respects" (p. 30). When this does not happen, the assessment may be questionable and inadequate in helping us understand the test taker's strengths and weaknesses.

Promising New Research

In the last decade, federal agencies have begun to pay more attention to the need for funding research in the field of adult literacy. In 2002, the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the U.S. Department of Education Office of Vocational and Adult Education, and the former National Institute for Literacy funded six research projects to focus on instructional issues for adults with low literacy skills. The results from these studies, which were published in a special issue of the *Journal of Research on Educational Effectiveness* (Foorman & Hedges, 2011), indicated that facilitating large literacy gains with adults who have low literacy skills is a very challenging endeavor. These findings and findings from other intervention studies before and after suggest that much more research is necessary to determine which type of reading instructional approach is most effective for each type of adult literacy learner.

In September of 2012 my colleagues and I were awarded a five-year research center (Center for the Study of Adult Literacy/CSAL; csal.gsu.edu) from the Institute of Education Sciences with the focus on adults who read between the third- and eighth-grade levels. CSAL's goals are to analyze the underlying reading, motivation, and cognitive skills of these adults, as well as to explore the appropriateness of the assessments that are commonly used to study these skills. Another goal includes the development and testing of a reading curriculum that includes a web-based, animated e-tutor.

In 2012, a report was published by the National Academy of Sciences (National Research Council, 2012) in response to an invitation by the U.S. Department of Education to the National Research Council to review research in the area of adult literacy. The committee generated recommendations to policy makers, researchers, and practitioners. In addition, the results from the internationally administered Programme for

the International Assessment of Adult Competencies (known as the PIAAC; <http://www.oecd.org/education/highereducation/adultlearning/piaacprogrammefortheinternationalassessmentofadultcompetencies.htm>) will be released in late 2013. This literacy evaluation is the most wide-ranging international assessment of adult skills ever administered. It is hoped that the combination of the National Research Council report and the PIAAC will generate funding for a field that desperately needs resources in the areas of research, professional development, curriculum development, and infrastructure. For example, the adult literacy instructional workforce is heavily composed of part-time teachers, many of whom are very dedicated, but are poorly paid and under-trained. This situation makes it very difficult to translate research to practice.

For a good overall characterization of adult literacy program issues, readers are encouraged to read the Tamassia, Lennon, Yamamoto, and Kirsch 2007 report found at: http://www.ets.org/Media/Research/pdf/ETSLITERACY_AEPS_Report.pdf

Looking to the Future

Many questions remain unanswered in the area of adult literacy. Examples include the prevalence of learning disabilities in adults who have low literacy levels, the tension between the amount of time that adults can devote to education versus the amount of time it takes to become an expert reader, and the role that technology can take in adult literacy instruction. Ideally, funding will be dedicated to adult literacy research, so that these and other questions can be explored. From a social justice perspective, adults who struggle with their reading deserve attention to their literacy needs. It also behooves society to make adult literacy a priority. An educated populace is critical for a healthy democracy, for workplace efficiency, for lower health care costs, and for intergenerational transmission of literacy skills.

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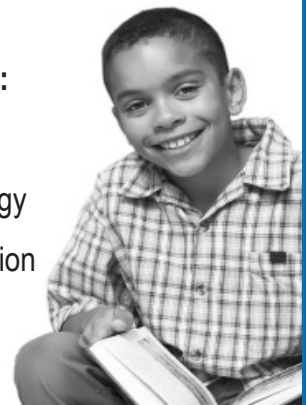
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