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Research-Based Principles for Adult Basic Education Reading Instruction

John Kruidenier, Ed.D.

Consultant, NIFL/NCSALL Adult Literacy Research Working Group

*For those who teach reading to adult learners, what are the key points that can be drawn from the work of the NIFL/NCSALL Adult Literacy Research Working Group (ALRWG), the group of experts who worked on **Research-Based Principles for Adult Basic Education Reading Instruction** and who are now working on updating the principles?*

First of all, given the methods that the group used to review adult reading instruction research, there is just not enough research to arrive at a set of firm principles for adult reading assessment and instruction. Virtually all of the principles that can be derived from the research should be viewed as *emerging* principles. That being said, it is fairly clear from the research that reading programs for adults should strive to obtain accurate and complete assessments of each adult's reading ability. Most instructors know that adults in basic education programs can be at just about any level in their ability to understand what they read. The research suggests as well that adults can be at just about any level in each of the other crucial aspects of the reading process, those that enable comprehension: their phonemic awareness, their knowledge of letter-sound relationships, their reading fluency, and their understanding of specific concepts or vocabulary. Accurate and complete assessment should inform instruction.

What about instruction? When the emerging principles from *Research-Based Principles* are viewed alongside ideas derived from the much stronger K-12 reading instruction research base, concrete suggestions for instruction emerge for teaching comprehension strategies, reading fluency, and letter-sound knowledge. Even if research with younger readers is relatively strong and carefully applied in adult settings, more research with adult new readers themselves is needed. NIFL, the Department of Education, and NICHD are sponsoring at least five long-term research projects that will investigate the best ways to teach reading to adults. Also, new and reliable assessment information about adult new readers will become available over the next few years as the next National Assessment of Adult Literacy (NAAL) is completed. The ALRWG will look to the results from this research, as well as ideas from reading research with populations other than children, as it works on the update to *Research-Based Principles*. (John Kruidenier, March 2004).

Executive Summary

The Reading Research Working Group (RRWG), a panel of experts on adult reading research and practice, was established by the National Institute for Literacy (NIFL) in collaboration with the National Center for the Study of Adult Learning and Literacy (NCSALL). It is part of the Institute's efforts to provide educators, parents, and others with access to scientifically based reading research, including research-based tools for improving literacy programs and policies for children, youth, and adults, through the Partnership for Reading.

The purpose of the RRWG was to identify and evaluate existing research related to adult literacy reading instruction in order to provide the field with research-based products including principles and practices for practitioners. This document presents findings from an analysis of the adult basic education (ABE) reading instruction research base and is designed as a resource for practitioners and reading researchers. It focuses on *principles* that can be derived from the research and a research agenda for the future.

For the purposes of the RRWG, "adult reading instruction research" is defined as research related to reading instruction for low-literate adults, aged 16 and older, who are no longer being served in secondary education programs. This includes low-literate adults in community-based literacy centers, family literacy programs, prison literacy programs, workplace literacy programs, and two-year colleges. It includes research related to all low-literate adults in these settings, including adults in ASE (Adult Secondary Education) programs, ESOL (English for Speakers of Other Languages) programs, and adults with a learning or reading disability.

Evaluating the Research

Two recent reports were influential in guiding the work of the RRWG: *Preventing Reading Difficulties in Young Children* of research related to reading instruction with children (National

Reading Panel, 2000). For the NRP review, major topics for study were established, studies were located through a literature search, and studies were evaluated using a set of “evidence-based methodological standards.”

The RRWG made several modifications to the approach used by the NRP. Important modifications included the addition of topics especially important to adult reading professionals, the inclusion of studies related to the assessment of reading ability, and the inclusion of non-experimental studies as well as those involving the use of control groups.

Like the NRP, the major topics selected for study by the RRWG are those components of reading found by the National Research Council and others to be crucial during reading instruction: alphabets (phonemic awareness and word analysis), fluency, vocabulary, and comprehension. The ultimate goal in reading is *comprehension*. Readers read a text in order to understand and use the ideas and information contained in it. Comprehension is improved when readers understand the key concepts or vocabulary in a text. Reading comprehension may suffer, however, when readers are unable to recognize individual words in a text. A reader may be conceptually ready to understand a text, for example, but will not have the opportunity to do so if he or she cannot read the individual words. To read individual words, the reader must know how the letters in our alphabet are used to represent spoken words (*alphabets*). This includes knowing how words are made up of smaller sounds (*phonemic*

awareness), and how letters and combinations of letters are used to represent these sounds (*phonics* and *word analysis*). The ability to figure out how to read individual words, however, is not sufficient. Readers must also be able to rapidly recognize strings of words as they read phrases, sentences and longer text. Fluent reading is crucial to adequate comprehension.

Effective reading and reading instruction cannot occur without sufficient motivation. Motivation is one of the additional topics selected by the RRWG for study, along with others that are especially important for adult reading instruction: computer technology, reading assessment, program goals and setting (family literacy, workplace literacy, and general functional literacy), instructional methods (strategies, material, teacher preparation, and the intensity and duration of instruction), and specific characteristics of learners that affect instruction (reading level, whether English is their first language, the existence of a learning disability, and motivation).

Use of K-12 Research

One task for the RRWG was to identify gaps in the ABE reading research and to consider how these gaps might be addressed. What research is needed and, of more immediate concern, where should the ABE instructor look for suggestions on the best ways to teach reading to ABE learners when the ABE research has not yet addressed a topic? One strong recommendation from the RRWG was to look to the NRP results

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The Four Elements

The Reading Research Working Group, sponsored by a collaboration between the National Institute for Literacy and the National Center for the Study of Adult Learning and Literacy, evaluated the research related to four elements (which the report calls components) that should be included in reading instruction offered in adult basic education classes. For more information go to www.nifl.gov/partnershipforreading/adult_reading.html.

The Website lists the following definitions:

Alphabets	The whole process of using the written letters in an alphabet to represent meaningful, spoken words is called alphabets.
Phonemic Awareness and Word Analysis	Alphabets includes both phonemic awareness (PA) and word analysis (WA). Students with good PA know how to manipulate the individual sounds (phonemes) of spoken English... Students with good WA know how individual letters and combinations of letters are used to represent the sounds of spoken English.
Fluency	Fluency is the ability to read with speed and ease. When readers are fluent, they read accurately, without making mistakes in pronunciation, and with appropriate speed and rhythm.
Vocabulary	Vocabulary is a term used to refer to all of the words in a language. Our own vocabulary consists of the individual words we understand or know the meanings of.
Comprehension	Reading comprehension is understanding a text that is read, or the process of “constructing meaning” from a text.

Adult Reading Components Study (ARCS) Summary

Karen Rowe, M.P.H.

NCSALL Dissemination Director, World Education
Boston, MA

According to the preliminary findings of NCSALL's Adult Reading Components Study (ARCS), adult learners fall under one of three broad groups, each of which is distinct and has different instructional needs. Led by John Strucker and Rosalind Davidson, both at the Harvard Graduate School of Education, the study administered a battery of assessments to 957 randomly selected learners at learning centers in seven states. The learners (676 adult basic education students and 279 students in English for Speakers of Other Languages programs) were tested on the critical skills—or components—that make up reading ability: phonological awareness, rapid naming, word recognition, oral reading, spelling, vocabulary, and background knowledge. Researchers also interviewed students about their educational history and reading habits. For the 218 of the 279 ESOL students whose native language is Spanish, component tests were administered in both Spanish and English, and they were also interviewed in Spanish.

Based on the results of these assessments, ABE learners were divided into the following three groups, in descending order of skill level: Group 1 (GED/Pre-GED); Group 2 (Intermediate); and Group 3 (Low Level/Beginning). ARCS researchers found that because GED-level and low-level/beginning readers have different profiles from intermediate readers, they require different instructional approaches. GED/Pre-GED readers should be provided instruction that helps them pass the test and build the skills necessary for postsecondary education. For low level/beginning readers, instruction should focus on phonemic awareness and word recognition skills, and be presented in a

direct, systematic, and sequential fashion. Intermediate readers, who comprised the largest portion of learners in the study, appear to have learned some word attack skills; they know basic phonics, but do not make strong use of those skills. Thus, intermediate students' primary needs are increasing fluency and developing a more literate vocabulary and stronger background knowledge.

As for the Spanish-speaking ESOL students, the researchers note that while the size of the sample used in this analysis preclude their findings' generalizability across all Spanish speakers, they can be suggestive. For example, the researchers found that contrary to what ESOL teachers told researchers to expect, 80% of the native Spanish speakers had adequate or better native language literacy skills. Accordingly, it may be more appropriate to provide these students instruction based on an "English-as-a-Foreign-Language" (EFL) approach. ARCS researchers also found that ESOL Spanish speakers' reading ability in Spanish was directly related to years of Spanish school completion: the more years completed, the stronger the skills. And all native Spanish speakers in the study were weak on English consonant sounds.

A more detailed discussion of these preliminary findings of the ARCS can be found in a NCSALL research brief of the same name, which can be downloaded from NCSALL's Website at: http://ncsall.gse.harvard.edu/research/brief_strucker2.pdf

To learn more about NCSALL's Adult Reading Components Study and other NCSALL research, and to download NCSALL publications, visit: <http://ncsall.gse.harvard.edu>. ■

Resources

NCSALL

The National Center for the Study of Adult Learning and Literacy (NCSALL) both informs and learns from practice. Its rigorous, high quality research increases knowledge and gives those teaching, managing, and setting policy in adult literacy education a sound basis for making decisions. NCSALL is also a leader in designing innovative professional development programs and in building support for research use (<http://ncsall.gse.harvard.edu/ncsalldes.html>).

The following resources will be available (in late Fall) to download for free from the NCSALL Website at: <http://ncsall.gse.harvard.edu> and click on "Teaching and Training Materials."

Research-Based Adult Reading Instruction Study Circle Guide

This Study Circle Guide is one of a series of study circles NCSALL has developed. The purpose of the study circle guides is to help professional developers and practitioners organize

and conduct Study Circles that help practitioners read, discuss, and use research to improve their practice. This 10-hour, 4-session Study Circle is based on a review of adult reading research conducted by a panel of experts called the Reading Research Working Group.

Understanding What Reading Is All About: Teaching Materials and Lessons for Adult Basic Education Students

While reading teachers are often guided by what they know about the stages and components of the reading process, it is rare that they share this information with students. By understanding how one becomes a fluent reader, students can reflect on their own process of improving reading skills. This guide offers a set of 13 lessons designed to help learners understand the components of reading that are part of becoming a more fluent reader, and to guide students as they work with the teacher to set their own goals for reading. The lessons can be used as an independent mini-course, or they can be integrated into an existing curriculum.

Considering What It Means To Read With Understanding — And What It Means To Teach It

Amy R. Trawick, M.S. Ed.
Coordinator, Equipped for the Future Reading Project
Knoxville, TN

Over the past two years increasing numbers of tutors and teachers in the field of adult and family literacy have become aware of what gets talked about as “the reading research”—that body of evidence that supports particular reading instructional practices in the areas of alphabeticity, fluency, vocabulary, and comprehension. In developing the materials for the Equipped for the Future (EFF) Reading Project, our goal was to integrate these findings about effective reading instruction into the EFF approach to teaching and learning. This article explores the connections we made between the EFF Content Standard—Read With Understanding and the reading research—and how tutors, teachers, and programs can use this information to support students in reading to accomplish important purposes in their lives.

Connecting the Reading Research to RWU

Read With Understanding (RWU) is one of 16 applied learning standards that have been identified through Equipped for the Future’s research on adult learning (Stein, 2000). Like the other 15 EFF Standards, RWU is conceptualized as an integrated skill process that individuals use to accomplish goals and purposes related to their adult roles as workers, family members, and community members. The five components of the *Read With Understanding* standard describe this process; however, it is important to note that the components do not occur in sequential, discrete steps. Rather, the components are *integrated* as the reader draws upon sets of underlying skills in order to read with understanding to accomplish identified and meaningful purposes.

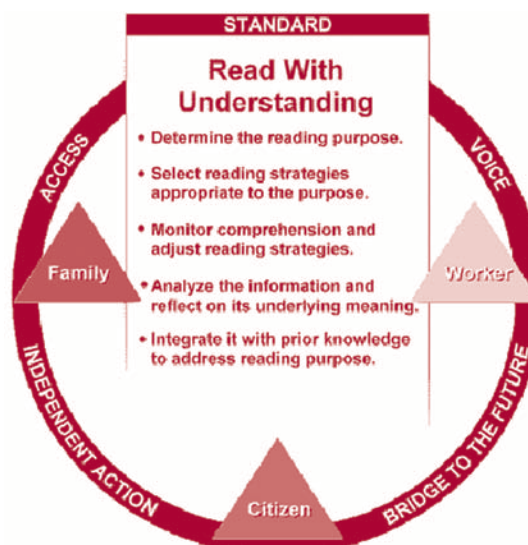
Recent reports that review and synthesize research on reading instruction have helped EFF to articulate these underlying skills that readers integrate during the reading process. The report *Research-Based Principles for Adult Basic Education Reading Instruction* (Kruidenier, 2002) discusses “emerging principles” from the relatively small base of adult reading instruction and supports these with findings from *Teaching Children to Read* (National Reading Panel, 2000), a report on K-12 reading instruction based on a much larger body of research. The reports organize these instructional principles around four elements: alphabeticity, fluency, vocabulary, and comprehension. As the EFF Reading Project studied these four elements, it became clear that they could be thought of as sets of *knowledge, skills, and strategies*.

Knowledge refers to what the reader knows about each reading element. For instance, in alphabeticity, the skilled reader knows that written spellings usually and systematically represent the sounds of spoken words. This knowledge can be used when trying to figure out, or *decode*, unknown words. In the area of comprehension, knowledge consists of such things as knowing that readers read for a purpose, and that reading can break down and require specific “fix-up” strategies.

Skills refers to what the reader can do with that knowledge as he or she reads. For example, in the area of alphabeticity, it is helpful to have knowledge that *b* says /b/, *a* might say /a/, and *t*

says /t/; it is even more useful for reading purposes to be able to apply this knowledge in the skill of decoding when one encounters the word *bat*. In the area of comprehension, it is important that the reader know that monitoring comprehension is something that good readers do. However, it is actually the ability to monitor comprehension—a skill—that is of practical significance.

Strategies refers to intentional ways that readers perform skills. There may be a multitude of strategies for performing certain skills. For example, Joe, a novice reader, sees the sentence, “The bat hit the ball with a smack” and gets stuck at the word *bat*. He decides to try to decode the word (a skill), applying at least one of several possible strategies. He might try segmenting the word into individual sounds—/b/+a/+t/. Or, he might decide to look for a word he knows inside the larger word. To decode *bat*, then, he might find the word *at*, put a /b/ in front of it—/b/+at/—and come up with *bat*. He might use another strategy, comparing the unknown word to a full word he knows—*cat*—substituting a /b/ for the /k/. Any of these strategies might be used for accomplishing the skill of decoding.



More complex strategies aid the reader in using comprehension skills. Susan, for instance, has a variety of strategies that will help her determine the main idea and supporting details of a text (a skill). She might first look for headings or numbered sections, knowing that authors often try to mark their main points. She might read the first sentence or paragraph in a section and compare following sentences or sections to the first to see if it captures an idea bigger than the others. She could draw a graphic organizer to help her see the relationships. Or, she might use different colored highlighters and write notes in the margin as she works out her hypothesis and keeps track of her thinking. Again, each of these strategies, applied appropriately, can help her accomplish the skill of finding the main idea and supporting details.

This scheme of knowledge, skills, and strategies outlined for alphabets and comprehension can also be applied to fluency and vocabulary, the other two elements named specifically in the reading research.

Skilled Performance of RWU

Let's now consider how a skilled reader reads with understanding. A reading toolbox can be a helpful metaphor for all the knowledge, skills, and strategies that the skilled readers draw upon in the reading process. It might be tempting to see this toolbox as one that is merely large, containing a breadth of knowledge, skills and strategies. However, research on how people develop expertise tells us that the knowledge base of experts is not only broad but also *organized* for efficient retrieval. So instead of a hodge-podge of tools thrown willy-nilly into a box, we want to be sure that we envision an organized toolbox for our skilled reader, maybe even a tool *chest* with drawers representing the key sets of knowledge, skills and strategies. Because these drawers are organized, the skilled reader can access these tools with ease to accomplish a wide range of tasks in a wide range of situations. Furthermore, a skilled reader chooses wisely among these tools, using them flexibly and in combination, as he works fluently through each of the components that make up the integrated skill process *Read With Understanding*.

Let's return to Susan and see how all of this looks in practice. Susan is now reading a brochure about heart attacks, a subject of concern to her since the doctor has warned her husband that he is a likely candidate. As she monitors her comprehension (the third RWU component) during a reading about the causes of heart attacks, she realizes that the passage doesn't make sense to her. She decides to zero in on certain words that she thinks she might have mis-pronounced, applying appropriate tools from her alphabets drawer. Concluding that word recognition is not the issue, she checks her *understanding* of key words, borrowing from her vocabulary drawer and attending to sidebar notes that define the terms. This process has slowed down her reading significantly, so she then re-reads the passage more fluently (fluency drawer) to see if understanding flows more easily. Since she wants to be able to talk to her husband clearly about what might be at issue with his health problems, she finally decides she needs to sketch out a graphic organizer to help her make sense of the information (comprehension drawer).

This example illustrates that, in the course of trying to read with understanding, skilled readers pull from the tools they have available to them, choosing those that address the issue at hand to achieve their purposes in reading. A skilled reader is able to draw appropriate tools from the tool chest, knowing when and how to use them, because he has *metacognitive* abilities, i.e., an awareness of his own thinking and the ability to monitor and regulate thinking to achieve cognitive goals.

Implications for Teaching

Based on what we know about skilled readers, it is crucial that, in designing reading instruction, effective tutors and teachers consider ways to support developing readers in regularly attending to their own understanding and making decisions about how to solve problems as they read. The standard captures the key components of skilled reading and facilitates discussion and learning about this integrated skill process. Key to effective instruction in the standard is careful attention to the underlying sets of knowledge, skills, and strategies that can be employed in the service of reading with understanding. This point is reinforced by research with students in adult basic education classes which shows that, unlike skilled readers, who have rather

equally developed sets of tools across all four elements, students in adult and family literacy programs are more likely to have strengths in some of the sets and significant gaps in others. Findings like these suggest that teachers assess students in order to identify their strengths and gaps, consider

these in terms of their ability to *Read With Understanding*, and focus instruction where needed.

And what should that instruction look like? The recent synthesis reports on reading instruction identify effective instructional practices that help readers build these sets of knowledge, skills, and strategies. In general, the reports conclude that two approaches are essential for building expertise in reading: explicit instruction in knowledge, skills, and strategies and opportunities to use and practice these learnings in reading connected texts (e.g., sentences and paragraphs). In teaching *Read With Understanding*, then, effective tutors and teachers provide explicit instruction about the key sets of knowledge, skills, and strategies and how they are integrated in the reading process. Both reports maintain that such explicit instruction entails teacher modeling and student practice, with increasingly diminished teacher guidance and support. EFF's own research with adults suggests that explicit instruction of this sort carries the most weight when it occurs within the context of larger activities that engage students in reading material in pursuit of goals related to their roles, responsibilities, and interests as adults. Addressing these goal-related contexts provides the motivation for students to read, which in turn reinforces learning, facilitates further growth in each of the sets of knowledge, skills, and strategies, and provides practice in the metacognitive process of reading that is transferable to situations that occur outside of the instructional setting.

“A reading toolbox can be a helpful metaphor for all knowledge, skills, and strategies that the skilled readers draw upon in the reading process.”

Conclusion

EFF's research¹ in adult learning, in general, and adult reading, in particular, is supplemented and supported by the findings in the synthesis reports of the reading research. Working together, these offer an increasingly comprehensive picture of the key features of effective reading instruction for adults:

- explicit instruction in the process of reading described in the standard *Read With Understanding*;
- explicit instruction in the underlying sets of knowledge, skills, and strategies that support this process;
- the use of topics and tasks that matter to adult students; and
- practice in choosing the right tool at the right time

¹ Equipped for the Future has spent the last ten years researching adult learners' purposes for literacy learning, the responsibilities adults encounter in their adult roles, and the skills required to address these responsibilities. From this research, EFF has developed standards for adult and family literacy and is committed to improving the quality and results of adult learning through standards-based teaching and assessment. EFF is currently in the process of developing a research-based performance continuum for each standard, which describes what performance on the standard looks like at different levels of expertise. The first performance continuum was developed for the Read With Understanding standard and utilized research collected through the development years and during field testing of the continuum. For more information about EFF's research and approach to teaching, learning, and assessment, visit the Website at <http://www.nifl.gov/lincs/collections/eff/>.

Ultimately, our goal as a field to support adult learners in developing the skills they desire to accomplish important purposes in their lives is furthered when reading instruction thoughtfully incorporates these features.

This article is adapted from one that appeared in the *EFF Hot Topics* (Winter, 2003). ■

References

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Stein, S. (2000). *What Adults Need to Know and Be Able to Do in the 21st Century*. Washington, DC: National Institute for Literacy.

The EFF/NCFL Reading Project

Equipped for the Future and the National Center for Family Literacy received funding from the Partnership for Reading to develop materials and a professional development process aimed at helping teachers and administrators learn how to use research-based reading instruction to support adult students in learning to read more effectively. Teachers and administrators from ten program teams participated in piloting the training curriculum. They took part in three training sessions, received technical assistance between sessions, and designed and implemented a series of lessons integrating research-based reading instruction in an EFF teaching/learning approach.

The programs that took part in the project:

FACE Programs at the Blackwater Community School, Coolidge, Arizona; the Chi Chi'l Tah/Jones Ranch Community School, Vanderwagon, New Mexico; the Crownpoint, Community School, Crownpoint, New Mexico; the Little Singer Community School, Winslow, Arizona; and the Rough Rock Community School, Chinle, Arizona. The Groves Adult High School Even Start, Middletown, Delaware; Susanna Wesley Even Start, East Prairie, Missouri; Easton Even Start Project of Easton Incorporated, Easton, Pennsylvania; Southwest Corner Even Start, Waynesburg, Pennsylvania; and the Norfolk Even Start, Norfolk, Virginia.

EFF Website

The EFF Special Collection brings EFF related resources and expertise to a single point of access for multiple users working in adult and family literacy education. The collection includes materials developed by EFF partners and other quality materials relevant to standards-based education and program improvement.

www.nifl.gov/lincs/collections/eff

EFF Hot Topics

This publication highlights current topics in the adult literacy field and contains case studies and examples of implementation of Equipped for the Future at various sites around the country. The fall winter 2003 issue focuses on the EFF Standard: Read with Understanding and contains:

- (1) An article by Amy Trawick which connects Reading Research to the Standard RWU and presents implications for teachers.

- (2) An explanation of the EFF/NCFL Reading Project and specific contributions from the five American Indian FACE programs that participated, along with contributions from five other family literacy programs across the country.
- (3) An authentic classroom example of how two teachers in Norfolk, VA used the EFF Teaching and Learning Cycle to integrate the components in a family literacy program.
- (4) An article by Marilyn Gillespie, which connects RWU to Learning to Read in English.
- (5) The graphic of the Teaching/Learning Toolkit.
- (6) Practical tools--The RWU Diary and Guide.
- (7) A RWU Assessment Prototype.

http://www.nifl.gov/lincs/collections/eff/eff_publications.html

Changing Literacy Practices

Victoria Purcell-Gates, Ph.D.
Michigan State University
East Lansing, MI

A Harvard University-funded research programme investigated whether using different approaches to teaching adults with literacy difficulties, including using real-life texts and examples, makes a difference to how often adults read and write and the type of texts they favour when they do. Victoria Purcell-Gates, professor of language and literacy at Michigan State University, reports on her research.

A common-sense indicator of the effectiveness of adult literacy instruction is whether the students are reading and writing more in their lives outside of class and/or reading and writing different types of text. The literacy activities that people engage in as they go about their lives are what we refer to as 'literacy practices'. Examples of these would include reading newspapers, coupons, notes from teachers, memos from employers, television schedules, legal documents and books. Writing examples include writing lists, personal notes and letters, diary entries, recipes, stories, poems and directions. As a teacher and a researcher, I believe that change in literacy practice is a better indicator of students' achievement than a test score. After all, if our students do not use what they learn, what is the point of learning (or teaching) it?

Literacy Practices of Adult Learners (LPALS) study

Funded by the US Government through the National Center for the Study of Learning and Literacy, housed at Harvard University, my study looked for elements of instruction through questionnaires, observation of classes, and student interviews. We then followed students - who had volunteered to participate - from these classes for a year to document changed literacy practice. Students were interviewed in their homes every three months (or as long as they stayed with the class) with an extensive questionnaire about all types of different literacy practices: how often they engaged in them, when did they start/stop, and if they were reading and writing particular texts more often or less often. Information was used from 173 adult students in 83 classes or tutor/tutee arrangements.

Findings

Our analysis revealed that adult literacy students reported an increase in current or new literacy practices when reading and writing in class real-world texts for real-world purposes while learning the skills they need to do so. We use the phrase 'authentic literacy activities' for this real-world aspect of reading and writing in class.

Classes that were rated as 'highly authentic' used texts that could be found outside of an instructional context: magazines, flyers, drivers' manuals, help-wanted notices, application forms, novels, letters-to-the-editor, and so on. They involved their

students in reading or writing these texts for actual purposes that exist for them outside of class: reading the newspaper for the news on a topic of interest; reading a drivers' manual to prepare for an exam; writing a letter-to-the-editor that was to be sent; reading a novel for enjoyment and discussion, and so on.

Classes that were rated as 'somewhat authentic' used some of these texts but often the texts and purposes were simulated rather than real: reading a novel but filling in comprehension questions afterwards; writing a 'model' letter-to-the-editor of a fictional newspaper; reading multiple copies of an actual newspaper that was a month old. In this approach, the concept of real-life can actually be decontextualised in ways that reduce the effectiveness of its inclusion in adult literacy programmes.

The continuum of authenticity ran from 'highly authentic' to 'highly school-only'. Highly school-only texts and purposes were those that one can find only in a literacy instructional context: workbooks, spelling lists, phonics charts, and so on.

Making literacy instruction more authentic

Many teachers ask how they can begin to incorporate more authentic literacy activities into their instruction. The following points are developed in an upcoming handbook for teachers (to be published by NCSALL, in 2003):

- Get to know your students through discussions, intake interviews, and observations. This will reveal their needs for reading and writing in their own lives which will give you the direction you need to find relevant texts and purposes for reading and writing those texts.
- Locate texts from the worlds of your students. Look in the neighbourhoods for newspapers, flyers, brochures, menus. Ask for copies of pamphlets from local health centres. Ask students to bring in applications, school reports and other texts they wish to read/write.
- Work with the students' purposes for interacting with these texts.
- Teach explicitly the skills needed to read/write these texts. None of the teachers in the LPALS study skipped skill teaching. In fact, simply learning to read was also highly related to changed literacy practices for our students. The important thing was that teachers involved students in authentic reading/writing of authentic texts while they explicitly taught critical skills. ■

“As a teacher and a researcher, I believe that change in literacy practice is a better indicator of students' achievement than a test score.”

This article first appeared in the September 2002 issue of Literacy Today (no. 32).

Science Informs Our Work

Anne Murr, M.S.

Coordinator

Drake University Adult Literacy Center

Des Moines, Iowa

About the Author: Anne Murr has been coordinating the Drake University Adult Literacy Center, Des Moines, Iowa, since May, 1998. She has a degree in elementary and early childhood education and taught Head Start for six years. She has completed course work for a masters degree in adult education.

I am a practitioner-researcher and have been in the adult literacy field for six years. After just a year of tutoring adults who struggle to learn to read and training volunteers to tutor, I discovered that learning progress was not happening when using authentic text which required word recognition through memorization, guessing, and guided phonics instruction. Instruction in word structure while writing letters to pen pals was very hit and miss. This instruction did not have the systematic intensity which learners needed to address their learning struggles.

I began reading the research on why children fail to learn to read because the adults we serve failed to learn to read as children. This is what I have found in my reading of quantitative, i.e., scientifically-based, reading research:

Groundbreaking work in neuroscience informs educators about cognitive processes involved in translating speech to print and print to speech and how these mental processes do not become automatic for one in five learners (Shaywitz, 2003). Research has identified the differing cognitive processes of children and adults who fail to reach levels of functional literacy. Beginning with Isabella Liberman in the late 1970's and

continuing with Shaywitz, Paulesu, Richards, (see accompanying bibliography) and others, brain scan technology reveals that persons who struggle to learn to read have brain activity patterns that differ from the brain activity patterns of competent readers. This brain-based difference manifests itself in the lack of perception of the speech sounds of which words made, i.e., a lack of phonemic awareness, and great difficulty in combining and segmenting these sounds (phonological processing skills). Their brains are truly not wired to learn to read.

Quantitative researchers are able to separate distinct factors which influence learning, i.e., verbal and nonverbal I.Q., family educational background and income, ethnicity, age and sex. Through this process, scientifically-based research has determined that children and adults who lack adequate phonemic awareness and phonological processing skills do fail to reach competence in literacy. Pratt and Brady (1988) looked at the reading skills and performance of good and poor readers in 3rd grade and in ABE classes. They found that both child and adult poor readers display deficiencies in phonological processing. In fact, the adults scored more poorly on the sounding-out tasks than did the children. Read and Ruyter (1985) found similar results when investigating good

and poor readers in 5th grade and adults in a Wisconsin prison. While the adults had more extensive banks of memorized non-decodable sight words, they performed more poorly than the children on tasks measuring phonological processing skills. Read and Ruyter concluded that the only hope seems to be in teaching these skills. (p. 51)

Four years ago at the Drake University Adult Literacy Center we began an informal screening process to determine each adult learner's level of phonemic awareness and phonological processing skills. Every adult, regardless of education or incoming reading level, has demonstrated the lack of phonological processing skills identified in the scientific research. (This is our qualitative, observational research.) Several had already earned a GED but

stated emphatically, "Take me back to the very beginning. I'm tired of feeling dumb with words!"

We began using direct, systematic instruction which activates learning with multisensory, hands-on learning of the sounds of our alphabetic language and then in the structure of how sounds and syllables combine as text. Minimally-trained volunteers have the materials and structure to address the learning challenges that face persons who have failed to learn to read through more traditional methods.

My background and previous teaching experience was as an early childhood educator.

When I began studies in an adult learning masters degree program, I addressed the issue of whether or not adults and children learn in different ways. My conclusion was that we all learn best in the context of doing, through hands-on experiences in a meaningful context. Developmentally-appropriate instruction is necessary at ALL ages, not just for young children. If an adult does not know how sounds correspond to letters, it IS appropriate to teach that adult the sounds (phonemes) and how they combine into words.

I have observed that adults in our center immediately transfer that information into decoding (reading) text at work, on street signs, and in books that they read to their children. They have the background knowledge and experience to apply what they are learning within the structured tutoring setting to the broader context of their lives. One of the women I tutor has a cleaning business. She is now able to read the notes left for her by her employers so that she can clean exactly what they want her to. Her tearful comment when we began working on multisyllabic words was: You mean I don't have to be afraid of the big words anymore?

Experimental research also has investigated the effects of structured, direct instruction for children who are failing to learn to read. Children in the successful Reading Recovery program made

“Groundbreaking work in neuroscience informs educators about cognitive processes involved in translating speech to print and print to speech and how these mental processes do not become automatic for one in five learners.”

greater reading gains when receiving direct instruction in phonological processing skills (Iverson and Tunmer, 1993). An intensive investigation into literacy learning in Title One reading classes found that the only children whose reading scores improved were those who received direct, systematic instruction. (Foorman, et al., 1998)

There is a dearth of research on the effect of instruction with adults. We are collecting data in our Center and hope to have it compiled in the near future.

For those whose brains are not wired to process words efficiently, we have observed that it takes much time for structured, multisensory practice in order for adults to internalize word structure information. Memorization alone just doesn't compute.

We who teach most often learned to read effortlessly; we have strengths in verbal intelligence. Until we witness the struggles of those who have invested great effort in learning to read but have failed (to this point in time), we think that given appropriate text and context, these adults WILL learn to read. However, persons who have very low verbal intelligence but who are skilled in visual-spatial, mechanical, inter or intrapersonal, or kinesthetic intelligence will continue to fail to reach functional literacy competence without instruction that is informed by science.

Reading problems are not caused by low intelligence, by a literacy-deprived environment, by lack of motivation to learn or

by emotional turmoil, although learning is certainly affected by all these factors. Science has identified the root cause of reading problems as neurological. Educators are challenged to act on this evidence.

Certainly literacy learning must occur within the context of meaningful text and life application tasks. Literacy is more than the learning of discrete skills. But adults who failed to learn to read as children will continue to struggle to become fully literate until they learn the basic structure of our alphabetic language. They must internalize the knowledge that words are constructed from sounds and that those sounds correlate with letters. When we do not act on the evidence from science, we undermine the effectiveness of our instruction.

I will close with this anecdote: During his third tutoring session with me, a college student (who was tested as reading at the 6th grade level) tapped out 3 sounds /f/ /a/ /d/. After several attempts with saying the discrete sounds but not perceiving how the sounds combined into a word, he finally exclaimed, Fad! That's how you spell fad? I wouldn't spell fad that way! It's a damn-ass shame I never learned the little words before! Later he declared, This is productive! Learning is fun!

Instruction which is informed by science IS productive - and empowering for all of us as learners. ■

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Adult Basic Education Reading Instruction, *continued from page 2*

for K-12 (elementary and secondary school) students, selecting those approaches to reading instruction that were likely to work with adult learners. To do this, the RRWG established criteria for evaluating the application of K-12 reading research to adult reading instruction. These criteria take into account the existing ABE research, the important differences between children and adults, and the strengths and weaknesses of K-12 research in each of the topic areas. NRP findings were used to help fill gaps in the ABE reading instruction research, to provide support when K-12 and ABE research were compatible, or to signal caution when they were contradictory.

A Brief Summary of Findings from the Research Review

Most of the principles derived from the ABE reading instruction research are “emerging principles” because they are based on a relatively small body of experimental research. There is much more research focusing on children, as demonstrated in the report of the National Reading Panel. The small size of the ABE reading instruction research base precludes establishing more than just a few principles based solidly on large numbers of research studies that have been replicated. Some of the topic areas reviewed contain no or very few research studies. This does not necessarily suggest that the quality of ABE reading instruction research is poorer than K-12 reading instruction research or other bodies of research, only that there is less of it.

Approximately 70 qualifying research studies were identified in the literature search based on the criteria used. From the results reported in these studies, eighteen emerging research-based principles and related practices for ABE reading instruction were identified, along with thirty-two additional trends in the ABE research. Twenty-two specific ideas that might be used to supplement the ABE research were derived from the K-12 research. Emerging *principles* were based on findings from at least two experimental studies (including quasi-experimental studies) and any number of non-experimental studies. Findings based on fewer than two experimental studies were labeled *trends* rather than principles.

Findings from the adult reading instruction research show that adults can have difficulties with any of the crucial aspects of reading: alphabets (phonemic awareness and word analysis), fluency, vocabulary, or comprehension. It is important to assess adult students’ abilities in each of these areas in order to identify what they already know as well as what they need to work on during instruction. Assessment for instructional purposes is one of the first tasks a teacher performs. One emerging principle in the ABE research suggests that assessing each component of reading in order to generate profiles of students’ reading ability gives teachers much more instructionally relevant information than any test of a single component can.

Some of the strongest ABE reading instruction research has to do with the assessment of adults’ phonemic awareness. Phonemic awareness among adult non-readers is almost non-existent and is only a little better among adult beginning readers. Adult beginning readers also have poor phonics or word analysis knowledge. Their sight word knowledge (the ability to recognize words on sight without having to sound them out) may initially be better than expected. Research evidence indicates that adults can be taught word analysis skills within ABE programs and, though the evidence is not as strong, that non-disabled readers can be taught phonemic awareness. Trends in the research suggest that phonemic awareness does not develop as easily among adults with a reading disability.

Teaching alphabets leads to improved achievement in other aspects of reading. This emerging principle in the adult research is supported by research conducted with children. Research at the K-12 level, unlike ABE research, has identified specific practices that can be used to teach alphabets. Many of these K-12 practices address topics that are especially important for ABE learners. No research was found related to the alphabets ability of learners in ESOL adult basic education programs (programs that teach English to speakers of other languages).

There is very little research that reports results from the assessment of ABE students’ fluency and vocabulary. We do know that young adults with poor fluency have an average silent reading rate that is much slower than that of normal readers.

“One emerging principle in the ABE research suggests that assessing each component of reading in order to generate profiles of students’ reading ability gives teachers much more instructionally relevant information than any test of a single component can.”

Emerging principles in the ABE research indicate that fluency can be taught to adults who qualify for ABE programs, that teaching fluency leads to increases in reading achievement, and that one specific technique can be used to help

adults develop their reading fluency. This technique, repeated readings of a text, is also supported by a much larger body of research with children.

The one trend related to the assessment of ABE readers’ vocabulary suggests that their vocabulary knowledge is dependent on reading ability. Although, as might be expected, their life experience can give them an advantage as they begin to learn to read (their vocabulary knowledge is much better than their knowledge of alphabets), this advantage may disappear at higher reading levels. An important trend from the instruction research, supported by research with children, is that contexts that are more interesting or engaging, such as workplace or family contexts for adults, may be especially useful for vocabulary instruction.

Reading comprehension is the ultimate goal for reading. A large-scale national survey of adult literacy provides information about adults’ reading comprehension that is more reliable than the information we have about their fluency and vocabulary. Results from this survey indicate that most ABE learners have

difficulty integrating and synthesizing information from any but the simplest texts. Although it is likely that poor phonemic awareness, word analysis, fluency, and vocabulary contribute to poor reading comprehension, it is also likely that most ABE adults will need to be taught specific comprehension strategies. Those adults with a learning disability and those whose first language is not English are especially at risk. Although there are more principles and trends related to ABE reading comprehension instruction than for alphabets, fluency, or vocabulary instruction, the research does not address issues related to these adults.

Three important emerging principles from the ABE reading research suggest that participation in an ABE program can lead to increased reading comprehension achievement, that explicit instruction in reading comprehension strategies is effective, and that teaching comprehension along with instruction in other components of reading is also an effective way to improve reading comprehension. The effectiveness of reading comprehension strategy instruction is supported by extensive research with children. In addition, K-12 research has identified eight specific strategies that may be of use to adult educators and also finds that instruction in other aspects of reading can lead to improved comprehension.

Trends in the ABE reading comprehension research also address several issues that are important to adult literacy students and teachers. Although more research is needed, these trends suggest that comprehension can be improved in most ABE settings, including workplace and family literacy settings; use of adult-oriented content material is an effective way to help improve comprehension; and, dealing briefly but directly with issues related to motivation and how adults feel about their reading can have a positive effect.

In general, the review of ABE reading instruction research found that much more research is needed in almost all of the topic areas addressed. Of the existing research, assessment research is the strongest. Emerging principles suggest that reading can improve in ABE settings, that direct or explicit instruction

in various components is effective, and that computer-assisted instruction can improve achievement in some aspects of reading. Basic information about the reading ability of ABE learners is known and fairly sophisticated methods for obtaining assessment information and using it for instruction have been developed. Much more information is needed about ESOL learners and adults with reading disabilities. More information about specific teaching strategies is also needed. With the exception of fluency,

specific teaching strategies validated by the research are just beginning to emerge. Also beginning to emerge are findings of special significance for adult educators related to adult-oriented settings and contexts, and issues of motivation and the feelings that result from continued failure in learning to read.

While K-12 research does not address these more adult-oriented issues with the same urgency, the much larger body of reading

instruction research conducted with children is compatible with the ABE reading instruction research, offering both support for many ABE findings and specific suggestions for instruction in areas where the ABE research is thin. ■

“An important trend from the instruction research, supported by research with children, is that contexts that are more interesting or engaging, such as workplace or family contexts for adults, may be especially useful for vocabulary instruction.”

Kruidenier, John (2002). *Research-Based Principles for Adult Basic Education Reading Instruction*. Washington, DC; National Institute for Literacy, Partnership for Reading. Reprinted with permission.

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Assessment Strategies and Reading Profiles: An Interactive Website for Adult Education Practitioners

Reading is not a single skill, it is a composite of several sub-skills any one of which can be weak enough to be the cause of a low level or reading comprehension difficulty. This interactive Website is a tool to aid ABE teachers, administrators and curriculum resource personnel in diagnosing reading difficulties. The Website has two tracks: in the “Match a Profile” track, you can create a reading profile for learners by entering scores for your learner and be matched to one of the 11 Adult Reading Component

Study(ARCS)-based profiles. You will find suggestions for instruction as well as information about the ARCS learners in this group that may relate to your learner. The second track, “The Mini-Course,” offers an opportunity to learn more about reading. You will find extensive information on the major reading components and assessment as well as sections containing references and downloadable resources. Please visit the Website at: <http://www.nifl.gov/readingprofiles>

Fluency Development: Practice Means Progress

Susan McShane, M.S.
Reading Initiative Specialist
National Center for Family Literacy
Louisville, KY

Many teachers and tutors working with adult literacy learners are unaware of the importance of developing reading fluency. In fact, in many adult learning settings oral reading is not assessed, so learners' fluency deficiencies may go unnoticed. Adult educators have long believed that asking learners to read aloud in group settings is a bad idea—that adults with poor reading skills may be frightened away from programs if they have to put their reading deficiencies on public display.

However, recent research summaries indicate that improving fluency may make a significant difference in literacy development. The National Reading Panel (2000) identified fluency development as one of five major components of reading instruction, and the Reading Research Working Group reinforced this finding in their review of the adult education research (Kruidenier, 2002).

Of course, literacy tutors frequently have opportunities to listen to a learner's oral reading and may find it appropriate and natural to incorporate fluency practice in tutoring sessions. As you read consider how this information may apply to your work with learners.

What is reading fluency?

Fluent reading is rapid, efficient, and largely free of errors in word identification. But fluency is more than speedy, accurate word reading; a fluent reader also uses appropriate phrasing and expression. A fluent reader knows how to group words into phrases, where to pause, and what to emphasize. In other words, fluent reading sounds like speech.

Why is fluency important?

Comprehension is the goal of reading, and fluency is required for comprehension (National Reading Panel, 2000, p.3-1). At a minimum, accurate and efficient word reading is necessary. Comprehension suffers when poor readers must focus on "getting the words off the page" and therefore aren't able to give much attention to the meaning of what they are reading. In contrast, fluent readers are able to focus on meaning because for them, decoding is automatic and effortless.

In addition, fluency is part of the process of comprehension because fluent reading involves interpretation: grouping words into phrases and using word knowledge and punctuation to determine pacing, pauses, intonation, and expression. Most texts provide clues to such interpretations: punctuation, bold print, descriptive words, and signal words (first, finally, therefore, on the other hand, etc.). Fluent readers notice these clues and achieve a richer understanding as a result.

Who needs fluency development?

Most adult beginning readers need work on fluency because fluency depends on rapid, accurate word reading, and beginners are, by definition, struggling to read words. However, even those with better skills may need work on fluency and the underlying decoding skills and knowledge, if they are to progress beyond their current levels of reading achievement (Kruidenier, 2002, Principle 8).

What kind of fluency instruction is most effective?

Research suggests that guided repeated oral reading may improve one or more aspects of fluency as well as comprehension (Kruidenier, 2002, Principles 9 & 10 and Ideas 14 & 17).

Guided repeated oral reading

The learner reads a passage several times, with guidance, until an acceptable level of fluency is reached, at which point he/she begins work on another passage at the same or a slightly higher level of difficulty.

Guidance may involve

- modeling—teacher or audiotape-assisted,
- simultaneous reading,
- assistance and correction, and
- combinations of these options.

No one approach or technique has been demonstrated by research to be more effective than others. Several are described below.

(1) Reading to the teacher or tutor

The learner reads a brief passage aloud, and the teacher or tutor provides help as needed, to identify problem words. The tutor may also ask a couple of recall questions after the reading. Then the learner reads the passage aloud again one or more times, continuing until he/she can read it comfortably with few errors and can recall facts and details accurately. By engaging the reader in discussion and asking comprehension questions after each reading, the tutor maintains a focus on meaning and demonstrates to the learner that re-reading not only increases accuracy, but also results in better understanding. When fluency is achieved with one passage, the learner begins working on another one. In a slight variation on this approach, the tutor begins the session by reading the passage aloud before asking the learner to read.

(2) Echo reading

The teacher or tutor reads a sentence aloud and the learner reads the same sentence immediately afterward, imitating the first reader's phrasing. They proceed through the text this way. Then the learner may attempt re-reading the text aloud independently.

(3) Dyad or choral reading

The teacher or tutor and learner read a passage or story in unison. At any point, the learner may offer to read alone or the tutor may simply stop reading. If the learner begins to struggle or miscalls one or more words that have significance for the meaning of the passage, the tutor resumes reading. In choral reading a group of learners reads aloud in unison.

(4) Paired or partner reading

Pairs of learners take turns reading and re-reading the same passage to each other, or they read aloud together as in dyad reading above.

(5) Tape-assisted reading

Using taped readings, a learner is able to work more independently, reading along while listening to the passage on tape. The tutor might use commercial books on tape or make recordings of texts or real-life materials.

(6) Performance reading

A group of learners prepares a performance of a poem, play, or story. They divide up sections or roles and practice reading their parts aloud to each other and the tutor. They may also tape their readings so each reader can assess her/his delivery and make improvements. This approach gives learners a real reason to re-read text.

As a variation on performance reading, learners who are parents of young children might prepare to read to their children by re-reading stories with a tutor's assistance. (This activity is most suitable for parents who find reading age-appropriate children's books sufficiently challenging to benefit from fluency practice. If they have very young children, appropriate stories may be too easy.)

Phonics instruction and decoding practice

If word identification is part of the fluency problem, phonics instruction may make a difference. The teacher or tutor uses assessments to identify learners' specific decoding problems, and then provides focused, systematic instruction in phonics and/or sight word recognition (Kruidenier, 2002, Idea 16).

What else is important in planning for fluency practice? Several issues may arise when planning instruction.

Appropriate difficulty level of materials

When choosing reading materials for fluency practice, how do you decide on the difficulty level? For fluency practice aimed at building speed and improving phrasing and expression, some authors suggest using material at the learner's independent reading level, to minimize word recognition problems. If, however, you want to work on all aspects of fluency, you may want a passage that is somewhat difficult—at the instructional reading level—so the learner gets decoding practice as well as work on the other aspects of fluency.

Text readability

You can calculate the reading grade level of any passage using a readability formula. (See <http://school.discovery.com/schrockguide/fry/fry.html> for a copy of the Fry readability graph or check to see if your word processing program evaluates text for readability.) You may also use commercial textbooks written to grade-level specifications as a source for oral reading passages.

Assessing oral reading levels

The learner's oral reading (grade equivalent) level may be assessed with an informal reading inventory (IRI) like the LVA READ Test. Alternatively, if you are using passages from graded textbooks for fluency practice, you may simply have the learner try one or more sample passages and determine reading level based on word-reading accuracy. Definitions of reading level vary. A conservative estimate would judge text to be at the learner's independent reading level if he/she is able to read it with 98-99% accuracy, or no more than two errors in 100 words. Instructional reading level may be defined as approximately 95-97% accuracy, or no more than five errors in 100 words. Then, depending on the focus of your practice activity, you may choose an independent- or instructional-level passage.

Type and length of passage

Considering learners' abilities and goals, it makes sense to provide practice with various types of texts: literature, workbook samples and other instructional materials, as well as real-life materials adults need to read. There are no generally accepted guidelines for length, but it is usually recommended that fluency practice should occupy only a small portion (a few minutes) of each reading lesson. Passages should be short enough to be read several times.

Audiotapes

If you use commercial books-on-tape, you may find the reader reads more quickly than an adult learner can follow. Tape players with variable speed playback may solve this problem.

Another option is to create your own tapes of selected passages. You can read slowly (while still modeling phrasing and expression) and signal at the end of a section or page.

Tutor assistance

How much help should you provide? When and how should you correct errors? One guideline is to refrain from stepping in unless the reader makes an error that affects meaning. It's also a good idea to allow the reader a few seconds to identify the word or correct a mistake. Then you may provide the word—or a phonic cue if you think the learner should be able to figure it out. You probably should not choose this moment to teach or review a phonics rule.

Silent reading

Most people perform better in oral reading when they read silently first. You may want to encourage learners to read a passage silently before reading it aloud.

Fluency standards

You may ask, "How long does one continue to re-read a passage? How fluent is fluent enough?" There seem to be no generally acceptable standards for adults. If you have chosen a difficult passage to build decoding skills, you might use independent reading level as your target, so that reading with 98-99% accuracy is the aim. You may also consider timing the readings to assess improvement in reading rate, and, of course you may note the reader's use of phrasing and expression. This is not a high-stakes decision, so perhaps tutor and learner judgment will suffice: if you and the learner are comfortable with the progress made, you might try the next level.

Practice means progress

Improvements in reading speed, accuracy, and expression are concrete outcomes of instruction, and improved fluency may lead to improved comprehension. Both you and the learner may find fluency practice to be rewarding and motivating. ■

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The Relationship Between Reading and Speaking Skills

An Interview with Ann Hilferty

Ann Hilferty, Assistant Professor of English at the Massachusetts College of Pharmacy and Health Sciences, has been exploring the research literature on the relationship between the development of reading and speaking skills, especially with adult English for speakers of other languages (ESOL) learners. While she assumes that oral mastery, when it exists, influences reading, she finds that much recent research reveals the influence of reading on speaking. There also seems to be reciprocity between them, which may have implications for ESOL instruction. Focus on Basics editor Barbara Garner interviewed her to learn more.

BG: *What do you mean by reciprocity between reading and oral language?*

AH: By reciprocity I mean that as skills in some aspect of oral language increase, they help development in reading, and as a person improves his reading skills, that improvement seems to enhance further improvement in the spoken language. This seems to be a continuing spiral.

I became interested in this because some adult ESOL teachers don't seem to think that it is true. They seem to think there's somewhat of a one-way influence: that development in spoken language influences development of reading. That's true, but it's also true that as people develop stronger reading skills, they further enable their development of more sophisticated speaking skills.

BG: *Where does your sense of ESOL teachers' beliefs come from?*

AH: In a small survey I did a few years ago, many of the teachers seemed to feel strongly that there was a theory supporting the primacy of the spoken language. The word "transfer" came up a lot. Some people seemed to believe that a person only had to reach a certain level of oral proficiency in English and reading proficiency would automatically develop if they were already literate in their first language. My guess is that the teachers were influenced by early 1970's Goodman and Smith articles [on what came to be known as whole language]. Goodman and Smith became very influential in the ESOL community, even when the reading community began to contest their ideas regarding the acquisition of beginning reading skills.

I later tested 44 Latinos who had, in general, fairly high literacy in Spanish, but not a lot of exposure to written English in their ESOL instruction. Their performance on English tests was quite low. They didn't do well in reading in English. There is clearly some transfer [from reading in the first language to reading in the second] but I'm not sure how much. It's not something that automatically happens. If you withhold exposure to practice in English reading and writing until the learners have advanced oral proficiency, you're withholding the very practice they need to improve.

BG: *What are some of the main research findings that reflect reciprocity?*

AH: Some of the most convincing findings are reported in a number of studies. Phonemic awareness — noticing the individual sounds in word — seems to help with comprehension

of the spoken language. Knowledge of spelling patterns seems to help improve pronunciation and listening. Print experience is related to knowledge of grammar and print experience also seems to help learners acquire spoken language forms, for example, function words, such as conjunctions, prepositions and articles, and derivational word endings, which are endings that form new words.

BG: *An example of derivational word endings?*

AH: Photographer, photography, photographic.

At the same time, research has shown that we don't speak the way we thought we did. Our model of speech mimicked our model of reading: that we spoke by producing sequences of phonemes. But now we know that it doesn't work like that. That's one of the reasons it's difficult to learn to read.

BG: *So you're saying that there's a firm basis to teach the two — oral and reading skills in a second language — simultaneously and not to neglect one for the other?*

AH: Yes. And many of the same people who are seeing the connections between speaking and reading also report that beginning reading needs instruction. Under normal circumstances, we all learn to speak. But we don't all, under normal circumstances, without any instruction, learn to read.

The research suggests that in the early stages of beginning reading in a second language accurate and fast word recognition is a good predictor of reading comprehension. You might say that instead of [reading] being dependent on speech, both speech and reading are dependent on the same group of abilities needed to process phonologically difficult materials. Evidence for this is that most reading difficulties reside in phonological language difficulties. Poor readers tend also to have poor speech perception, and phonological deficits in both spoken and written language.

Beginning readers need to learn phonological awareness: awareness of the sound system; and graphophonic awareness: a knowledge of the letters and an understanding that letters and letter combinations stand for sounds and words. If people are only doing oral skills, it might not include much attention to the elements of the sounds of the language — the bits and pieces — even if they do some work on pronunciation.

After the early stages of reading, the relationships [between speech and reading] may change, depending on learner, task, and circumstances. There is evidence, for example, that while for first-language readers' oral experience is primary, reading and writing become increasingly independent and reciprocal as they develop. For some second-language or foreign-language

readers, the reading skills provide the bulk of the new language input.

Most studies of adult literacy indicate that phonemic awareness is dependent on letter-sound knowledge. For example, phonemic awareness usually begins to develop in illiterate adults after they have actually had experience with printed letters. Even the concept of "word" is usually not learned until the learner experiences words in print, separated from each other by spaces. As phonological awareness develops, it helps both first- and second-language learners to understand spoken language better.

BG: What could teachers do to support this reciprocity?

AH: I didn't read a lot of instructional research, but we do know that phonological and graphophonemic awareness develop in a sequence. Steve Stahl confirmed this for both children and adults. These steps can be supported.

BG: What are the steps?

AH: Knowledge of the alphabet; phoneme identity (sounds of a language); partial word segmentation (divide a word into syllables, or into onsets and rimes — the first consonant group and the ending, if it's a one syllable word); recognition of some letter sounds in words; simple word recognition; phoneme blending and deletion and full word segmentation (not just syllables but phonemes); advanced word recognition (multisyllabic words, demonstrating less frequent spelling patterns).

BG: Who are some of the researchers working in this area?

AH: Just a few of the names that come to mind: Linnea Ehri, Beatrice DeGelder and Jose Morais, Maria Carlo, Charles Read, Lenore Ganschow, James Flege, John Strucker and Rosalind Davidson.

BG: What kind of classroom research could an interested teacher do to explore these ideas?

AH: One suggestion might be for teachers to design classroom research projects following some of the recommendations researchers are making for beginning reading instruction. For example, teachers might include sequenced instruction and practice, for those students who need it, in phonemic awareness, alphabet knowledge, and knowledge of the simple English spelling patterns. Teachers can adapt the materials for this from their regular lessons. Then, measuring and recording the students' progress in these skills, teachers might look for relationships with progress in other language skills, both oral and written.

BG: I hope we hear from teachers who try this out. ■

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From the Editor's Desk

SELECTED RESOURCES

Focus on Basics

Focus on Basics is the quarterly publication of the National Center for the Study of Adult Learning and Literacy. It presents best practices, current research on adult learning and literacy, and how research is used by adult basic education teachers, counselors, program administrators, and policy makers.

Focus on Basics is dedicated to connecting research with practice, to connecting teachers with research and researchers with the reality of the classroom, and by doing so, making adult basic education research more relevant to the field.

<http://www.gse.harvard.edu/~ncsall/fob/index.htm>

Partnership For Reading

The Partnership for Reading is offering free literacy resources for educators, teacher educators, administrators, policymakers, support agencies and families. Partnership materials focus on the contributions of scientifically based research to improving the quality of reading instruction for children, adolescents, and adults. Among the resources now available are: a new booklet for parents to help their children in grades K-3 become successful readers; a book geared to parents of children from birth through preschool; and a guide to help teachers become discerning consumers of education programs and materials. All of these documents and more can be downloaded for free at <http://www.nifl.gov/partnershipforreading>.

Put Reading First

The National Institute for Literacy's activities to strengthen literacy across the lifespan are authorized by the U.S. Congress under two laws, the Adult Education and Family Literacy Act (AEFLA) in the Workforce Investment Act and the No Child Left Behind Act (NCLB). The AEFLA directs the Institute to provide national leadership regarding literacy, coordinate literacy services and policy, and serve as a national resource for adult education and literacy programs. The NCLB law directs the Institute to disseminate information on scientifically based

reading research pertaining to children, youth, and adults as well as information about development and implementation of classroom reading programs based on the research.

<http://www.nifl.gov/>

Reading Research Quarterly

Reading Research Quarterly (RRQ) is the leading peer-reviewed professional research journal for those committed to scholarship on questions of literacy among learners of all ages. RRQ supports the spirit of inquiry that is essential to the ongoing development of literacy research, and provides a forum for multidisciplinary research, alternative modes of investigation, and variant viewpoints about the nature of literacy practices and policies of diverse groups of persons around the world.

<http://www.reading.org/publications/rrq/>

Journal of Adolescent & Adult Literacy

The Journal of Adolescent & Adult Literacy is the only peer-reviewed literacy journal published exclusively for teachers of adolescents and adult learners. With each issue, JAAL gives you the practical solutions you need to overcome your toughest classroom challenges. Newly refocused and revitalized, JAAL offers authoritative, classroom-tested advice grounded in sound research and theory.

<http://www.reading.org/publications/jaal/index.html>

Literacy Today

The quarterly magazine, Literacy Today, is essential reading for those in schools, colleges, libraries, local councils and beyond who want to be up to date on literacy issues. Written in an easily accessible style, Literacy Today offers a comprehensive listing of the latest literacy research, publications and resources. Articles by practitioners from early years to adult provide a unique cross-sector perspective. Contributors are always welcome.

<http://www.literacytrust.org.uk/Pubs/ltorderform.html>

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777 Maryvale Drive
Buffalo, NY 14225
716/631-5282

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