Techniques for Teaching Beginning-Level Reading to Adults

by Ashley Hager

I have been teaching beginning-level reading (equivalent to grade 0–2) at the Community Learning Center in Cambridge, MA, for the past eight years. The majority of students in my class have either suspected or diagnosed reading disabilities (dyslexia). The difficulty they experience learning to read is as severe as the urgency they feel about mastering the task. One of my students, a former Olympic athlete, had to turn down a job offer as a track coach because of his inability to read the workout descriptions. He describes his life as "an ice cream that he is unable to lick."

Focus on Basics

NCSALL

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Adult Learning and Literacy

WORLD EDUCATION

Welcome!

"First-level readers," "beginners," "new readers," "0-4 level," adult basic education has struggled with what to call those learners who are really still building decoding and comprehension skills. This inability to settle on a name may be masking a larger issue: Why are we, as a field, failing to serve these learners well?

I can think of three general reasons.

The first is the system. The funding structure for many adult basic education programs does not encourage service to beginners, because beginners often progress slowly.

Discomfort with providing direct instruction, which can feel childish to teachers who are attempting to create adult learning environments, is another stumbling block.

A third is that serving first-level learners well is hard work and requires specific training. Native English-speaking adults who have not learned to read probably have some learning difficulties or disability. Teachers must know a lot about the craft of reading to teach someone with a learning disability, and many adult basic education teachers, while well intentioned, lack the formal training in reading instruction they need to reach these learners effectively.

The teachers writing in this issue of *Focus on Basics* do know a lot about teaching reading. Ashley Hagar, of Cambridge, Massachusetts; Gladys Geertz, of Anchorage, Alaska; and Anne Murr of Des Moines, Iowa, all bring immense skill to their classrooms and programs. They all have found that very structured classes, with direct instruction in specific subskills such as phonological awareness, word analysis, and sight word recognition, among other skills, provide the best results. Their students don't chafe under direct instruction, they welcome it: finally, they have the tools they need to join, however belatedly, the reading club.

The beginning learners in MaryAnn Cunningham Florez's English for speakers of other languages (ESOL) program had valuable feedback to share about the strengths and weaknesses of their instructors. Included in their list was the suggestion to "talk to us about learning and the learning process." It echoes the metacognitive strategies provided to students by Hagar, Geertz, and Murr. Florez shares her students' complete list of suggestions, and her techniques for getting such input from students.

Drs. Sally and Bennett Shaywitz, in their overview of the neurobiology of dyslexia, explain that an inability to segment the written word into its underlying phonologic elements results in readers having difficulty in decoding and identifying words. But, they remind us, the phonologic deficit is "domain-specific." That is, other cognitive skills are intact. This is important information to share with first-level learners. It explains the paradox so often encountered of otherwise intelligent people who experience great difficulty reading.

We hope that the articles in this issue provide first level teachers with an introduction to the techniques useful for teaching first-level learners. Let us know what works for you.

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You've noticed that this issue of *Focus on Basics* looks different. We decided to "freshen" our layout and design with new typeface and a few other small changes. "Blackboard" is now inside the back page, and we've added the section "All About NCSALL" to the back cover. We hope that the editorial content remains as relevant and useful as it has always been.

Sincerely,

Barbara Garner

Barbara Garner
Editor

Techniques for Teaching

continued from page 1

Little research is available on the most effective methods for teaching reading to beginning-level adults. My continuing challenge has been to determine how reading acquisition research conducted with children can be applied to teaching reading to adults. In this article, I describe the techniques I have found most useful; I hope other teachers working with beginning readers will find them helpful.

Our Class

This year our class includes nine students: six men and three women. Three are from the United States, five are from the Caribbean, and one is from Ethiopia. Their ages range from late 20s to late 50s and all are employed. Their educational experiences range from completing four to 12 years of school; one student has a high school diploma. One student has documented learning disabilities (LD). Students typically enter my class knowing little more than the names of the letters and a handful of letter sounds. They are usually only able to write their name and, in most cases, the letters of the alphabet. However, one student had never held a pencil before he entered my class.

Our class meets two evenings a week for three hours each evening. Because skilled reading depends on the mastery of specific subskills, I find it helpful to teach these explicitly. I organize the class into blocks of time in which, with the help of two volunteers, I directly teach eight components of reading: phonological awareness, word analysis, sight word recognition, spelling, oral reading for accuracy, oral reading for fluency, listening comprehension, and writing. These components embody the skills and strategies that successful readers have mastered, either consciously or unconsciously. My curriculum also includes an intensive writing component.

Over the last 30 years, a significant amount of research has compared the effectiveness of different approaches to teaching beginning reading to children. It consistently concludes that approaches that include a systematically organized and explicitly taught program of phonics result in significantly better word recognition, spelling, vocabulary, and comprehension (Chall, 1967; Curtis, 1980; Stanovich 1986; Adams, 1990; Snow et al., 1998). For this reason, I directly teach the structure of the English language using a phonics-based approach.

I draw from a number of phonics-based reading programs, including the Wilson Reading System, the Orton-Gillingham System, and the Lindamood-Phoneme Sequencing Program (LiPS; see the "Blackboard" on page 31 for contact information). The Wilson Reading System is a multisensory, phonics-based program developed specifically for adults. Unlike phonics-based programs for children, the Wilson system is organized around the six syllable types, which enables even beginning level adults to read works with somewhat sophisticated vocabulary (see the box on page 4 for the six syllable types). The Orton-Gillingham program is a phonics-based program similar to the Wilson Reading System but designed for dyslexic children. Students learn about syllables much later in the program. I find particularly helpful the Orton-Gillingham technique for learning phonetically irregular sight words (see page 5). The LiPS Program is useful for helping students acquire an awareness of individual sounds in words. This ability, referred to as phonemic awareness, is a prerequisite for reading and spelling.

Phonological Awareness

Phonological awareness, which involves the ability to differentiate and manipulate the individual sounds, or phonemes, in words, is the strongest predictor of future reading success for children (Adams, 1995). No research exists that describes the affects of phonological awareness on reading for adults. However, I have found that teaching phonological awareness to my beginning-reading adults significantly improves their reading accuracy and spelling, especially for reading and spelling words with blends.

Typical Lesson Plan for a Three-Hour Class

Component	Time (min)
Phonological Awareness	10
Word Analysis	20
Word Recognition "Sight Words"	10
Spelling	20
BREAK	10
Oral Reading (Accuracy)	20
Oral Reading (Fluency)	35
Comprehension	25
Writing	30

Three phonological tasks that I use with my students, in order of difficulty, are auditory blending, auditory segmenting, and phonemic manipulation. Auditory blending involves asking students to blend words that the teacher presents in segmented form. For example, I say "/s/-/p/-/l/-/a/-/sh/" and the students responds with "/splash/." Auditory segmenting is exactly the opposite. I present the word "/sprint/" and the student must segment the word into its individual sounds "/s/-/p/-/r/-/i/-/n/-/t/." Phonemic manipulation, which is the strongest predictor of reading acquisition, is also the most difficult. The student must recognize that individual phonemes may be added, deleted, or moved around in words.

The following exchange is an example of a phonemic manipulation task. I ask the student to repeat a word such as "bland." Then I ask the student to say the word again, changing one of the phonemes. For example, "Say it again without the "/l/." The student responds with "/band/." While phonological awareness does not include the student's ability to associate sounds with letter symbols, and tasks are presented orally, the research concludes that the most effective way to promote phonemic awareness is in conjunction with the teaching of sound-to-symbol relationships (Torgesen, 1998).

Word Analysis

Word analysis, or phonics, involves teaching the alphabetic principle: learning that the graphic letter symbols in our alphabet correspond to speech sounds, and that these symbols and sounds can be blended together to form real words. Word analysis strategies enable students to "sound out" words they are unable to recognize by sight. Explicit, direct instruction in phonics has been proven to support beginning reading and spelling growth better than opportunistic attention to

phonics while reading, especially for students with suspected reading disabilities (Blackman et al., 1984; Chall, 1967, 1983). Beginning readers should be encouraged to decode unfamiliar words as opposed to reading them by sight, because it requires attention to every letter in sequence from left to right. This helps to fix the letter patterns in the word in a reader's memory. Eventually, these patterns are recognized instantaneously and words appear to be recognized holistically (Ehri, 1992; Adams, 1990).

I use the Wilson Reading System to teach phonics because the six syllable types are introduced early on. This enables even beginning-level adults to read words that are part of their oral vocabulary and overall cognitive abilities. After learning the closed syllable rule, for example, students are able to read three-syllable words such as "Wisconsin," "fantastic," and "Atlantic." Reading multisyllabic words provides my students, who have acquired a history of reading failure, with an unexpected sense of accomplishment and opens

Syllable Types	
SYLLABLE TYPE	**DESCRIPTION**
Closed Syllable (vc/cv)	– one vowel per syllable – ends with one or more consonants – the vowel has a short sound *example:* pit, bath, splash, mitten
Vowel-Consonant-e Syllable (vce)	– one vowel, then a consonant, then an e – the first vowel has a long sound – the e is silent *example:* hope, mine, bedtime
Open Syllable (v/cv), (vc/v)	– one vowel – ends with the vowel – vowel has a long sound *example:* me, so , flu, why
R-Controlled Syllable	– one vowel, followed by an r – vowel sound is neither short or long – vowel sound is controlled by the r – /ar/ as in "car," /or/ as in "Ford," / er/, /ir/, /ur/ all sound alike as in "her," "bird," "church"
The Consonant-LE Syllable	– has three letters: a consonant, an "l," and an "e" – the e is silent – the consonant and the "l" are blended together *example:* little, grumble, table
The Double-Vowel Syllable	– two vowels side-by-side making one sound – usually the first vowel is long, and the second is silent *example:* maid, may, leaf, seen, pie, goat

Credit: Wilson Reading System

possibilities for them. Recognizing syllable types is important because the syllable pattern determines the sound of the vowel and how the word must be pronounced.

I have found that the Wilson Reading System Sound Tapping technique is a particularly effective way to teach decoding. In this technique, each sound in a word is represented by one tap. Students tap the first sound with their index finger and thumb, the second sound with their middle finger and thumb, the third sound with their ring finger and thumb, etc. If the student runs out of fingers, he or she returns to the index finger. Digraphs — two letters that make one sound (/sh/, /ch/, /th/, /ck/, /ph/) — are represented with one tap. Example: bed = 3 sounds, 3 taps; shed = 3 sounds, 3 taps; stint = 5 sounds, 5 taps. This technique helps students to hear all the sounds in a word.

"Sight Word" Recognition

Since many of the words that appear most frequently in print are phonetically irregular, even beginning readers must learn to recognize some words by sight. Students with reading disabilities have typically relied almost entirely on their ability to memorize words. In most cases, however, their strategies for remembering the way words look in print have proved ineffective. I have experienced some success in teaching sight words using the Visual-Auditory-Kinesthetic-Tactile (V-A-K-T) method that is part of the Orton- Gillingham program. The VAKT method, which emphasizes memorization through visualization, involves asking the student to say the name of each letter in a word and to trace each letter with his or her finger in the air before covering the word and attempting to spell it on paper. The VAKT method may be used to help students with both the reading and spelling of phonetically irregular

words. To avoid unnecessary frustration, it is best to tell beginning readers which words they should decode and which words they must recognize by sight.

Spelling

Spelling is an effective way to reinforce both word analysis skills and automatic word recognition. Research consistently indicates that fluent, skilled readers (both children and adults) make use of spelling patterns when they read and, conversely, reading itself reinforces a knowledge of spelling patterns (Adams, 1995). Spelling for practicing word analysis skills and spelling for promoting word recognition (usually of phonetically irregular words), however, involve different tasks and call for different teaching techniques. The VAKT method, described earlier, is a process for teaching learners how to spell phonetically irregular words. When dictating phonetically regular words, include only those words that include letter sounds and spelling rules that have been taught directly.

An especially effective technique for the spelling of phonetically regular words is the LiPS technique. This involves asking students to put down a poker chip for each sound they hear. After identifying the correct number of sounds in the word, students locate the vowel sound and place a different-colored chip over the chip that represents the vowel sound. Only after they have identified the sounds and isolated the vowel sound are students asked to select the letter symbols that represent the sounds in the word.

This places a lighter burden on short-term and working memory.

For beginning-level readers who are native speakers of English, it is important to include nonsense words as part of dictation practice. Nonsense words require the student to use word attack strategies as opposed to sight recognition.

Oral Reading

Oral reading builds accuracy and fluency, both of which contribute to improved reading comprehension. It is also the most practical way for me to monitor a student's progress. It gives a student an opportunity to practice applying word attack and word recognition skills in context. Because reading for fluency and reading for accuracy involve different objectives and require different materials, I find it useful to teach and evaluate them as two separate activities.

Oral reading for accuracy gives students an opportunity to use the word analysis skills they have been taught directly, so I choose reading selections from controlled texts. During accuracy reading, the emphasis is on using word analysis knowledge to decode unfamiliar words. The goal of fluency reading, on the other hand, is to encourage students to read smoothly and with expression. When asking my students to do fluency reading, I do not interrupt the flow of the reading to discuss the content of the text or to analyze a particular spelling pattern. If the student makes a mistake, I provide the word. Because it is difficult to find materials that are easy enough for a beginning reader to read fluently, I often address fluency in the context of rereading material students

/sh/   /i/   /p/   /sh/   /i/   /p/   =   s-h-i-p

have first read for accuracy. The Wilson Reading System describes a technique for promoting fluency called penciling that I have found particularly useful. I encourage the student to read more than one word in a breath by scooping a series of words together with a pencil. First, I model how the sentence should be read. For example: "The man with the hat is big." Eventually, students are able to pencil the sentences for themselves but, at the beginning, I scoop words into phrases for them.

When working on oral reading for either accuracy or fluency, I divide the class up according to ability. I assign my teaching volunteers to work with the higher-level groups. Periodically, I pair stronger readers to act as student teachers with their less skilled classmates.

Before being paired with a less skilled reader, however, student teachers receive explicit instruction in providing decoding clues and handling errors. I find this activity effective for two reasons. First, by teaching someone else, the more skilled student teachers consolidate their own knowledge and become cognizant of their own relative progress. Second, the more-skilled readers become a source of inspiration and support for the less-skilled readers in the class.

Comprehension

For readers at the 0–3rd grade level, I teach higher-level comprehension skills using materials other than those the students can read themselves. In my class, critical thinking usually takes place in the context of a classroom debate. Topics I have found particularly conducive to a heated discussion include "Why do you think it is or is not appropriate to hit your children when they misbehave?" and "Why do you think there is so much crime in this country?"

Using photographs is also effective in building higher-level comprehension skills. I ask questions such as "What do you think the people in the photograph are feeling?" "How can you tell?" or "What do you think may have happened to make them feel that way?" Open-ended questions encourage students to make inferences, draw conclusions, and express opinions.

Conclusion

Progress can be excruciatingly slow for beginning-level adult readers. The volunteers who work in my class are struck by the lack of novelty in my classes. Each class follows the same routine (see the Typical Lesson Plan) and a significant amount of class time is spent reviewing previously taught skills and rereading texts. For beginning-level readers, and especially for those with reading disabilities, a predictable routine helps to alleviate anxiety. Students get upset when the class does not follow its expected course. The volunteers are also surprised that students do not feel insulted or embarrassed working with the letters of the alphabet and reading texts that may appear babyish. On the contrary, after years of only using a hit or miss approach, my students are extremely relieved to discover that reading involves patterns of letters with predictable sounds.

One student describes his early experience with reading: "When I was in grade school, I would listen to the other kids read aloud and I had no idea how they knew that those letters said those words. When it was my turn, all I could do was guess. Now it makes sense! It's like I found the key."

The challenge of teaching reading to beginning-level adults can be daunting. In my opinion, however, teaching at the beginning level is also the most rewarding. It is extremely moving to witness an adult who, after years of struggling with the sounds of individual letters, is able to read a letter from a family member or a note that his or her child brings home from school.

References

■ Adams, M.J. (1990). *Beginning to Read: Thinking and Learning About Print.* Cambridge, MA: MIT Press.

■ Adams, M.J. (1995). "Resolving the "great debate"." *American Educator,* 19(2).

■ Blackman, J., Bruck, M., Herbert, M., & Seidenberg, M. (1984). "Acquisition and use of spelling-sound correspondences in reading." *Journal of Experimental Child Psychology,* 38, 114-133.

■ Chall, J.S. (1967). *Learning to Read: The Great Debate.* New York: McGraw-Hill.

■ Chall, J.S. (1983). *Stages of Reading Development.* New York: McGraw-Hill.

■ Curtis, M.E. (1980). "Development of components of reading skill." *Journal of Educational Psychology,* 72, 656-669.

■ Ehri, L.C. (1992). "Reconceptualizing the development of sight word reading and its relationship to encoding." In P. Gough, L. Ehri, & R. Treiman (eds.), *Reading Acquisition* (pp. 107-144). Hillsdale, NJ: Erlbaum Associates.

■ Snow, C., & Strucker, J. (2000). "Lessons from preventing reading difficulties in young children for adult learning and literacy." In J. Comings, B. Garner, & C. Smith (eds.), *Annual Review for Adult Learning and Literacy,* Vol. 1, 25-69. San Francisco: Jossey-Bass, Inc.

■ Stanovich, K.E. (1986). "Matthew effects in reading: Some consequences of individual differences in acquisition of literacy." *Reading Research Quarterly,* 21, 360-407.

■ Torgesen, J. (1998). "Catch them before they fall; Identification and assessment to prevent reading failure in young children." *American Educator,* 32-39.

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Beginning ESOL Learners' Advice to Their Teachers

by MaryAnn Cunningham Florez

"They [the teachers] have a lot of 'esfuerzo'."

*I*t *seemed like an innocuous comment from a learner about a two-teacher team, and it was only one of many that I furiously noted as I talked with a focus group of adult learners from a beginning-level class in English for speakers of other languages (ESOL). When I opened my notebook a day or two later, however, I realized exactly how much this learner and others were telling me. The word "esfuerzo" made me stop and think. The English translation from a dictionary —*

effort, spirit — might not seem that informative, but we were holding these discussions in the learners' native Spanish, and the implications of that word in Spanish and the comments it sparked provided a wealth of insights into the instructional process in that classroom. The learners were telling me what they valued in their teachers' practices: not only their heart and dedication, but also the focus, pace, activity, and sense of purpose in the lessons they conducted. It provided me with a

wonderful window into what teachers need to know and do to support beginning-level English language learners, and also gave me valuable information for planning and implementing the training of their teachers.

In ESOL, we often talk about learner-centered instruction and the value of including learners' perspectives and realities in our program and classroom planning and implementation. Teachers and administrators everywhere work to gather learners' input on issues from content topics to teaching methods. I began conducting learner focus groups as a way of including learners' voices in our small program's end-of-semester evaluation. In what specific areas did I think learners' comments might be applied? I was probably expecting them to be helpful in identifying barriers to participation or providing comments that might help me as I talked with individual teachers about their practices.

I was missing the potential impact that direct comments and ideas from learners could have on staff development, especially for teachers working with beginning-level

learners. Until, that is, I began to see the quality, thoughtfulness, and depth of the comments they were providing. These comments added enriching dimensions to the approaches, techniques, and information that are usually a part of training for teachers working with beginning-level learners.

Ours is a community-based volunteer program at St. Anthony of Padua Catholic Church, Falls Church, VA. We began this year with approximately 140 predominantly Central American learners assigned to five different classes. Sixty percent of the learners enrolled were placed in the three beginning-level classes. They attend classes two evenings a week for two hours, working primarily on basic language development within a life skills context. The learners exhibit a range of literacy skills (from nonliterate to highly literate) and educational backgrounds in their native language, as is typical in beginning-level classes (Brod, 1999; Shank & Terrill, 1997). There are 12 volunteer teachers for the program's five classes: three two-person teams and six individual teachers. All of the teachers teach one night a week; one teacher teaches both nights of her class. Only one of the teachers has experience teaching English to non-English speakers.

The advice that follows — representing a collection of the most frequently heard statements — is drawn from the comments of 28 students in the beginning-level classes who participated in three different focus groups with me. All of the learners are native Spanish speakers; I conducted the focus groups in Spanish to ensure that all could participate as fully as they wanted.

The Learners' Advice

Repeat, but differently. One of the most consistent suggestions was that teachers need to create opportunities for learners to practice material repeatedly but in different ways and in different contexts. For some learners, this meant a better balance of opportunities to engage in speaking, listening, reading, and writing. For others, it meant different practice structures: pair work, individual work, round-robin, choral response, etc. For still others, it meant changing the context in which the content or material is used: saying, copying, and printing lists of numbers as a first step for pre- or nonliterate learners and later practicing them again as times, dates, and prices.

Spend more time on topics and go more deeply into them. Learners were generally very happy with the topics and themes typically covered in beginning-level classes: health, personal information, jobs, or shopping. They appreciated the fact that these topics involved language they needed to know and use in their daily lives. However, they suggested that teachers spend more time on each topic, offering more and different ways to practice the material and

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Self Assessment

I ask learners to self-assess what they have learned at the end of each unit in our textbook. I give each learner a three-column chart and I draw a similar one on the board. The first column will be filled in with items we studied in the unit. Learners put a check in one of the other two columns to indicate if they have mastered the item or not. I use symbols (a simple drawing of a person smiling and another of a person frowning) or words ("I know;" "I don't know") to head these columns, depending on the proficiencies of my learners and their comfort with the process.

I ask learners to look back through the unit and think about what we have studied. We then brainstorm together and I record the items on the chart on the board while the learners record them on their individual charts. (I may write one or two items in the first column as examples, to get them started.)

Depending on the learners' language levels, I might use words, symbolic drawings, or a combination of both to list the items that we brainstorm. As I list items, I make sure that I point to the page or pages in the book where they were covered, to remind learners of the context and to make sure everyone is clear about what we are naming. Learners then indicate individually what they have learned and what they need to practice more. Afterward, we debrief, either as a whole group or in pair or small groups that then report back to the large group, to determine the items that people had in common. On that basis, we decide what we may need to review as a class or as individuals.❖

exploring issues and situations associated with it. They wanted teachers to move more deliberately through the language and materials being presented and to be open to studying related language and issues identified by the learners.

Don't fall into a vocabulary rut. Many learners felt that teachers spent more time on practicing vocabulary than on actually using it. Flash cards, matching games, labeling of pictures, copying of words, and similar vocabulary development exercises are useful, but they shouldn't constitute the whole lesson. The learners want to use the words in sentences, in dialogues, and completing other tasks.

Do more reading and writing. The majority of learners felt that reading and writing are the skills most often neglected in their beginning-level ESOL classes. While most acknowledged that speaking and listening (or "understanding," as many learners called it) were the immediate needs in their lives, reading and writing were the areas in which they felt they needed the most practice. They wanted teachers to make concerted efforts to incorporate level-appropriate reading and writing as regular parts of the class, as they did with speaking and listening.

Let us know how we are doing. A number of learners expressed a desire for more tests and quizzes in their classes. With further probing, however, I found that what they really wanted were more opportunities of any type that would help them to check on their progress. Paper-and-pencil tests were mentioned, perhaps because learners are familiar with this means of assessment. More consistent, concrete feedback from the teacher was also mentioned. Teachers may feel that, at the beginning levels, learners will find tests or direct feedback too intimidating or even discouraging. The challenge may be for teachers to introduce learners to the variety of forms that assessments can take and to the concept of self-assessment.

The latter, in particular, is a valuable concept to introduce, although it may be difficult because learners may not have experience with it; or if they do it, they may not know it as self-assessment.

Give us more than the "simple present." As one learner put it, how can teachers expect learners to talk or write about important experiences,

their homelands, or even their families when so many of these things are in the past and all students have to work with is the present tense? If teachers are going to involve learners in activities that ask them to use life experiences as their basis, the learners want at least a start on the language tools required to do so. This may mean introducing and using some past

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Ideas for Eliciting Learner Feedback

What if you want to get feedback from your learners about the learning process in your classroom, but you do not share a native language with them?

■ Use picture or word prompts to stimulate role plays or brainstorming sessions to preface a new topic. As you and the learners do this, you will gather clues about what they already know or have experienced and any special needs or interests they may have in relation to the topic.

■ Create a Language Experience Approach (LEA) story about studying English. Find or draw pictures in which people are writing, listening, speaking, looking in a dictionary, talking collaboratively, etc. After the story has been completed, ask learners to circle the ways they like to study English, compare with each other, and even create a consensus list of advice that you can use to inform your lesson planning.

■ Take a picture of your classroom on a typical day. Ask learners to create (draw, assemble a collage, for example) pictures of classes they have attended in the past. Ask them to compare the pictures they create with the picture of your current classroom. Write or discuss what your students like and dislike about each.

■ At the end of a class period, ask learners to comment on the various activities in which they participated. They can do this by voting yes or no on whether a specific activity was helpful, or by rating it. Use pictures, symbols, recognizable words or phrases, and refer back to concrete handouts or products of the activities to support the learners as they tackle the task.❖

tense verbs or a sentence using a modal. It does not mean, however, that beginning learners should be expected to learn everything about that past tense verb or modal and be able to reproduce it out of the context in which it was presented.

Know when to say "That's all you need to know right now." These beginning-level learners respect when a teacher tells them that they do not need to know all the intricate explanations behind a grammar point or a common, but structurally more advanced, phrase, such as "May I help you?" In fact, they are sometimes relieved simply to memorize what they need to know and proceed to the practice that is more appropriate and necessary for their level. The learners discussed this issue primarily in terms of grammar and a few simple, practical idioms. However, I think it is worth considering when planning other aspects, such as vocabulary or even content to be covered. (For example, do beginning-level learners really need to know "veins" and "arteries" and the differences between them, or can that wait for the next level?) Teachers need to make clear for themselves the knowledge they absolutely need to frame their lessons and the extent of information they actually need to impart to their students.

Watch your "teacher talk." Many of the learners reported that teachers used very complicated language that distracted or confused them in the course of presenting materials and lessons. Teachers often devote a great deal of time to determining what content and material are appropriate for the beginning-level learner. In an ideal situation, they then spend additional time figuring out how to present them in an understandable way. Teachers need to be doubly aware of the vocabulary and language structures that they use to present, explain, and even "fill" the time in and around lessons.

Talk to us about learning and the learning process. Learners wanted their teachers to talk to them about what learners need and what helps them most in the classroom. They were willing to share their strategies for learning, their goals, and their difficulties in order to help the teacher adjust instruction. They were very sophisticated and thoughtful in their analysis of the learning process in their classroom. Teachers may want to look at ways in which pictures, role playing, and similar techniques could be used to gather feedback on the ways that learners learn best, topics or themes they want to explore, or even the sequence in which learners want to cover chapters or units in a textbook.

Conclusion

These comments are not necessarily innovative ideas for working with beginning-level learners. In fact, most are a part of good teaching practices for students of any level (see Holt, 1995; Wrigley & Guth, 1990). They helped me focus, however, not only on what the learners need but also on what inexperienced teachers often overlook, forget, or do not completely understand about working with beginning-level ESOL learners. In a "church basement" program like ours, the amount of time that you can ask volunteers to contribute beyond their weekly teaching commitment is limited both by their schedules and by the desire not to over-tap their generosity. However, you also want to make sure that volunteers are sufficiently prepared and supported in their teaching efforts. I think these learner comments will help me to focus better the training for teachers in beginning-level classes. Such classes constitute more than 50 percent of our program and tend to attract new, less-experienced volunteers. They remind me to include aspects and strategies that are second nature to me as an experienced beginning-level teacher.

These learner voices were practical and thoughtful. They revealed the cognitive, intellectual, psychological, and social savvy and capability that inexperienced teachers can sometimes overlook in learners with beginning-level English language or literacy proficiencies and skills (Brod, 1999; Shank & Terrill, 1997). They will resonate strongly when used in teachers' preparation and training in our program. I had a distinct advantage in gathering these comments, since I spoke the students' native language. It would be interesting to see if program planners or teachers using role plays, responses to pictures, Language Experience Approach (LEA), or similar techniques might get the same types of responses from mixed native-language groups. These beginning learners have a great deal of useful advice to offer to their teachers as well as to staff developers and trainers like me. It would be worth the effort to find ways to tap that resource.

References

■ Brod, S. (1999). *What Non-readers or Beginning Readers Need to Know: Performance-Based ESL Adult Literacy.* Denver, CO: Spring Institute for International Studies.

■ Holt, G. (1995). *Teaching Low-level Adult ESL Learners.* Washington, DC: National Clearinghouse for ESL Literacy Education.

■ Shank, C., & Terrill, L. (1997). "Multilevel literacy planning and practice." *Focus on Basics,* 1 (C), 18-21.

■ Wrigley, H. & Guth, G. (1990). *Bringing Literacy to Life: Issues and Options in Adult ESL Literacy.* San Mateo, CA: Aguirre International.

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The Neurobiology of Reading and Dyslexia

by Sally E. Shaywitz, M.D., and Bennett A. Shaywitz, M.D.

Developmental dyslexia is characterized by an unexpected difficulty in reading experienced by children and adults who otherwise possess the intelligence and motivation considered necessary for accurate and fluent reading. It represents one of the most common problems affecting children and adults; in the United States, the prevalence of dyslexia is estimated to range from five to 17 percent of school-aged children, with as many as 40 percent of the entire population reading below grade level. Dyslexia (or specific reading disability) is the most common and most carefully studied of the learning disabilities, affecting 80 percent of all individuals identified as learning disabled. This article reviews recent advances in the neurobiology of dyslexia and their implications for teaching adults with dyslexia.

Epidemiology of Dyslexia

Like hypertension and obesity, dyslexia fits a dimensional model: within the population, reading and reading disability occur along a continuum, with reading disability representing the lower tail of a normal distribution of reading ability. Good evidence based on sample surveys of randomly selected populations of children now indicate that dyslexia affects boys and girls equally (Figure 1); the long-held belief that only boys suffer from dyslexia reflected sampling bias in school-identified samples.

Dyslexia is a persistent, chronic condition; it does not represent a transient "developmental lag" (Figure 2). Over time, poor readers and good readers tend to maintain their relative positions along the spectrum of reading ability.

Causes

Dyslexia is both familial and heritable: both environmental and genetic influences affect the expression of dyslexia. This observation provides opportunities for early identification of affected siblings and often for delayed but helpful identification of affected adults. Thus 23 to 65 percent of children who have a parent with dyslexia, 40 percent of siblings of dyslexics, and 27 to 49 percent of parents of dyslexics may have the disorder. Studies implicate loci on chromosomes 6 and 15 and, more recently, on chromosome 2 in the causation of dyslexia.

The Cognitive Basis of Dyslexia

The phonologic deficit hypothesis — There is now a strong consensus among investigators in the field that the central difficulty in dyslexia reflects a deficit within the language system, although other systems and processes may also contribute to the difficulty. The language system is conceptualized as a hierarchical series of components: at higher levels are neural systems engaged in processing, for example, semantics, syntax, and discourse; at the lowest level is the phonologic module dedicated to processing the distinctive sound elements that constitute language. The functional unit of the phonologic module is the phoneme, defined as the smallest discernible segment of speech; for
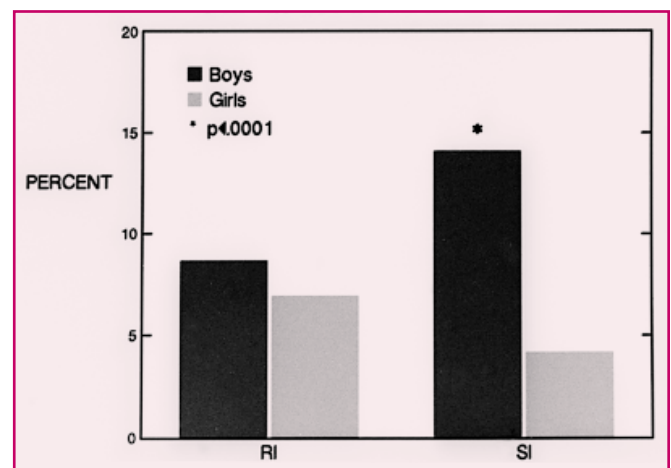
Figure 1. Prevalence of reading disability in research-identified (RI) and school-identified (SI) boys and girls. Schools identify about four times as many boys as girls, reflecting primarily externalizing behavioral characteristics that are more likely to bring boys to a teacher's attention. This skewed prevalence rate reflects referral bias. When actual reading scores are used to identify children, there is no significant difference in the prevalence of dyslexia between boys and girls (based on data in Shaywitz et al., 1990).

example, the word "bat" consists of three phonemes: /b/ /ae/ /t/ (buh, aah, tuh). To speak a word, the speaker retrieves the word's phonemic constituents from his or her internal lexicon, assembles the phonemes, and then utters the word. Conversely, to read a word, the reader must first segment that word into its underlying phonologic elements. The awareness that all words can be decomposed into these basic elements of language (phonemes) allows the reader to decipher the reading code. In order to read, a child has to develop the insight that spoken words can be pulled apart into phonemes and that

Figure 2. Trajectory of reading skills over time in nonimpaired and dyslexic readers. Ordinate shows Rasch scores (W scores) from the Woodcock-Johnson reading test (Woodcock & Johnson, 1989) and abscissa shows age in years. Both dyslexic and nonimpaired readers improve their reading scores as they get older, but the gap between the dyslexic and nonimpaired readers remains. Thus dyslexia is a deficit and not a developmental lag (from Francis et al., 1996).

the letters in a written word represent these sounds. This so-called phonemic awareness is largely missing in dyslexic children and adults. Results from large and well-studied populations with reading disability confirm that in young school-aged children, as well as in adolescents, a deficit in phonology represents the most robust and specific correlate of reading disability. Such findings form the basis for the most successful and evidence-based interventions designed to improve reading. While children and adults with a phonologic deficit represent the vast majority of

subjects with dyslexia, other subtypes may account for some cases of dyslexia. Examples include dyslexia resulting from deficits in naming-speed in addition to phonological deficits, the so called double-deficit hypothesis.

Implications of the phonologic model of dyslexia

— Reading is comprised of two main processes: decoding and comprehension. In dyslexia, a deficit at the level of the phonologic module impairs the reader's ability to segment the written word into its underlying phonologic elements. As a result, the reader experiences difficulty, first in decoding the word and then in identifying it. The phonologic deficit is domain-specific; that is, it is independent of other, non-phonologic, abilities. In particular, the higher-order cognitive and linguistic functions involved in comprehension, such as general intelligence and reasoning, vocabulary, and syntax, are generally intact. This pattern — a deficit in phonologic analysis contrasted with intact higher-order cognitive abilities — offers an explanation for the paradox of otherwise intelligent people who experience great difficulty in reading.
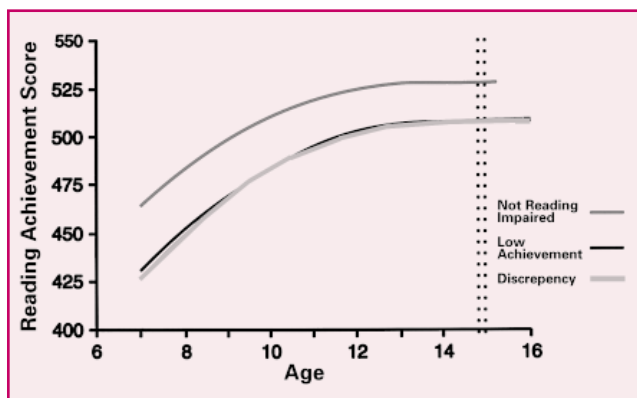
According to the model, a circumscribed deficit in a lower-order linguistic (phonologic) function blocks access to higher-order processes and to the ability to draw meaning from text. The dyslexic reader cannot use his or her higher-order linguistic skills to access the meaning until the printed word has first been decoded and identified. For example, readers who know the precise meaning of the

spoken word "apparition" will not be able to use their knowledge of the meaning of the word until they can decode and identify the printed word on the page and will appear not to know the word's meaning.

The phonologic deficit in adolescence and adult life

— Deficits in phonological coding continue to characterize dyslexic readers even in adolescence; performance on phonological processing measures contributes most to differentiating dyslexic from average readers, and average from superior readers as well. Children with dyslexia neither spontaneously remit nor do they demonstrate a lag mechanism for "catching up" in the development of reading skills. That is not to say that many dyslexic readers do not become quite proficient in reading a finite domain of words in their area of special interest, usually words that are important for their careers. Such individuals, while able to decode words in this domain, still exhibit evidence of their early reading problems when they have to read unfamiliar words, which they do accurately but not fluently and automatically. In adolescents, oral reading, the rate of reading, as well as facility with spelling may be most useful clinically in differentiating average from poor readers.

From a clinical perspective, these data indicate that as children approach adolescence, a manifestation of dyslexia may be a very slow reading rate. Children may learn to read words accurately, but they will not be fluent or automatic, reflecting the lingering effects of a phonologic deficit. Because they are able to read words accurately (albeit very slowly), dyslexic adolescents and young adults may mistakenly be assumed to have "outgrown" their dyslexia. These older dyslexic students may be similar to their unimpaired peers on untimed measures of word recognition, yet continue to suffer from the phono-

logic deficit that makes reading less automatic, more effortful, and slow. The provision of extra time is therefore an essential accommodation; it allows them the time to decode each word and to apply their unimpaired higher-order cognitive and linguistic skills to the surrounding context to get at the meaning of words that they cannot entirely or rapidly decode.

Neurobiological Influences

A range of neurobiological investigations using postmortem brain specimens and, more recently, brain morphometry and diffusion tensor magnetic resonance imaging (MRI) suggests that there are differences between dyslexic and nonimpaired readers in the back of the brain, specifically in the temporoparietooccipital brain regions. Functional brain imaging studies also show a failure of left hemisphere posterior brain systems to function properly in adult dyslexic readers while they perform reading tasks.

In principle, functional brain imaging is quite simple. When an individual is asked to perform a discrete cognitive task, that task places processing demands on particular neural systems in the brain. To meet those demands requires activation of neural systems in specific brain regions and those changes in neural activity are, in turn, reflected by changes in cerebral blood flow. We use the term "functional imaging" for technologies that measure those changes in blood flow in specific brain regions while subjects are engaged in cognitive tasks.

Gender-Based Differences

In an early study of 19 neurologically normal right-handed men and 19 women, the subjects had to decide whether two pseudowords

rhymed. (For example, do [LEAT] and [JETE] rhyme?) Nonword reading is perhaps the clearest indication of decoding ability because familiarity with the letter pattern cannot influence the individual's response. Of particular interest were differences in brain activation patterns in men compared to women. Figure 3 illustrates that activation during phonological processing in men was more lateralized to the left inferior frontal gyrus, known as Broca's area; in contrast, activation during this same task in women resulted in a more bilateral pattern of activation of this region.

These findings provide the first clear evidence of gender-based differences in the functional organization of the brain for language. They support and extend a long-held hypothesis that language functions are more likely to be highly lateralized in males but are represented in both cerebral hemispheres in females.

Studies of dyslexic readers indicate a significant disruption in the neural systems for reading in dyslexic subjects as they try to decode pseudowords. Thus, as shown in Figure 4 during nonword rhyming in dyslexic readers, we found a disruption in several critical components of a posterior system involving the posterior superior temporal gyrus (Wernicke's area) and the angular gyrus,

and a concomitant increase in activation in the inferior frontal gyrus.

These data indicate that dyslexic readers demonstrate a functional disruption in an extensive system in the posterior cortex encompassing both traditional visual and language regions as well as a portion of association cortex. The involvement of this latter region, centered about the angular gyrus, is of particular interest since this portion of association cortex is considered pivotal in carrying out those cross-modal integrations necessary for
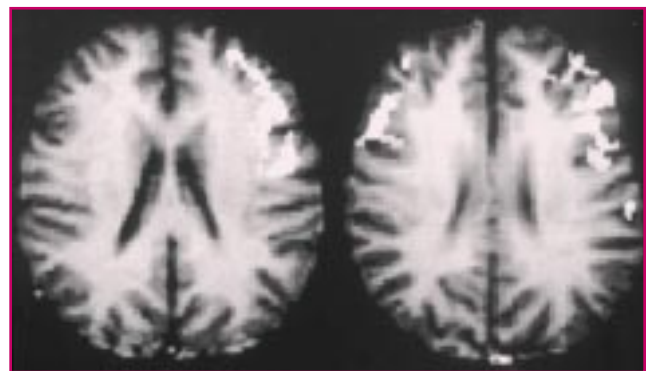
Figure 3. Gender-based differences in the brain during phonological processing. Composite fMRI images show the distribution of brain activation patterns in men (left) and women (right) during a nonword rhyming task. In men, activation is lateralized to the left inferior frontal regions; in women the same region is active bilaterally (data from Shaywitz et al., 1995).
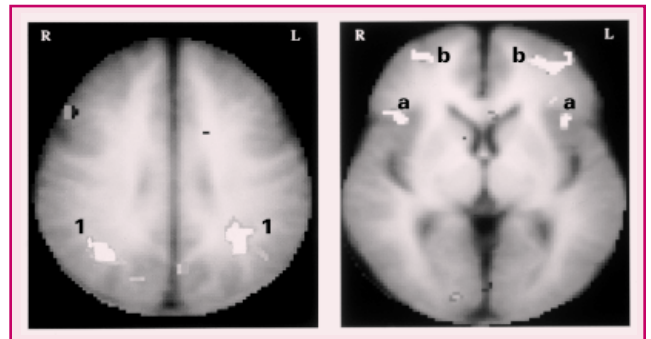
Figure 4. Composite fMRI activation maps in nonimpaired and dyslexic readers engaged in phonological processing during the nonword rhyme task show that nonimpaired readers activate a large region involving the angular gyrus (1), supramarginal gyrus, and posterior portions of the superior temporal gyrus. In contrast, dyslexic readers demonstrate a relative underactivation in this posterior region and an increased activation in the inferior frontal gyrus (a) and middle frontal gyrus (b) bilaterally(data from Shaywitz et al., 1998).

reading (i.e., mapping the visual percept of the print onto the phonologic structures of the language).

Consistent with this study of developmental dyslexia, a large literature on acquired inability to read (alexia, for example, following a stroke) describes neuroanatomical lesions most prominently centered about the angular gyrus. It should not be surprising that both the acquired and the developmental disorders affecting reading have in common a disruption within the neural systems serving to link the visual representations of the letters to the phonologic (language) structures they represent. While reading difficulty is the primary symptom in both acquired alexia and developmental dyslexia, associated symptoms and findings in the two disorders would be expected to differ somewhat, reflecting the differences between an acquired and a developmental disorder. In acquired alexia, a structural lesion resulting from an insult (e.g., stroke, tumor) disrupts a component of an already functioning neural system and the lesion may extend to involve other brain regions and systems. In developmental dyslexia, as a result of a constitutionally based functional disruption, the system never develops normally. The symptoms reflect the emanative effects of an early disruption to the phonologic system. In either case the disruption is within the same neuroanatomical system.

A Neural Model for Reading

These data from laboratories around the world indicate that a number of interrelated neural systems are used in reading: at least two in posterior brain regions as well as distinct and related systems in anterior regions (Figure 5).

In order to read, the beginning reader must break the reading code, that is, transform the visual features

(the letters) of the word into the linguistic sounds (the phonemes) they represent and then access the meaning of the word. As early as 1891, Dejerine suggested that a portion of the posterior brain region (which includes the angular gyrus and supramarginal gyrus in the inferior parietal lobule, and the posterior aspect of the superior temporal gyrus) is critical for reading.

Rather than the smoothly functioning and integrated reading systems observed in non-impaired readers, disruption of the posterior reading systems results in dyslexic readers attempting to compensate by shifting to other, ancillary, systems (e.g., anterior sites such as the inferior frontal gyrus and right posterior sites). The anterior sites, which are critical in articulation, may help dyslexic readers develop an awareness of the sound structure of the word by forming the word with their lips, tongue, and vocal apparatus and thus allow them to read, albeit more slowly and less efficiently than if the fast occipitotemporal word identification system were functioning. The posterior sites, for example the right occipitotemporal area, may be used by the dyslexic reader to facilitate visual pattern recognition, compensating for the impaired word analysis systems in the left posterior regions. The shift to ancillary neural systems in dyslexic readers may support accurate, but not fluent and automatic, word reading.

Delineation of the circuitry for reading in dyslexia may now allow strategies for specific interventions designed to facilitate the function of these ancillary systems, and a method to measure the efficacy of such
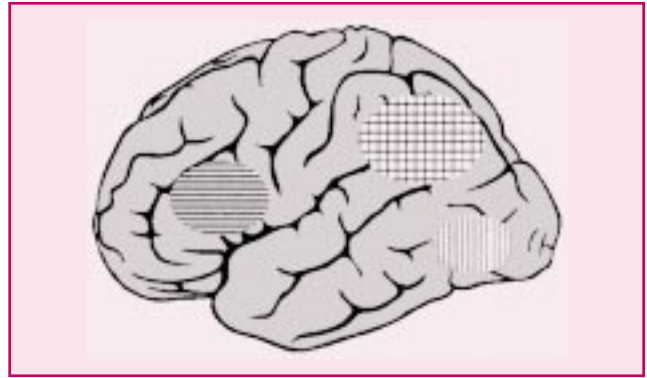
Figure 5. Neural systems for reading. Converging evidence indicates three important systems in reading, all primarily in the left hemisphere: 1) anterior system in the left inferior frontal region; 2) dorsal parietotemporal system involving angular gyrus, supramarginal gyrus, and posterior portions of the superior temporal gyrus; 3) ventral occipitotemporal system involving portions of the middle temporal gyrus and middle occipital gyrus. See text for details.

interventions in a more focused and efficient way. Such studies are now underway.

For dyslexic readers, these brain activation patterns provide evidence of an imperfectly functioning system for segmenting words into their phonologic constituents; accordingly, this disruption is evident when dyslexic readers are asked to respond to increasing demands on their phonologic analysis. These findings now add neurobiological support for previous cognitive/behavioral data, pointing to the critical role of phonologic analysis, and its impairment, in dyslexia. The pattern of relative underactivation in posterior brain regions contrasted with relative overactivation in anterior regions may provide a neural signature for the phonologic difficulties characterizing dyslexia.

Editor's note: Portions of this chapter appeared in (Shaywitz 1998; Shaywitz and Shaywitz 1999; Shaywitz, Pugh et al. 2000; Shaywitz, Shaywitz et al. In Press; Shaywitz, Shaywitz et al. In Press; Shaywitz, Lyon et al. In Press) with permission.

Development (PO1 HD 21888 and P50 HD25802). We thank Carmel Lepore for her help in preparing the manuscript.

References

- Anderson, A., & Gore, J. (1997). "The physical basis of neuroimaging techniques." In M. Lewis and B. Peterson (eds.), *Child and Adolescent Psychiatric Clinics of North America* (vol. 6, pp. 213-264). Philadelphia: W. B. Saunders Co.

- Bruck, M. (1992). "Persistence of dyslexics' phonological awareness deficits." *Developmental Psychology, 28*(5), 874-886.

- Filipek, P. (1996). "Structural variations in measures in the developmental disorders." In R. Thatcher, G. Lyon, J. Rumsey, and N. Krasnegor (eds.), *Developmental Neuroimaging: Mapping the Development of Brain and Behavior* (pp. 169-186). San Diego, CA: Academic Press.

- Frackowiak, R., Friston, K., et al. (1997). *Human Brain Function.* New York: Academic Press.

- Francis, D. J., Shaywitz, S. E., et al. (1996). "Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis." *Journal of Educational Psychology, 88*(1), 3-17.

- Panel, R. o. t. N. R. (2000). Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction. Bethesda, MD: National Institute of Child Health and Human Development, National Institutes of Health.

- Paulesu, E., Demonet, J. F., et al. (2001). "Dyslexia — cultural diversity and biological unity." Science, 291, 2165-2167.

- Pennington, B. F., and Gilger, J. W. (1996). "How is dyslexia transmitted?" In C. H. Chase, G. D. Rosen, and G. F. Sherman (eds.), *Developmental Dyslexia. Neural, Cognitive, and Genetic Mechanisms* (pp. 41-61). Baltimore: York Press.

- Shaywitz, B., Pugh, K. R., et al. (2000). "The neurobiology of reading and reading disability (dyslexia)." In M. Kamil, P. Mosenthal, P. Pearson, and R. Barr (eds.), *Handbook of Reading Research* (vol. III, pp. 229-249). Mahwah, NJ: Lawrence Erlbaum Associates.

- Shaywitz, B., Shaywitz, S., et al. (1995). "Sex differences in the functional organization of the brain for language." *Nature*, 373, 607-609.

- Shaywitz, S. (1998). "Current concepts: Dyslexia." *The New England Journal of Medicine, 338*(5), 307-312.

- Shaywitz, S., & Shaywitz, B. (1999). "Dyslexia". In K. Swaiman and S. Ashwal (eds.), *Pediatric Neurology: Principles & Practice* (vol. 1, pp. 576-584). St. Louis, MO: Mosby.

- Shaywitz, S., Shaywitz, B., et al. (In Press). "The neurobiology of dyslexia." *Clinical Neuroscience Research*.

- Shaywitz, S., Shaywitz, B. et al. (In Press). "The neuropsychology of dyslexia." In S. Segalowitz and I. Rapin (eds.), *Handbook of Neuropsycholology*. Amsterdam: Elsevier.

- Shaywitz, S.E. (1996). "Dyslexia." *Scientific American*, 275(5), 98-104.

- Shaywitz, S., Fletcher, E., et al. (1999). "Persistence of dyslexia: The Connecticut Longitudinal Study at adolescence." *Pediatrics*, 104, 1351-1359.

- Shaywitz, S., Lyon, E., et al. (In Press). "Dyslexia (specific reading disability)." In F. Burg, J. Ingelfinger, R. Polin, and A. Gershon (eds.), *Current Pediatric Therapy*. Philadelphia: W.B. Saunders.

- Shaywitz, S., Shaywitz, B., et al. (1990). "Prevalence of reading disability in boys and girls: Results of the Connecticut Longitudinal Study." *Journal of the American Medical Association*, 264(8), 998-1002.

- Shaywitz, S. E., Shaywitz, B. A., et al. (1998). "Functional disruption in the organization of the brain for reading in dyslexia." *Proceedings of the National Academy of Science of the United States of America*, 95, 2636-2641.

- Snowling, M. (2000). *Dyslexia.* Oxford, UK: Blackwell Publishers, Inc.

- Torgesen, J. K. (1995). *Phonological Awareness: A Critical Factor in Dyslexia*, Orton Dyslexia Society.

- Wagner, R., and Torgesen, J. (1987). "The nature of phonological processes and its causal role in the acquisition of reading skills." *Psychological Bulletin*, 101, 192-212.

- Woodcock, R.W., and Johnson, M.B. (1989). *Woodcock-Johnson Psycho-Educational Battery* — Revised (WJ-R). Allen, TX: Developmental Learning Materials.

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Using a Multisensory Approach to Help Struggling Adult Learners

by Gladys Geertz

I have been a teacher for about 25 years. When I taught elementary school, it seemed that most kids learned to read almost by osmosis. Even the students of some truly lackadaisical teachers usually learned to read. But what about the children who didn't? I spent many hours working on ways to help these special children, sometimes finding a technique that helped, other times passing a child on to the next grade in hope that another teacher would find the key. What happened to these kids? They are the adults I work with every day at the Anchorage Literacy Project (ALP) in Anchorage, AK. Because no one ever found the answer, eventually many of them became frustrated and dropped out of school. Some of them graduated, but they still could not read.

About eight years ago, I observed the Slingerland technique being used with children in Slingerland classrooms in the Anchorage schools, and with adults at ALP. The Slingerland technique uses multi-sensory teaching techniques from Orton-Gillingham that were adapted for the classroom by Beth Slingerland (Slingerland, 1996). Orton-Gillingham developed their teaching techniques working one-on-one with dyslexic children and those with specific language disabilities. A colleague and I developed a program that uses these techniques in classroom settings with adult, low-level reading students. What differentiates our method from the Slingerland method is that we move through a lesson more quickly, teaching more concepts in a day than would be taught in an elementary school class.

Our Program

The ALP multisensory classes consist mostly of students who have gone through the school system in the United States. Some are dropouts; others are high school graduates. They range in age from 18 to 75 years. Our classes are limited to 15 students, but some classes have only four or five. All of our teachers are trained in the Slingerland method, and as of this writing, we have three instructors in the multisensory program who teach a total of nine multisensory classes. Two are spelling classes, three are a combination of reading and spelling, and four are reading classes at various levels, ranging from first to approximately 10th grade level. Each class meets three days a week for an hour and a half per class. Our quarter lasts 10 weeks.

Our classes are not open entry. We continue to accept new students for the first two weeks, but then we close the classes because it is too difficult for new students to catch up. The class atmosphere is casual, but the instructor is in charge. We have found that most adults relish humor and the feeling of camaraderie. Each group tends to become close-knit, and we foster group development.

We have expanded and modified the Slingerland techniques for use with adults with and without language disabilities. The modifications are minor; for example, we do not use tracing procedures (going over the same letter many times) as much with our students. Since our students are adults, and many of them are familiar with the letters, we require them to trace a letter three times, instead of the 10 or 20 that may be required in elementary school. We also proceed more quickly to paper and pencil tasks, rather than spending a lot of time using the pocket chart or board. We also introduce three or four letters during each class session; an elementary teacher may only introduce one or two letters a day. At the beginning of our basic classes, we discuss our teaching procedures with the students, explaining that because they have missed some of the educational experiences necessary for learning, we are starting over.

A Success-Oriented Program

The multisensory approach is a success-oriented program. We only expect students to know what they have been taught. We *provide* instruction, *guide* the students through a successful learning experience, and then *reinforce* this successful learning experience. We make sure that all students leave the classroom feeling that they have experienced success.

We begin with a single unit of sight, sound, or thought, and then proceed to the complex combinations of these units. We start with sight and sound association, following the same routine day after day, and adding a few

consonant letters and then, slowly, the vowels. We usually begin with the short /i/ vowel sound, and the consonant sounds of /n/, /t/, and /p/, using the sequence in *Angling For Words* by Carolyn G. Bowen (1983).

"*We* **provide** *instruction,* **guide** *the students through a successful learning experience, and then* **reinforce** *this successful learning experience.***"**

(Teachers could conceivably introduce letters in any sequence, but it is practical to start with high-frequency letters and those that correspond to a selected text.) We spell and read words from these letters, and then we move on. The time involved in teaching the letter sounds depends on the needs of the particular group of students.

Once the sounds are learned, students move on to the more complex tasks of reading and spelling words, putting these words into sentences, and then mastering paragraphs. With these basic skills, students are able to handle more complex reading and writing material.

A Sample Multisensory Lesson

How does a typical multisensory lesson unfold? People tend to learn through different or unique stimuli. Some of us learn better visually, some auditorily, and others kinesthetically. I have found that most people probably learn best by using two of these modalities. The multisensory technique makes use of all these modalities and combines them into

one simultaneous procedure. It requires learners to see, hear, speak, and do at the same time. We follow a set pattern of seven steps in every lesson. This strict adherence to structure provides a consistent, expectable routine that frees students to concentrate on learning.

From the first day of class, we begin class with **oral language skills,** because the spoken word is much more comfortable than the written word to a low-level reader. First, we, the teacher and the learners, talk, using complete sentences. We encourage each student to participate. Some oral language questions concern the students personally: "How long does it take you to get to class?" "How do you get to class?" "What is your favorite restaurant and why?" "What is your favorite holiday and why?" "How will this class help you?" "If someone gave you a thousand dollars, how would you spend it?"

In the second segment of the lesson, we introduce the **sound-symbol relationship.** We introduce a letter while writing it in the air: kinesthetic movement. If the students need instruction in writing the letter, we also do the writing procedure. Most early readers print; therefore, we teach them cursive writing. The left to right directionality of cursive makes it easier to write neatly, helps fluency, increases speed in writing, and gives our students the skill that most adults have: writing in cursive, which we expect our students to do also.

In the writing procedure, we write the letter on the board, using three lines — a head line; a belt, or middle, line; and a foot line — while communicating to the students exactly how the letter is made and that some

letters are tall and go to the head line, some fall below the foot line, and some are crossed or dotted. We then make the letter in the air, while explaining exactly how it to make it. Next, the students make the letter in the air, very large, using their pointers and index fingers as their writing tools.

After making the letter in the air, each student receives a 12 X 18 inch sheet of newsprint, which has been folded to create lines. We write a cursive letter in crayon on this newsprint. Now the students can trace the letter with their fingers, "feeling" it and saying it. We trace the letter at least three times with our fingers, three times with the blunt end of a pencil from which the eraser has been removed, and three times with the pencil point. Learners then move on to the next box on the paper, tracing with no crayon letter as a guide, using their fingers, then the blunt end of the pencil, and then the pencil point. Then on to the next box using the same procedure. This is the Slingerland technique used for teaching writing. It involves seeing, saying, feeling, and doing simultaneously. We repeat it every

Typical Lesson Plan Components

- Using oral language skills
- Learning a sound-symbol relationship, and using cards to review the sound-symbol relationship
- Decoding
- Vocabulary enrichment
- Phrase reading
- Structured reading
- Story reading using comprehension skills

day for every lesson.

After saying the name of the letter and writing the letter in the air, we show the class a picture of a **key word** beginning with that letter, such as turtle for /t/. Next, the sound of /t/ is made as it is heard in the key word turtle. After the instructor demonstrates the procedure, the class follows the procedure as a group, then each student does it. "Write the letter in the air, say the keyword, say the sound of the letter." They have *felt* the letter, *spoken* the letter, *heard* the name of the letter and letter sound, and *said* the letter sound.

After we have introduced the sound-symbol relationship for a specific number of letters, we review this sound-symbol relationship by displaying flash cards of the letters. This is a review with emphasis on both enabling the learners to feel success and allowing the teacher to ascertain whether everyone has learned the relationship. The students write the letter in the air, speak the name of the letter, hear the name of the letter and the sound of the letter, and then say the sound of the letter. Every lesson has a review of letters using this sound-symbol relationship.

The third lesson segment involves the **decoding of words.** We decode, or sound out, a list of words every day. We develop these lists by using words that incorporate the sounds taught in the second segment of the lesson. We do not include words that contain sounds that we have not taught. So, for example, if we have only taught the sounds for short /i/, consonants /t/, /n/, /p/, then we can spell or decode only words containing those sounds, such as tip, nip, nit, it, tin, pin. To encourage students to sound out words rather than memorize or sight read them, we often use nonsense words such as "nin," or "ip." The more vowel and consonant sounds the students learn, the more words we can use. We begin with one-syllable words, progress to two syllables, three syllables, and so forth. We usually decode 20 to 25

words in a lesson, of which one-third are nonsense. To decode a word, the student underlines the vowels, divides the word into syllables, shows what each vowel "says" by writing above each vowel a diacritical mark, pronounces the word, and then defines it. We teach this entire procedure, one step at a time, with each step modeled by the teacher.

The fourth segment, after we decode several words, is learning **vocabulary.** From conversing with our students, and from answering their questions about words, we know that many of them have limited vocabulary skills. When introducing a story, we teach the definitions of new words and the learners put them into sentences. One of the reading series that we use with low-level readers is *Early Reading Comprehension in Varied Subject Matter* (Ervin, 1999), which has four levels. Written for the older elementary school child, the series seems to be successful with adults. New vocabulary in this story includes "shrubs," "snug," and "den." We also use the Kim Marshall (1999) series for readers above the fourth grade level, which is targeted for adults. Newspapers or *Reader's Digest* are other sources of informational stories. Our students tend to find nonfiction more interesting than fiction.

The fifth lesson segment is **phrase reading,** or reading by ideas. We put five to eight phrases on a chart, read a phrase, and the students repeat it. All phrases are read once with the teacher modeling and the students repeating. After that, the students and instructor discuss any new vocabulary, hyphenated words, or grammar. Then a

student approaches the chart at the front of the classroom. We say a phrase, the student underlines the phrase with a yard stick, reads it aloud, and the other students repeat the phrase. All the phrases on the chart are read a second time using this procedure. Then a different student comes to the chart and we pose questions formatted as "Find the phrase that . ." The student finds the phrase that answers the question, underlines it, and reads it aloud. The other students read the phrase aloud. We do all the phrases in the same way. A fourth student comes to the chart. That student begins at the bottom phrase, reads it, and the other

Procedure for Phrase Reading

The teacher puts the following on a chart:

a very lazy cat

in the shrubs

cold and snowy

He would moan

and eat them
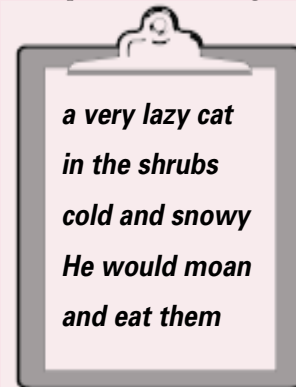
The teacher might ask the learners to:

"Find the phrase that tells <u>where</u>"

"Find the phrase that has a word that means the <u>opposite</u> of warm"

"Find a phrase that begins with an <u>article</u>"

"Find a phrase that is the <u>beginning</u> of a sentence"

"Find a phrase that begins with a <u>conjunction</u>"

Taken from Early Reading Comprehension, Book A, "The Lazy Cat" Paragraph 1, by J. Ervin.

students repeat it. The student at the chart reads from the bottom to the top of the chart, focusing on comprehension. During this phase, we build comprehension skills, lengthen eye-span, make functional use of word attack skills, make predictions, and build cognitive skills.

The sixth segment, after phrase

reading, is **structured reading.** The first paragraph of the story is read aloud using structured reading: a student reads a certain number of words (a phrase) specified by the teacher. The phrase may answer a where, what, why, how, or when question. We say to one student: "Read the first three words that tell why." The student reads the first three words. We ask another student to: "Read the next four words that tell who." The student reads the next four words. We choose another student: "Read the next two words that tell where." The student reads the next two words. This phrase reading is done throughout the first sentence. When the first sentence is finished, we pick a student to read the entire sentence using phrasing. The objective is to get students to read by ideas or thoughts, not by words.

Each sentence is read in sequence using the same method. Eventually, the first paragraph — and only that paragraph — is read using phrase reading designed by the teacher.

In lesson segment seven, each student gets a turn to **read orally.** Each student reads aloud a different paragraph in the story. This enables

us to hear the learners' decoding, expression, and fluency. We discuss every paragraph, always pressing for good comprehension. After answering some specific questions about the last one or two paragraphs, the learners read them silently. Then the class discusses the last two paragraphs and someone reads them aloud.

Challenges

Finding appropriate reading materials for adult students reading at a low level is extremely difficult. Several publishers print books at a fourth-grade reading level and above; materials for adults reading at lower reading levels lower are scarce. Another major challenge is time. Every day we struggle to include all seven steps in our 90-minute class. We may modify the lesson by making steps shorter, decoding fewer words, or reading half the story and assigning the rest for homework, but we do not continue the lesson the next day. Repetition of the seven-step sequence provides useful structure, freeing learners to focus on content rather than methodology.

Results

Since I have started using this multisensory approach, I have witnessed success. During the winter and spring 2000 instructional sessions, for example, our learners improved their skills in word reading and word attach at a statistically significant level as measured by the WRAT3 (word reading) and the Woodcock Johnson-Revised (word attack) tests. But more than statistics, the successes come from the students. They are now willing to pick up a newspaper and they can laugh and joke about their reading, because they have experienced some success. They tell us that the structure and continuity of the instruction as well as the interactive teaching methods were particularly helpful. They have discovered that they are not the only

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Structured Reading

Students read directly from the book using the phrases the instructor indicates to them:

> **Toby was a wild cat who lived in a city park. He was a very lazy cat. He also liked to eat. Even when it was cold and snowy, he knew how to get his meals without ever leaving where he slept. He would stay in his snug den in the shrubs.**

Instructor says: *Read the first five words that tell <u>who</u>.*

Student 1 reads: **Toby was a wild cat.**

Instructor says: *Read the next two words telling <u>what</u>.*

Student 2 reads: **who lived.**

Instructor says: *Read the next four words that tell <u>where</u>.*

Student 3 reads: **in a city park.**

Instructor says: *Read the complete sentence using that same phrasing.*

Student 4 reads: **Toby was a wild cat (pause) who lived (pause) in the city park.**

Instructor says: *Read the next two words that tell you <u>what</u>.*

The procedure continues until the end of the paragraph. To conclude, a student reads the entire paragraph using good phrasing.

Taken from Early Reading Comprehension, Book A, "The Lazy Cat" Paragraph 1, by J. Ervin.

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people in the world with reading difficulties and know that, with time and diligence, they can achieve their educational goals.

References

- Bowen, C. (1983). *Angling For Words*. Novato, CA: Academic Therapy Publications.

- Ervin, J. (1999). *Early Reading Comprehension in Varied Subject Matter*. Cambridge, MA: Educators Publishing Service, Inc.

- Marshall, K. (1999). *The Kim Marshall Series, Reading Book 1*. Cambridge, MA: Educators Publishing Service, Inc.

- Slingerland, Beth H. (1996) *A Multi-Sensory Approach To Language Arts for Specific Language Disability Children Books 1, 2, 3*. Cambridge, MA: Educators Publishing Service, Inc.

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*PLAY
IT
FORWARD!*
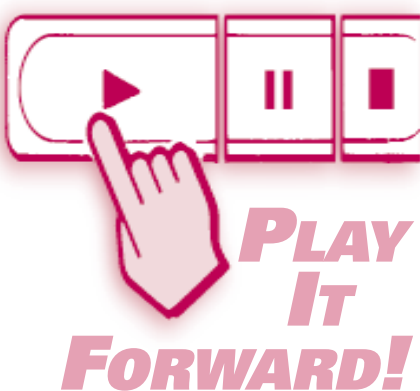
Share
Focus on Basics
with a colleague.

Reading for Pleasure

Learners' personal reading choices can provide teachers with ideas on how to motivate and support them

by Sondra Cuban

After tutoring, teaching, and doing research in literacy programs, I wanted to know more about how literacy fit into women's lives, thinking that this could help me understand how better to serve women learners in programs. I conducted a lengthy qualitative study of 10 women learners for my doctoral dissertation. I wanted to find out if the women learners I was studying read outside of the program, what they wanted to read about, and what their purposes were for reading. I focus here on my interviews with four women and what their experiences suggest for curriculum and instruction in literacy programs.

Gloria, Donna, Lourdes, and Elizabeth were enrolled in a computer-assisted literacy program in a semirural area of Hawaii. Gloria and Donna were beginning adult basic education (ABE) students; Lourdes and Elizabeth, both students of English for speakers of other languages (ESOL), were at slightly higher levels in the program. Donna was at the lowest level of literacy of the four women and rarely read. She told me

she really wanted to read love stories but felt she couldn't. She said, "I guess my mind's so tired that I get frustrated and give up. I guess, like I said — too much stuff going [on] in my mind." Her desire to read love stories was fueled by the romances and comedies she watched on TV, which she enjoyed and which distracted her from her family problems.

The women in the study all read and wanted to read popular-culture materials — commercially published books also referred to as genre and trade books — that were not, for the most part, used in the literacy program they attended. They also used reading for similar ends: they read to make themselves feel better. I interviewed the women over the course of a year about their schooling and work experiences, the ways they learned in their families of origin, and about their use of mass media: anything from watching television to reading books. I also observed them and interviewed staff in the program within this period. I discovered gaps between what the women read and wanted to read outside of the program and what the program offered.

In the literacy program, they learned basic keyboarding skills, English grammar, phonics, and oral pronunciation. Instruction in the program tended towards skills-based learning from commercial texts such as student dictionaries, Laubach books such as the *Challenger* series, reading skills workbooks such as the Steck-Vaughn *Reading for Today* series, as well as pre-GED materials. The program also used educational and diagnostic software and typing

program tutorials. Library books and newspapers were sometimes brought into the tutoring instruction but were not central to the curriculum.

The Research

Each woman participated in five interviews between August, 1997, and May, 1998. Four of the interviews lasted between one and two hours and concerned the women's literacy and learning in school, their work, families, and social networks, as well

as their use of mass media. The biographical interview was shorter and valuable for obtaining background information.

Gloria, Lourdes, and Elizabeth did read outside of the literacy program, and although I did not ask them how much they read or venture into the technical aspects of their reading, they described memorable reading experiences and the effects the books had on them. They read mainly for pleasure and to reduce tension, reading stories that nurtured them emotionally. The reading

materials they referred to in the interviews would, by most standards, be considered too difficult for the learning level in which the program placed them. Lourdes, for example, was at an ESOL level of competency 2 (between grades 4.5 and 6.5). She described what she learned from reading Gail Sheehy's *The Silent Passage*, a book that deeply affected her. Lourdes also said she read the Bible and small prayer books. She read these books regularly, and as needed, sometimes on a daily basis.

Elizabeth

Elizabeth, a 70-year-old naturalized Japanese woman, was a meat wrapper for most of her working years. She confided in me with both excitement and shame that she had gotten hooked on soap operas through a friend, even videotaping them while she was away. She told me about the character development in these shows and that an advantage to watching them was that they helped her learn standard English. She also read books that had romantic storylines.

Reading and eating in conjunction with TV watching were important and ritualized for Elizabeth, who also read Japanese novels. Elizabeth explained how she read when she was younger, "every day because I'm home alone so breakfast, lunch, dinner, I have a book stand in the center. I have the book there while I'm eating — I read books." She read trade books, for example, *The Joy Luck Club*, by Amy Tan, which helped with her English vocabulary and was stimulating to her. She also listened to tapes of this book. Her family members and acquaintances were uninformed about the intense pain a serious back problem gave her. So, turning to books and going to classes seemed like a smart move. "I have lots of pain. [Be] cause I don't complain… I'm not expecting that person always feels sorry for you," she said.

Gloria

Gloria, a Hawaiian woman in her early 50s who spent her younger years working on macadamia farms and in pineapple factories, was worried about being able to pay her rent due to welfare cuts. She explained, "and, you know, like welfare — even though you know you're true [being honest], they don't know, they just give you hard time." She read the Bible every day and related to it as "a love letter" and a source of wisdom. She also listened to Bible tapes, used Bible software, discussed the Bible with her pastor and his wife, and used biblical resources to teach children in Sunday school. These activities invigorated her and distracted her from her worries. When she felt trapped by the welfare system, she sought spiritual materials for the direction and comfort they provided.

"The book. It's more intimate [than the computerized version of the Bible]…. because that is more like a study tool. And then when you're reading, this is what the pastor said, when you're reading, it's like a love

letter. Like somebody wrote to you and say how much he loves you. So the Bible is actually a love letter and he telling you what's taking place in the world."

Lourdes

Lourdes, a naturalized Mexican mother who used to sew aloha shirts and grade papaya, was in her 50s. Now a health aide, she was married to a local man. When facing problems with co-workers and her husband, Lourdes read her prayer book and inspirational books. She also watched a nun on television every night to relax and to seek encouragement. Oprah Winfrey and her guests, many of whom were authors, inspired her, and inspirational books gave her a sense of hope. This and other popular-culture books she read helped her to feel independent. As she described it, "The first book I read — I'll never forget it. Was back in 19…, maybe 1981, was with Norman Vincent Peale, the positive thinker. Oh that book was good. So from then on I start you know, in my head I can do it. They interest me to go back to work and to be indep[endent]… you know what I am now. Not to listen to my husband too much…"

She carried books in her purse and consulted them when she had "the blues." She learned to use them as a shield from pain, using them for comfort:

"…I have another one [a book], pick-me-up-prayers. Pick me up. And it's, like, if I do a lot of those things for somebody, then something goes wrong, and I remember what that book says…So these little books help me a lot. Oh, it make me feel good because you know that God is here."

Lessons for Practice

Lourdes, Elizabeth, and Gloria turned to books for love, pleasure, and comfort, and I think Donna would read for similar reasons, if she felt she could. These women related to books in ways that nourished them emotionally and reflected their life concerns and gender roles. They also used electronic media, such as television, computers, and video, to supplement their pleasure reading. This reflects newer theories about electronic and print literacy technologies as intertwining and complex social activities: part of people's everyday social relations and identities, not divorced from public activities and institutions (see Brandt, 1990; Hemphill & Ianiro, 1995; Merrifield, 1997; Pattison, 1982; Tuman, 1992). Lourdes, for example, used two different types of media (prayer books and a television show featuring a nun) for the same purpose: comforting herself during rough times and to

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The Theory

Cultural theories of reading for pleasure, including reading response theory (see Storey, 1993; Simonds, 1992; Radway, 1991; Fiske, 1989; Modleski, 1982), focus on the psychological benefits readers receive from reading mass-produced materials, otherwise called "popular texts." Pleasure reading is pleasurable because it can bring out the "melodramatic imagination" of women readers (Storey, p. 141). It provides "a terrain on which to dream" (Storey, p. 148) with fantasies that both reflect and counter "the very real problems and tensions in women's lives" (Modleski, 1982, p. 14).

"Popular culture texts" or "genre literature" (self-help books, mysteries, romance novels, Christian literature, even the Bible) may be favored by casual readers over other "classical" literature (i.e., "great books") because they evoke readers' emotions and are not intimidating. They carry familiar messages from the media that are open for interpretations. John Fiske refers to these texts as *"producerly"* (p.103) because the story lines do not follow strict rules and they contain many "loose ends" and "gaps" that seduce readers to fill them in and produce new meanings. These meanings are themselves relevant to readers' lives, feelings, and cultures. This process is possible because the texts are open and accessible. Readers identify with strong and weak characters because the characters act out their problems in ways that readers understand and desire. The readers can imagine themselves as treasured heroines and feel emotionally strong.

Janice Radway (1991) studied 42 women romance readers, many of whom had some college education. She learned that the women often read romances when they were under stress and depressed or just to relax: it had tranquilizing effects. Reading these stories allowed them to unwind and focus on their "personal needs, desires and pleasures." (p. 61). It also fulfilled their fantasies of being cared for by another person. The women knowingly read and reread the formulaic accounts for a desired emotional experience, in part, as a "reversal of the oppression and emotional abandonment suffered by women in real life" (p. 55).

Reader-response theory offers another way to understand the role of reading in women's lives by asking not only about the meanings women receive from texts but also the feelings they bring to reading. Reader-response theory provides an approach for understanding and building on students' reading interests and their imaginations.

Other research demonstrates how pleasure reading can be used effectively in the classroom. Cho and Krashen's study (1994) found that women studying English for speakers of other languages (ESOL) who read romance novels (the *Sweet Valley* series) felt that this reading increased their vocabularies and their interest in reading as it helped them learn English. A practitioner-researcher, Donna Earl, reported that students in a literacy program read more outside when she focused on increasing their outside reading practices. She felt that providing learners with high-interest, easy-to-read materials is one factor in enabling learners to "learn to love reading" (1997, p. 1).❖

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connect to her emotions. Her use of these sources also related to her gender, her access to technological resources, her generation, and her ethnicity.

Asking about and then listening to women's struggles and problems allows you to see their interests and needs at different life stages and under particular circumstances. It also allows you to understand their coping

"Women students may be ashamed or too shy to admit they enjoy these books and find them moving."

strategies and the resources and people to which they turn. The process of describing themselves helps them to become the "experts" and assert more control over the curriculum (see, CCLOW, 1996; Imel & Kerka, 1997). The same process can assist teachers to create curriculum based on learners' changing needs. It may be difficult to ask sensitive questions at intake, but as soon as rapport is established, this can be a very useful activity.

Learners like Donna, who claim they want to read love stories but still feel embarrassed about their literacy levels, might be doubly embarrassed to "come out" and admit to literacy staff that they want to read these stories and popular psychology books. She said, "I really feel stupid because I didn't do this long ago. Should of. Like I said, I was so embarrassed to tell it. To face somebody and tell them. I still cannot do that you know and say, 'I cannot read.' It's really hard to come out." Pleasure reading and inspirational books may appear frivolous and inconsequential to

instructors. Women students may be ashamed or too shy to admit they enjoy these books and find them moving (see Simonds, 1992). Yet these materials can motivate students to read because they reinforce emotional responsiveness between the reader and the text and relate to students' cultures (see Rowland, 2000). These texts give students opportunities to practice reading without the pressure to "get it right." Teaching students to see reading as a tool for relaxation (see Horsman, 2000; Kortner, 1993) rather than a forced and difficult activity is important in creating in learners a desire to read.

Conclusion

Offering pleasure reading to a woman learner as one of many reading choices in a literacy program may make her feel that the program is an oasis rather than a tax on her energy. Offering pleasure reading that makes women feel good can "hook" women into reading because it is an enjoyable, emotionally stimulating practice. This type of reading can connect to women's emotional lives in a nonthreatening way and potentially turn reading a satisfying daily ritual.

References

■ Brandt, D. (1990). *Literacy as Involvement: The Acts of Writers, Readers and Texts*. Carbondale, IL: Southern Illinois University Press.

■ Canadian Congress for Learning Opportunities for Women (1996). *Making Connections*. Toronto, Ontario: CCLOW.

■ Cho, K., & Krashen, S. (1994). "Acquisition of vocabulary from Sweet Valley Kids Series. Adult ESL acquisition." *Journal of Reading*. 37 (8), 662-667.

■ Earl, D. (1997). "Learning to love reading." *Focus on Basics*, 1 (B), 1-4.

■ Fiske, J. (1989). *Understanding Popular Culture*. Boston: Unwin Hyman.

■ Hemphill, D., & Ianiro, R. (1995) "Media, technology, and literacy in immigrant and multicultural contexts." Alberta University, Edmonton. Faculty of Education. 36th Annual Adult Education Research Conference Proceedings.

■ Horsman, J. (2000). *Too Scared to Learn*. Mahwah, NJ: Lawrence Erlbaum Associates.

■ Imel, S., & Kerka, S. (1997). *Women and Literacy: Guide to the Literature and Issues for Woman-Positive Programs*, 367. Columbus, OH: ERIC.

■ Kortner, A. (1993) *Bibliotherapy*. Bloomington IN: ERIC Clearinghouse on Reading and Communication Skills.

■ Merrifield, J. (1997). *Life at the Margins: Literacy, Language and Technology in Everyday Life*. NY: Teacher's College Press.

■ Modleski. T. (1982). *Loving with a Vengeance: Mass Produced Fantasies for Women*. Camden, CT: Archon Books.

■ Pattison, R. (1982). *On Literacy: The Politics of the Word from Homer to the Age of Rock*. New York: Oxford University Press.

■ Radway, J. (1991). *Reading the Romance: Women, Patriarchy and Popular Literature*. Chapel Hill: University of North Carolina Press.

■ Rowland, M. (2000). *African-Americans and Self-help Education: the Missing Link in Adult Education*. Bloomington IN: ERIC Clearinghouse for Adult, Career, and Vocational Education.

■ Simonds, W. (1992). *Women and Self-Help Culture: Reading between the Lines*. New Brunswick, NJ: Rutgers University Press.

■ Storey, J. (1993). *An Introductory Guide to Cultural Theory and Popular Culture*. Athens, University of Georgia Press.

■ Tuman, M. (1992). *Wordperfect: Literacy in the Computer Age*. Pittsburgh, PA: University of Pittsburgh Press.

About the Author

Sondra Cuban finished her doctoral dissertation in 1999 and joined NCSALL as a research associate. She works on a longitudinal persistence study of students in selected library literacy programs. ❖

Theory to Practice, Practice to Theory

A tutor-based program goes through multiple changes to serve its first-level learners better

by Anne Murr

I entered the adult literacy field four years ago as a volunteer tutor in the Drake Adult Literacy Center in Des Moines, Iowa. In my current role as Center Coordinator, I screen and place adult learners with volunteer tutors, train volunteers, and teach the initial lesson with all new students and tutors. I learn as much from the adult new readers as they learn from me. Along with teaching me about the varied and skilled ways in which they have succeeded in their lives, they have taught me about the depth of difficulty they have in processing language. Their struggles have taught me about the determination to learn and the obstacles they face.

As a Head Start teacher earlier in my career, I learned two valuable principles. The first was to reflect daily on what did and did not work in the classroom and to make changes based on those reflections. The second was to move from theory to practice, from practice to theory. I will examine here how critical reflection on the Drake Adult Literacy Center's practice, and on the theory and research that support it, intertwine.

Adult Center

The Drake University Adult Literacy Center is a community outreach service of the Drake University School of Education. Community and university volunteers meet one-to-one twice a week with adult new readers. Learners range in age from late teens to 70, with most in the 30 to 45 year range. The majority work full- or part-time but feel they could get better jobs if their reading skills were better. Many attended special education in school, but declare, "I know I can learn. I just never got the chance."

Theory

As I began to craft a literacy curriculum for adults I asked, "Do adults learn to read in the same way children do?" I downloaded *Learning to Read: Literacy Acquisition by Children and Adults* by Perfetti & Marron (1995) from the National Center on Adult Literacy's web site. Their study of the research led them to conclude that the cognitive process by which children and adults learn to read is the same. Of course, adults have more experiences, knowledge, and vocabulary in some areas, and more emotions linked to learning failure. Young children, I knew, learn through sensory stimulation while interacting with their environment. This principle guided my decisions as I began to design our curriculum. I wanted adult learners also to have interactive experiences that would stimulate their literacy learning.

Our First Practice

With guidance from Drake's professor of early childhood literacy, we adopted the America Reads tutoring model: read together, write together, and incorporate spelling and skills development. Since phonemic awareness is a necessary part of literacy learning, we encouraged tutors to use phonemic awareness activities. Every tutor received Edward Fry's *Phonics Patterns* (1997a), a resource to guide practice in phonemic awareness and spelling patterns. Each student received Fry's *Introductory Word Book* (1997b; the 1,000 most commonly used words) for use in building sight vocabulary and was encouraged to bring in reading materials that had personal meaning for him or her. We purchased books written for adults at the beginning reading level. Students wrote during each tutoring session, because writing promotes the practice of phonological processing skills.

We hoped to address reading skills development with computerized drill and practice. We used the Academy of Reading (Autoskill, 1998), which provides individualized training in phonemic awareness and reading. Adults were free to come to the Literacy Center to work on basic skills at their own pace. No keyboard skills were necessary. With all these pieces in place, we were confident that we had a balanced approach to literacy instruction for adults: use of personally meaningful text and writing in the context of real tasks as well as independent computerized skill work.

Reflections

Mary, the woman I was tutoring, chose to read from her children's Bible story easy reader. Despite practicing computer skills for hours and reading familiar stories repeatedly, she continued to make the same decoding errors. One of her goals was to be able

to spell all her grandchildren's names so she could write them on each child's Christmas presents. For several months we practiced and practiced, but those names never became automatic and accurate. Our first year together, Mary's spelling improved

> **"***The lack of progress informed us that our learners needed a different type of instruction.***"**

slightly in letters she wrote to her pen pal, but she was not making progress toward her goal of learning to read. She wanted to learn and worked hard to learn, but my teaching did not help her skills to improve.

During the first year, not one adult learner had made measurable progress in learning to read. The lack of progress informed us that our learners needed a different type of instruction. It was time to find a better way.

More Theory

I had been searching the National Institute for Literacy's electronic discussion lists — covering such topics as learning disabilities, Equipped for the Future, and technology — for suggestions on improving literacy instruction. Barbara Guyer, who works with college students with learning disabilities, wrote "When all else fails, we go to the Wilson." Since all else had indeed failed for adults at our Literacy Center, we decided to try the Wilson Reading System, (WRS; Wilson, 1988). With funds donated by R.R. Donnelley, a publishing corporation with a plant in Des Moines, we bought a Wilson starter kit. Our initial expenses were less than $500.

WRS is written specifically for

adults with dyslexia (defined as language-based learning disabilities) and is based on Orton-Gillingham multisensory principles. First, students learn letter-sound correspondence and how letters and sounds combine in words (phonemic awareness and phonological processing skills). The WRS 10-part lesson plan provides both structure and flexibility to allow students multiple opportunities to build skills and to receive immediate feedback on their learning. Instructional materials also give volunteer tutors the specifics they need to teach with confidence.

A New Practice

The Literacy Center Advisory Committee decided that all new volunteers would use the WRS to instruct adults with low literacy skills. Although we were not yet proficient in the WRS, it met our learners' needs more than our previous instruction had. The WRS also gave volunteer tutors a specific structure and materials they had lacked. (At a pilot training session for adult literacy providers I attended months later, Barbara Wilson confirmed that this is the way all adult literacy programs begin using Wilson materials. After we had sheepishly admitted the we were "sort of" using the Wilson Reading System, Barbara told us, "You start by doing as much as you know and can do. Then return to the instructor's materials and refine your skills as you are ready.")

Volunteers initially attend three hours of orientation. The first hour and a half session is an overview of reading disabilities and how the Wilson Reading System addresses those deficits. The second session

addresses lesson planning and gives volunteers practice with the lesson plan format. Tutors meet with me occasionally in follow-up seminars to continue learning. The Center's limited budget precludes formal Wilson training for our tutors, but WRS instructors' materials give tutors detailed and specific guidance. Currently 22 tutors and students are learning together using the Wilson Reading System.

Informed by the Learners

During our initial assessment, adults are often frustrated when they cannot name the sounds that go with the letters. While many of our learners know most of the consonant sounds, no one is able to name all the vowel sounds (phonemes) accurately. They struggle with perceiving sounds in words: they seem to be in a fog of sound from which they can identify few individual phonemes. They also are angry that no one ever taught them what they need to know in order to learn to read.

Most of our adult new readers have a bank of words they know by sight, but the "little words" give them difficulty. When asked in the initial assessment to read word lists beginning with three-letter closed syllables and progressing to increasingly

> **"*... they seem to be in a fog of sound from which they can identify few individual phonemes.***"**

more complex words, many have more difficulty with the smallest words (ship or den versus mascot or pumpkins). The small words have fewer visual clues from which students can make their best guess.

Many of our learners tell me

that they do not know that letters represent the sounds in the words we speak, or that when you see a letter, that letter tells you the sound. During the introductory lesson, most are able to recognize the individual sounds in three-letter words for the first time. As they systematically learn letter-sound correspondences and how to blend and segment sounds in words, learners stop relying on the "guess and check" method of reading, and move to the more reliable "see and say" method.

Adults in our Center have shown me that no step in the process of learning to read comes easily. They must repeatedly practice each new sound, each new combination of sounds, often for months, before skills and concepts become automatic. One task in the Wilson lesson is to read 15 words, three words per line. Learners must read three words silently, then return to the beginning of the line and read the three words aloud. After carefully decoding each word, they often return to the beginning of the line and cannot remember the first word. These are persons with many abilities and accomplishments, but they can master holding sounds and words in short term memory only after a multitude of repetitions.

Informed by Research

A year after beginning to use the WRS, I enrolled in a research class that was a requirement for my masters degree in adult education. I began to research the question, "Why do children fail to learn to read?" Research confirms what I have learned from our adult learners. The lack of phonemic awareness and inability to manipulate sounds in words, which I see in our adult new readers, is one of the causes of reading failure (Bradley & Bryant, 1983).

These reading deficits are neurologically based and span all levels of cognitive ability. New brain scanning technologies have identified that brains of children and adults with reading problems do process language differently (Shaywitz, et al. 1998; Richards, et al. 2000). A large proportion of reading failure is the result of neurological difficulties that must be addressed directly.

Substantial research indicates that effective instruction for persons with reading deficits should be systematic and intensive, and should involve directly teaching how to recognize sounds in words and how letters represent sounds (Liberman & Shankweiler, 1985; Torgesen et al., 1997). Instruction must include multisensory approaches, with extensive opportunities for practice that allow the learner to attain automaticity. Instruction about word structure and comprehension must also be included. The WRS contains these necessary components, and adults respond positively to this instruction.

Reflections on our Present Practice

In contrast to our first, less structured language experience approach, we now have a way to track learner progress, and learners are making progress. Every WRS level (Step) is divided into substeps. During each lesson, the learner reads a list of 15 words and graphs the number of words read correctly. When the learner easily and consistently reads 14 or 15 out of 15 words, he or she moves to the next substep. Every learner in our Center has progressed through at least several substeps. 13 have moved from step one to step two. Three learners are now in step three and four are in step four (out of a total of 12 steps). Progress is slow; however, each person is taking the time he or she needs to build reading skills. Adult learners in our program are forming the foundation of skills necessary to become independent readers, and they are pleased

with the results of their hard work.

When Mary started with the WRS, she didn't like it because she thought she already knew the alphabet. "But I found out I didn't know the sounds," she said. "When my employer left me a note, I panicked: back to old habits. Then I took my time and I read it!"

Jesse, who also attends a center where he is working on job skills, said, "At that center they don't teach me the sounds. I need that."

One of our youngest students, a 20-year old college student diagnosed

"... we now have a way to track learner progress, and learners are making progress."

with learning disabilities, exclaimed, "This is productive. Learning is fun." Adult learners are learning to trust what they know about letters and sounds.

Volunteers also are responding positively. "I like the fact that the WRS program is so well organized. It's a step-by-step approach with many helps for both the student and tutor," said one.

Another commented, "I like the flexibility. My student can move ahead while continuing to review previously learned concepts."

We continue to refine our tutoring skills, and we know that we are not yet proficient. With more training resources, tutor preparation and support could be greatly improved. To become more effective, tutors need to be active independent learners. Wilson tutor materials are clear and explicit, but volunteers need to spend time reading and practicing their skills.

The Future

Our Center's process of practice and praxis continues. Are we providing the best possible literacy

instruction for adults with language-based learning disabilities? How can we improve vocabulary and comprehension development? How can we address emotional blocks to help adults create the conditions for their learning? What more can we do that we have not yet discovered?

Research clearly identifies the criteria of instruction for children with reading disabilities, and has measured the effectiveness of this instruction. However, I have found no research that measures the effectiveness of reading instruction for adults with low literacy skills. I want to know if we are doing all we can to give our learners the most effective instruction. I have begun my own research to measure the impact on adults' reading skills of direct, systematic instruction in phonological processing skills by volunteer tutors using the Wilson Reading System.

Research informs our practice in the one-to-one tutoring setting with adults. Individuals in the Adult Literacy Center also instruct me about their needs and the challenges of remediating their reading difficulties. What will the next adult learner teach me and how will that inform our practice? Together, we move from theory to practice, practice to theory, in the continuing process of reflection and learning.

References

Autoskill (1998). Ottawa, Ontario: Academy of Reading.

Bell, L., & Perfetti, C. (1994). "Reading skill: Some adult comparisons." *Journal of Educational Psychology,* 86, 244-255.

Bradley, L., & Bryant, P.E. (1983). "Categorizing sounds and learning to read—a causal connection." *Nature,* 301, 419-421.

Byrne, B., & Ledez, J. (1983). "Phonological awareness in reading-disabled adults." *Australian Journal of Psychology,* 35, 185-197.

Fry, E. (1997a). *Introductory Word Book.* Chicago, IL: NTC/Contemporary.

Fry, E. (1997b). *Phonics Patterns.* Chicago, IL: NTC/Contemporary.

Liberman, L., & Shankweiler, D. (1985). "Phonology and the problems of learning to read and write." *Remedial and Special Education,* 6, 8-17.

Lyon, R. (1995). "Toward a definition of dyslexia." *Annals of Dyslexia,* 45, 3-27.

Perfetti, C.A., & Marron, M.A. (1995). "Learning to read: Literacy acquisition by children and adults." National Center on Adult Literacy, *Technical Report* TR95-07.

Read, C., & Ruyter, L. (1985). "Reading and spelling skills in adults of low literacy." *Remedial and Special Education,* 6, 43-52.

Richards, T., Corina, D., Serafini, S., Steury, K., Echeland, D., Dager, S., Marro, K., Abbott, R., Maravilla, K., & Berninger, V. (2000). "The effects of a phonologically-driven treatment for dyslexia on lactate levels as measured by proton MRSI." *American Journal of Neuroradiology,* 21, 916-922

Shaywitz, S., Shaywitz, B., Pugh, K., Fulbright, R., Constable, R.T., Mencl, W.E., Shankweiler, D., Liberman, A., Skudlarski, P., Fletcher, J., Katz, L., Marchione, K., Lacadie, C., Gatenby, C., & Gore, J. (1998). "Functional disruption in the organization of the brain for reading in dyslexia." *Neurobiology,* 95, 2636-2641.

Torgesen, J.K., Wagner, R.K., & Rashotte, C.A. (1997). "Prevention and remediation of severe reading disabilities: Keeping the end in mind." *Journal of Scientific Studies of Reading,* 3, 217-234.

Wilson, B. (1988). *The Wilson Reading System.* Milford, MA: Wilson Language Training Corp.

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Teaching Reading to First-Level Adults
Emerging Trends in Research and Practice

by Judith A. Alamprese

*R**eading has always been a fundamental concept taught in adult basic education (ABE). The methods and contexts for reading instruction, however, have varied over time according to practitioners' theoretical perspectives and belief systems about the reading process. For example, the teaching of reading often has been imbedded in instructional content rather than addressed as a discrete skill. Because of the variations in instructional approach, it sometimes has been difficult to discern the extent to which reading is being taught in ABE programs.*

The past five years have witnessed a national call to improve the teaching of reading in elementary education. Reading is now a priority in key education legislation, such as the Reading Excellence Act and Title 1 of the Elementary and Secondary Education Act. It has been the subject of research syntheses sponsored by the US Department of Health and Human Service's National Institute on Child Health and Human Development in conjunction with the US Department of Education (DOE). Reading instruction is also one of the key areas under program quality in the Adult Education and Family Literacy Act (AEFLA) of 1998.

ABE practitioners' concerns center on teaching reading to first-level learners, generally are defined as those scoring at a 0 to 6th grade equivalent on a standardized reading test or at Level 1 on the National Adult Literacy Survey. First-level adults enter ABE programs with a range of reading skills. This variation in abilities sometimes poses challenges for instructors. The enrollment of first-level learners in ABE programs remains constant: about 17 percent of those participating in programs funded under the Adult Education and Family Literacy Act (US Department of Education, 1999). ABE practitioners have voiced a desire to learn about effective instructional methods for them. Furthermore, as states implement the National Reporting System for ABE accountability, ABE staff at all levels have a need to understand the amount of improvement it is reasonable to expect from a first-level learner over a specified time. All of these circumstances have led to the teaching of reading emerging as critical topic in ABE, particularly as a focus for staff development and program improvement.

Emerging Research on Adult Reading

The literature on teaching reading to children is extensive, but few national studies have examined effective strategies for reading instruction with adults. Most studies on adult reading have been small in scale and descriptive in design. As a result, few empirical data exist about the particular instructional approaches that are associated with reading improvement in adults. To address this gap, the US DOE funded two national studies on reading for adults: the Evaluation of Effective Adult Basic Education Programs and Practices, conducted by the research firm Abt Associates Inc.; and the What Works Study of Adult English as a Second Language Programs, undertaken by the American Institutes for Research. The National Center for the Study of Adult Learning and Literacy (NCSALL) is also studying the instructional strengths and needs in reading of adults enrolled in ABE and English for speakers of other languages (ESOL) classes.

Key Issues

Although not based on research on adults, the syntheses presented in the report prepared by the National Reading Panel (2000) provide a useful perspective for understanding key issues in reading instruction. Taking into account the work undertaken by the National Research Council Committee — *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998) — National Reading Panel research syntheses examined how critical reading skills are most effectively taught and the instructional methods, materials, and approaches most beneficial for students of varying abilities. The Panel examined three topics in reading: alphabetics (phonemic awareness and phonics instruction), fluency, and comprehension (including both vocabulary and text comprehension instruction). The implications of the Panel's report for teaching adults are that direct instruction on these topics may be beneficial to first-level adult learners, and that teachers must understand adults' relative strengths in these areas prior to beginning instruction. A recent review of the literature on adult reading research (Venezky et al., 1998) supports these findings.

Questions for ABE

The emerging research on K-12 reading raises issues for teaching first-level adult learners. Will adults be receptive to being taught with a direct instruction method? How much emphasis should be placed on each of the key reading areas? How can adult text materials be incorporated into instruction focused on these reading

"*Our intent is to develop a better understanding of the ways in which ABE programs can both organize reading instruction and provide the resources to foster participation.***"**

areas? These questions and others concern instructors as they consider using research in refining their practice. One source of forthcoming information about these questions is Abt Associates' study of reading instruction for first-level learners, which is attempting to answer two critical questions:

- How much do first-level adult learners who participate in ABE programs improve their reading skills and reading-related behaviors after participation?
- How are adults' personal characteristics, as well as the operational and instructional characteristics of ABE programs, related to the amount of improvement in reading skills or reading-related behaviors among first-level learners?

Studying Direct Instruction

We are attempting to answer the fundamental question of whether adults improve their reading skills as a result of attending ABE programs by

examining ABE programs serving English-speaking, first-level learners in reading classes across the country. Our study is also investigating factors that may be associated with learners' improvement: their personal background and prior experience in education and work; the amount that they participate in instruction; the type of reading instruction that they receive; and the characteristics of the ABE program in which they participate.

While learners' background and amount of the instruction they receive are factors often examined in research, the operation of an ABE program is a new area of inquiry. We are attempting to address the gaps of previous studies of adult education programs, for example, National Evaluation of the Adult Education Program (Young, et al., 1994), the Evaluation of the Even Start Program (St. Pierre et al., 1995), and the Evaluation of the National Workplace Literacy Program (Moore et al., 1998). These examined the impact of ABE programs but did not develop in-depth enough information that allows us to understand the instructional and organizational approaches that local ABE programs use to administer services and produce learner outcomes.

Our assumption is that while quality instruction may be necessary for learners to improve, it may not be sufficient to address all of the needs that adult learners bring to the instructional setting. We are studying the instructional leadership that programs provide, the background and experience of instructors, the types of learner assessment that are used, and the support services that programs provide to learners. Our intent is to develop a better understanding of the ways in which ABE programs can both organize reading instruction and provide the resources

to foster participation.

In selecting ABE programs and classes for our study, we are targeting programs offering reading instruction that is organized and structured and taught by individuals with training and or extensive experience in reading instruction. Since prior research (e.g., Young et al., 1994) has indicated that instruction in ABE often is not organized or systematic and thus may not contribute to learner outcomes, our approach has been to exclude programs that would not provide a good test of the study's questions. We also want to determine the extent to which teachers' prior experience or training contributes to learners' growth.

In our initial analyses of five ABE programs, we found structured, organized classes where reading is taught explicitly and includes activities aimed at developing phonemic awareness as well as fluency and comprehension. The amount of time spent on these topics varies with the level of the learners. Classes for learners at the 0 to 3rd grade equivalent level spend more time on phonemic awareness and phonics than classes for learners at the 4th to 6th grade equivalent level. The instructional content moves in a sequence. An attempt is made to build vocabulary with words from the text used in developing reading comprehension. Reading passages used in comprehension exercises are selected for high relevance to adults and are appropriate for the learner's reading level.

Observations of classes indicate that instructors monitor learners by moving around the room to make sure that they are on task and providing feedback by correcting a mistake when it is made. Teachers foster high learner engagement by involving all participants in the class, by having learners take turns working at the board to complete exercises, and by encouraging all

learners' participation in discussion.

To provide opportunities for learners to practice the knowledge and skills that they are learning, teachers use exercises to guide learners in developing their reading skills. They use a variety of learning modalities, including oral reading, the completion of exercises on the board, and group recitation. They also have learners complete out-of-class assignments. Instructors gives concrete feedback; offer verbal praise when a learner gives a correct response or demonstrates initiative; encourage self-monitoring by pointing out specific strategies; and elicit verbal praise from other learners. In addition, teachers attempt to involve all participants by asking frequent questions, calling on learners by name, having learners take turns in oral reading, providing responses to learners' written exercises, asking learners to volunteer to participate in class exercises, and providing opportunities for learners to ask questions in class.

The instructors organize their reading instruction into a series of exercises or activities. They have an overall plan for the semester, term, or session, and their instructional activities follow a sequence based on the reading framework that they are using. Those who have been trained in reading instructional approaches such as the Slingerland Approach, the Wilson Reading System, and the Lindamood-Bell Learning Process are likely to adapt lesson plans these training programs provide. Other ABE teachers create their own lesson plans, which include instruction on the reading components (e.g., word analysis and word recognition, vocabulary development, comprehension development) in various amounts of time and sequence. The emphasis on any one reading component depends on learners' reading level and specific instructional needs. In carrying out these lessons, instructors use a variety of materials, including those produced by the reading programs noted above, as well as commercially produced materials, artifacts such as the newspaper, and exercises they create. The classes are based on a predetermined set of activities that may vary depending on learners' pace and progress (Alamprese, 2001).

Learners' Perspectives

Adults participating in the study are asked to describe which aspects of the instructional process facilitate or impede their learning as well as their perceptions of their experience in the ABE program. Participants in the first group of five ABE programs have cited the pace and structure of teaching, the repetition of content, the feedback provided to them, and instructors' personal interest in their well-being as important factors affecting their learning. These adults also have a high rate of attendance (67 percent), and many have enrolled in more than one term or semester in the program. Overall, they assess their experience in the reading classes as positive, productive, and motivating (Alamprese, 2001).

Conclusion

The instructional methods used by teachers in the first group of programs in this study are consistent with the research reported by the National Reading Panel and the synthesis of reading produced by Venezky and colleagues. Since the data collection is not yet complete, an analysis of the relationship between these methods and learners' capacity to improve their reading skills is not yet available. The study is scheduled for completion in 2002, when the final results will be available. In the interim, however, the trends in instruction that are being documented in the study offer some insight into current reading instructional practices that are of interest to teachers serving first-level learners and who are interested in offering group-based instruction.

References

■ Alamprese, J. A. (2001). *Strategies for Teaching Reading to First-Level ABE Learners.* Presented at the 2001 Commission on Adult Basic Education (COABE) Conference, Memphis, TN.

■ Moore, M.T., Myers, D., & Silva, T., with assistance from Judy A. Alamprese (1998). *Addressing Literacy Needs at Work Implementation and Impact of Workplace Literacy Programs: Final Report.* Washington, DC: Mathematica Policy Research Inc.

■ National Reading Panel (2000). *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature and Its Implications for Reading Instruction.* Bethesda, MD: National Institute on Child Health and Human Development.

■ Snow, C.E., Burns, S.M., & Griffin, P. (eds.). (1998). *Preventing Reading Difficulties in Young Children.* Washington, DC: National Academy Press.

■ St. Pierre, R., Swartz, J., Gamse, B., Murray, S., & Deck, D. (1995). *National Evaluation of the Even Start Family Literacy Program: Final Report* Cambridge, MA: Abt Associates Inc.

■ US Department of Education (1999). *Adult Education: Human Investment Impact,1994-1998.* Washington, DC: US Department of Education.

■ Venezky, R., Oney, B., Sabatini, J., & Richa, J. (1998). *Teaching Adults to Read and Write: A Research Synthesis.* Bethesda, MD: Abt Associates, Inc.

■ Young, M.B., Morgan, M., Fitzgerald, N., & Fleischman, H. (1994). *National Evaluation of Adult Education Programs: Draft Final Report.* Arlington, VA: Development Associates.

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BLACKBOARD

Resources on Teaching First-Level Learners

■ *Bridges to Practice: A Research-Based Guide for Literacy Practitioners Serving Adults with Learning Disabilities (1999).* Funded and supported by the National Institute for Literacy, this resource consists of five guidebooks and a video designed for use by literacy programs to enhance the quality of services provided to adults with learning disabilities. Each guidebook covers a different topic: understanding learning disabilities, legal issues related to adult with learning disabilities, systems and program change, resources, the assessment process, the planning process, the teaching/learning process, and creating professional development opportunities. For more information, visit the NIFL web site (http://slincs.coe.utk.edu/special_collections/learning_disabilities/) or phone the Academy for Educational Development, which distributes the publication: (202) 884-8186.

■ *Teaching Adults Who Learn Differently, An Extensive Guide for Literacy Teachers and Tutors (2000)* by L. Skinner, P. Gillespie, & L. Balkam, is published by Red Van Publishers and includes teaching and intervention strategies, information on language structure and learning differences, teaching tips, and sample lessons. It is available for $49.95 plus shipping and handling from Farnsworth's Books, 3911 Pacific Highway Suite 105, San Diego, CA 92110; phone (619) 299-4041.

■ **http://www.ldonline.org** is a service of The Learning Project at WETA, Washington, DC., in association with The Coordinated Campaign for Learning Disabilities. While it focuses primarily on kids, it also has useful information relative to adults.

■ **http://www.cast.org/bobby/, or "Bobby,"** is a free Web-based tool that analyzes web pages for their accessibility to people with disabilities. It also analyzes web pages for compatibility with various browsers. Any URL can be submitted for analysis. The site provides links to approved accessible sites, online discussion, and other information.

■ **http://slincs.coe.utk.edu/special_collections/learning_disabilities/** includes resources on learning disabilities for teachers, learners, and administrators. It is part of the National Institute for Literacy's LINCS system, a national electronic information and communication system for adult literacy.

■ An electronic discussion list on learning disabilities is maintained by LINCS http://www.nifl.gov/lincs/discussions/discussions.html.

Contact Information for Reading Programs

■ **The Wilson Reading System,** Wilson Language Training, 175 West Main Street, Millbury, MA 01527-1441; telephone (508) 865-5699; fax (508) 865-9644.

■ **The Orton-Gillingham Program,** Academy of Orton-Gillingham, P.O. Box 234, Amenia, NY 12051-0234; telephone (845) 373-8919.

■ **LiPS- Phoneme Sequencing Program,** Lindamood-Bell San Luis Obispo, 416 Higuera Street, San Luis Obispo, CA 93401; telephone (800) 233-1819; fax (805) 541-8756.

Previously Published in *Focus on Basics*

■ *Accommodating Math Students with Learning Disabilities* Rochelle Kenyon (Volume 4, Issue B, September 2000)

■ *Beginning Math for Beginning Readers* Linda Huntington (Volume 4, Issue B, September 2000)

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