Ideas for Teaching Reading: Program Administrators and Counselors

September 2005

NCSALL

National Center for the Study of Adult Learning and Literacy

Ideas for Teaching Reading: Program Administrators and Counselors

This seminar guide was created by the National Center for the Study of Adult Learning and Literacy (NCSALL) to introduce adult education practitioners to ideas for evidence-based program practices for reading. Programs or professional developers may want to use this seminar in place of a regularly scheduled meeting, such as a statewide training or a local program staff meeting.

Objectives:

By the end of the seminar, participants will be able to:

- Outline several strategies for teaching reading

- Analyze the reading practices in their programs and suggest possible changes

Participants: 8 to 12 practitioners who work in adult education—program administrators and counselors

Time: 3 ½ hours

Agenda:

20 minutes	1.	Welcome and Introductions
5 minutes	2.	Objectives and Agenda
75 minutes	3.	Reading Jigsaw
15 minutes		**Break**
65 minutes	4.	Reflections
20 minutes	5.	Planning Next Steps for the Group
10 minutes	6.	Evaluation of the Seminar

Session Preparation:

This guide includes the information and materials needed to conduct the seminar—step-by-step instructions for the activities, approximate time for each activity, and notes and other ideas for conducting the activities. The readings and handout, ready for photocopying, are at the end of the guide.

Participants should receive the following readings at least 10 days before the seminar. Ask the participants to read the articles, take notes, and write down their questions for sharing at the seminar.

- 📖 **The Neurobiology of Reading and Dyslexia** by Sally E. Shaywitz, M.D. and Bennett A. Shaywitz, M.D. (*Focus on Basics*, Volume 5, Issue A, August 2001)

- 📖 **Not by Curriculum Alone** by Mary Lynn Carver (*Focus on Basics*, Volume 6, Issue C, September 2003)

- 📖 **Reversing Reading Failure in Young Adults** by Mary E. Curtis and Ann Marie Longo (*Focus on Basics*, Volume 1, Issue B, May 1997)

- 📖 **Teaching Reading to First-Level Adults: Emerging Trends in Research and Practices** by Judith A. Alamprese (*Focus on Basics*, Volume 5, Issue A, August 2001)

- 📖 **The Theory Behind Content-based Instruction** by Thomas G. Sticht (*Focus on Basics*, Volume 1, Issue D, December 1997)

- 📖 **Theory to Practice, Practice to Theory** by Anne Murr (*Focus on Basics*, Volume 5, Issue A, August 2001)

The facilitator should read the articles, in addition to studying the seminar steps and preparing the materials on the following list.

Newsprints (Prepare ahead of time.)

___ Objectives and Agenda (p. 6)

___ Discussion Questions (p. 8)

___ Reflection Questions (p. 9)

___ Next Steps (p. 9)

___ Useful/How to Improve (p. 10)

Handouts (Make copies for each participant.)

___ *Action Plan*

Readings (Have two or three extra copies available for participants who forget to bring theirs.)

___ **The Neurobiology of Reading and Dyslexia**

___ **Not by Curriculum Alone**

___ **Reversing Reading Failure in Young Adults**

___ **Teaching Reading to First-Level Adults: Emerging Trends in Research and Practices**

___ **The Theory Behind Content-based Instruction**

___ **Theory to Practice, Practice to Theory**

Materials

___ Newsprint easel and blank sheets of newsprint

___ Markers, pens, tape

___ Sticky dots

Steps:

1. Welcome and Introductions   (20 minutes)

- **Welcome participants** to the seminar. **Introduce yourself** and state your role as facilitator. Explain how you came to facilitate this seminar and who is sponsoring it.

- **Ask participants to introduce themselves** (name, program, and role) and briefly describe their program's reading curriculum.

- **Make sure that participants know** where bathrooms are located, when the session will end, when the break will be, and any other housekeeping information.

> **Note to Facilitator**
> Since time is very tight, it's important to move participants along gently but firmly if they are exceeding their time limit for introductions.

2. Objectives and Agenda   (5 minutes)

- ☐ **Post the newsprint <u>Objectives and Agenda</u>** and review the objectives and steps with the participants.

Objectives

By the end of the seminar, you will be able to:

- Outline several strategies for teaching reading

- Analyze the reading practices in your programs and suggest possible changes

Agenda

1. Welcome and Introductions (Done!)
2. Objectives and Agenda (Doing)
3. Reading Jigsaw
4. Reflections
5. Planning Next Steps for the Group
6. Evaluation of the Seminar

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3. Reading Jigsaw   (75 minutes)

- **Explain to participants that in this activity they will be reviewing the articles that were sent to them to read in advance of the session. These articles describe evidence-based practices for reading instruction.**

- 📖 **Ask the participants to form small groups and assign two of the articles** to each group:
  - ○ Group 1
    - ▪ **The Neurobiology of Reading and Dyslexia**—The authors review the most recent advances in comprehending the neurobiology of dyslexia and outline the implications for teaching adults with dyslexia. They determine that a deficit in phonology correlates with reading disabilities and argue that practitioners need to consider these research findings in order to adopt the most successful, evidence-based interventions.
    - ▪ **Not by Curriculum Alone**—This article outlines how one program had success teaching beginning readers when teachers drew on recent research on reading and adopted the Wilson Reading System, the Lindamood-Bell Learning Processes, and the Orton-Gillingham Method. This program found that, in addition to curriculum changes, class schedules and other changes were necessary to support this approach.
  - ○ Group 2
    - ▪ **Reversing Reading Failure in Young Adults**—This article describes curriculum developed for students, ages 15 to 20, who were reading at different levels as measured against Chall's stages of reading development. The authors argue that teachers must be trained to provide instruction that is based on theory and research, is structured, challenges students, and fosters a positive classroom environment.
    - ▪ **Teaching Reading to First-level Adults: Emerging Trends in Research and Practices**—The assumption of the researchers is that, in addition to quality instruction, it is necessary to consider the background and experiences of teachers, the types of assessment used, and the range of support services available to adult beginning readers. Adult students identified instructional pace and structure, repetition, feedback, and the instructors' personal interest in learners as key factors for learning success.

- ○ Group 3
  - ▪ **The Theory Behind Content-based Instruction**—The author considers the research from cognitive science that emphasizes the importance of content for cognitive activity and cites examples of how content-based instruction has been more effective. Sticht argues for instruction that focuses on a particular context for literacy as opposed to general literacy instruction.

  - ▪ **Theory to Practice, Practice to Theory**—This article describes the various changes implemented by one tutor-based program to serve its first-level learners more effectively. After reviewing the research advocating for the importance of phonemic awareness, this program adopted the Wilson Reading Program.

- **Ask the groups to review the assigned articles and discuss the key points and the strengths and weaknesses of the evidence given to back up the practices.** Pass out blank sheets of newsprint and tell groups to record their ideas on them. Give them 20 minutes to do this.

- **Reconvene the group. Ask each group to post the newsprints on which they recorded the key points and briefly summarize them.**

- ⬜ **Post the newsprint <u>Discussion Questions</u>.** Then conduct a general discussion about the summarized articles.

> **Discussion Questions**
>
> - Which of the findings or practices did you find surprising or intriguing? Why?
>
> - How might the findings or practices in these articles be applicable to your context?

Break (15 minutes)

4. Reflections   (65 minutes)

- ⬜ **Post the newsprint <u>Reflection Questions</u>.** Ask participants to reflect on the reading instruction in their programs, using the reflection questions as a guide. Give the participants 20 minutes for reflections.

> **Reflection Questions**
>
> - What do you believe is positive about the reading instruction in your program?
> - What evidence or data does the program or teacher collect to support these beliefs?
> - Based on the articles you just read, what do you believe could be improved about reading instruction in your program and why?

- **Reconvene the group. Ask participants to briefly share one positive feature about the reading instruction** as it is now in their programs.

- **Then ask them to describe one idea that they might try in their programs.** Summarize the responses on newsprint. After each person presents, there should be time allotted for questions and comments from other participants.

5. Planning Next Steps for the Group   (20 minutes)

- ⬜ **Post the newsprint <u>Next Steps</u>.** Explain that now that the individual participants have ideas to try out in their programs, the group should make a plan about the group's next steps.

Another Idea

Ask participants to brainstorm ways in which their organization could integrate research into practice *and* policy.

> **Next Steps**
>
> - How might you share with each other how your ideas worked and the steps you took to try them, or how might you ask each other questions?
> -

- **Write up potential next steps** on the newsprint as the participants mention them. After five minutes of brainstorming, ask participants to

silently look at the options and individually decide on two ways for the group to continue the discussions.

- **Hand out two sticky dots to each participant** and ask the group to put their dots next to the one or two ideas that they would most like the group to do. If they don't want to do any of the activities, they should not put their dots on the newsprint.

- **Lead the group in organizing its choice. For example:**

  o If they choose to schedule a follow-up meeting, set the date, time, and place for the meeting, and brainstorm an agenda for the meeting. Determine who will definitely be coming, and who will take the responsibility to cancel the meeting in case of bad weather.

  o If they choose to organize an e-mail list, pass around a sheet for everyone to write their e-mail addresses. Decide who is going to start the first posting, and discuss what types of discussion or postings people would like to see (e.g., questions about how to try out their ideas for reading practices, describing what happened after they tried it, sharing other resources about reading, etc.).

6. Evaluation of the Seminar   (10 minutes)

- **Explain to participants that, in the time left, you would like to get feedback from them about this seminar.** You will use this feedback in shaping future seminars.

- Post the newsprint <u>**Useful/How to Improve**</u>.

<u>Useful</u>	<u>How to Improve</u>

Ask participants first to tell you what was useful or helpful to them about the design and content of this seminar. Write their comments, without response from you, on the newsprint under "Useful."

- **Then ask participants for suggestions on how to improve this design and content.** Write their comments, without response from you, on the newsprint under "How to Improve." If anyone makes a negative comment that's not in the form of a suggestion, ask the person to rephrase it as a suggestion for improvement, and then write the suggestion on the newsprint.

- **Do not make any response to participants' comments during this evaluation.** It is very important for you not to defend or justify anything you have done in the seminar or anything about the design or content, as this will discourage further suggestions. If anyone makes a suggestion you don't agree with, just nod your head. If you feel some response is needed, rephrase their concern: "So you feel that what we should do instead of the small group discussion is . . . ? Is that right?"

- **Refer participants to the National Center for the Study of Adult Learning and Literacy's Web site (www.ncsall.net) for further information.** Point out that most NSCALL publications may be downloaded for free from the Web site. Print versions can be ordered by by contacting NSCALL at World Education: ncsall@worlded.org.

- **Thank everyone** for coming and participating in the seminar.

Reading 📖

(To be read by participants *before* the session.)

The Neurobiology of Reading and Dyslexia

by Sally E. Shaywitz, M.D., and Bennett A. Shaywitz, M.D.
Focus on Basics, Vol. 5, Issue A, August 2001, pp. 11-15

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.
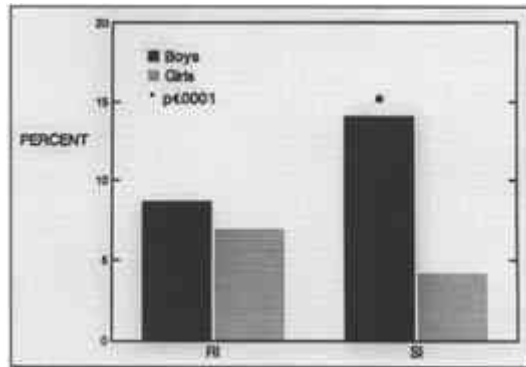

Figure 1. Prevalence of reading disability in research-identified (RI) and school-identified (SI) boys and girls. Schools identify about four times as many boys as girls, reflecting primarily externalizing behavioral characteristics that are more likely to bring boys to a teacher's attention. This skewed 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).

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 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 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.
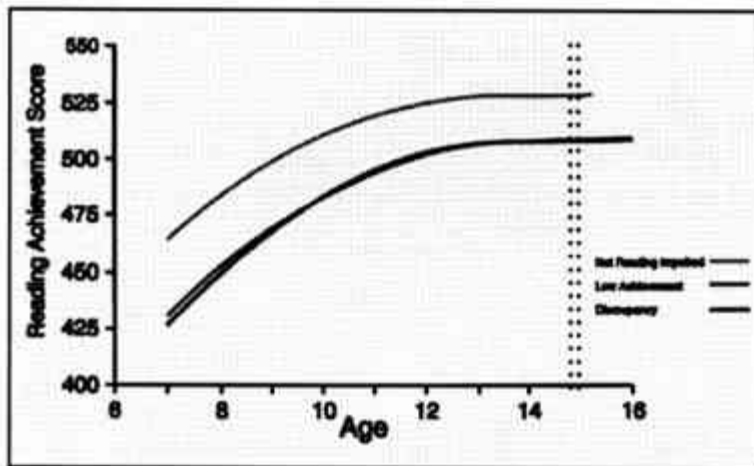
Figure 2. Trajectory of reading skills over time in nonimpaired and dyslexic readers. Ordinate shows Rasch scores (W scores) from the Woodcock-Johnson reading test (Woodcock & Johnson, 1989) and abscissa shows age in years. Both dyslexic and nonimpaired readers improve their reading scores as they get 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).

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, nonphonologic, 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 phonologic 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 temporoparieto-occipital 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 reading (i.e., mapping the visual percept of the print onto the phonologic structures of the language).
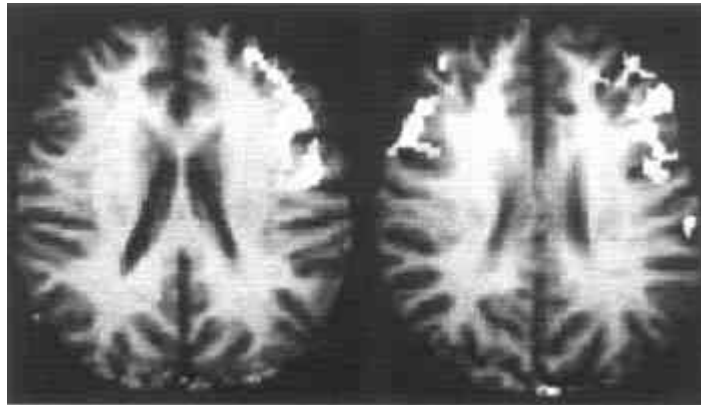
Figure 3. Gender-based differences in the brain during phonological processing. Composite fMRI images show the distribution of brain activation patterns in men (left) and women (right) during a nonword rhyming task. In men, activation is lateralized to the left inferior frontal regions; in women the same region is active bilaterally (data from Shaywitz et al., 1995).
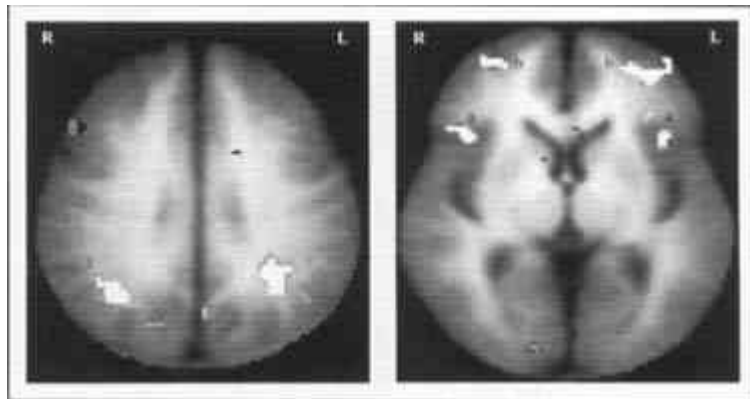
Figure 4. Composite fMRI activation maps in nonimpaired and dyslexic readers engaged in phonological processing during the nonword rhyme task show that nonimpaired readers activate a large region involving the angular gyrus (1), supramarginal gyrus, and posterior portions of the superior temporal gyrus. In contrast, dyslexic readers demonstrate a relative underactivation in this posterior region and an increased activation in the inferior gyrus (a) and middle front gyrus (b) bilaterally (data from Shaywitz et al., 1998).

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 nonimpaired 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.
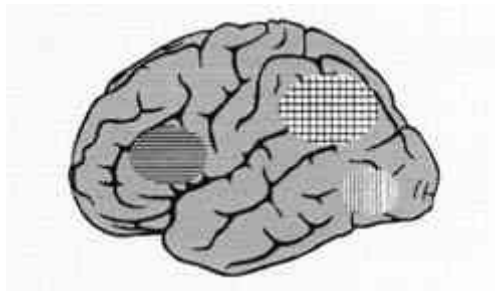
Figure 5. Neural systems for reading. Converging evidence indicates three important systems in reading, all primarily in the left hemisphere: 1) anterior system in the left inferior frontal region; 2) dorsal parietotemporal system involving angular gyrus, supramarginal gyrus, and posterior portions of the superior temporal gyrus; 3) ventral occipitotemporal system involving portions of the middle temporal gyrus and middle occipital gyrus. See text for details.

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 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.*

Acknowledgments

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Reading 📖

(To be read by participants *before* the session.)

Not by Curriculum Alone
by Mary Lynn Carver
Focus on Basics, Vol. 6, Issue C, September 2003, pp. 32-37

This ABE program found that the class schedule needed to change to support curriculum changes

Over the past decade, as a teacher of beginning level adult basic education (ABE), I rarely had a semester in which I didn't feel frustrated. The students just weren't "getting it." I work for the College of Lake County (CLC) in Grayslake, Illinois, and for the Waukegan Public Library Literacy program's Adult Learning Connection (ALC). Adult Learning Connection is a coalition of the Waukegan Public Library, CLC, and the Literacy Volunteers of Lake County. For years, CLC's ABE classes followed a very general curriculum. CLC developed a loosely organized set of competencies in 1995, but never turned them into a full curriculum. We teachers were free to be as creative as we wanted, with minimal guidance as to specific materials or methodologies. We used the best methods available to us, but we all had high drop out rates and saw little measurable student progress, especially with learners who tested into our beginning level (0.0 to 3.9 grade level equivalent on the Test of Adult Basic Education [TABE]). We wanted to address the drop out rate and find a more effective way to serve beginning level reading students.

Teachers were not the only ones feeling frustrated. The ALC-trained volunteer tutors, who worked one on one with students or in classrooms, expressed concern that their students were not progressing quickly enough. The literacy program staff decided to start looking for ways to improve, thereby embarking on a reflective process in which we are still engaged.

Learning from Others

We started, about eight years ago, by talking to people who seemed to succeed where we were failing. At the Illinois *New Readers for New Life* conference, we connected with students from other programs who had success in learning to read. We participated in electronic discussion lists on the Internet and began networking with other programs. An awareness of what we might be missing began to grow. We met John Corcoran, author of *The Teacher Who Couldn't Read*, on a guest author visit at the Waukegan Public Library. John

overcame his decades-long struggle to become a reader using the techniques featured in the Wilson Reading System methodologies and the Lindamood-Bell Learning Processes. He attended our annual tutor conference as a guest, and directed us to Meg Schofield, of the Chula Vista Public Library in California. Meg is a literacy practitioner who was trained in both the Wilson Reading System and the Lindamood-Bell Learning Processes. She has effectively translated both those systems into her practice with adults who have low literacy levels. Another former literacy student who has become an activist in the field of adult literacy, Archie Willard, also pointed us towards the Wilson Reading System when we met at a conference later that year.

ALC staff began to read the work of Dr. Reid Lyon, Chief of the Child Development and Behavior Branch of the National Institute of Child Health and Human Development. In a 1997 address before Congress, Dr. Lyon stated: "What our NICHD research has taught us is that in order for a beginning reader to learn how to connect or translate printed symbols (letters and letter patterns) into sound, the would-be reader must understand that our speech can be segmented or broken into small sounds (phoneme awareness) and that the segmented units of speech can be represented by printed forms (phonics). This understanding that written spellings systematically represent the phonemes of spoken words (termed the alphabetic principle) is absolutely necessary for the development of accurate and rapid word reading skills." Since his research focuses on how a beginning reader acquires the reading process, we wondered if it would apply to adults. In 1995, the research on how adults learn to read was sparse at best, so we were exploring new territory when it came to what might work for them. The research on children provided a glimpse into what we wanted, but it wasn't enough.

We asked our students: "What do you think we aren't doing?" As coassessors of their learning, they knew what they didn't know, which was how to "figure out words right." As we learned more about the subskills of reading and specific techniques for teaching those with learning disabilities, we began to understand what they meant. Financed by a combination of personal, grant-funded, and volunteer donations, various staff members participated in such training opportunities as attending sessions on the Orton-Gillingham method, a phonemics-based program; participating in an overview of the Wilson Reading System, a multisensory, phonemics-based program organized around the six syllable types; and spending two weeks in California at a training on the Lindamood-Bell system, useful for helping students acquire an awareness of individual sounds in words.

Over the years, staff turned to the National Institute for Literacy's Web site (www.nifl.gov) for reliable resources on reading research; we also scoured professional reading and learning disability journals such as the

Journal of Reading and *Journal of Adolescent & Adult Literacy*. We looked at information provided by Equipped for the Future and NCSALL's *Focus on Basics*. One staff member participated in the "Bridges to Practice" training offered by the National Adult Literacy and Learning Disabilities Center, which covered assessment of learning disabilities, planning, teaching, and fundamentals of the teaching and learning process.

Changes Begin

In 1997, the ALC offered experienced tutors two 2-day seminars with Meg Schofield. She came to Illinois from California in the middle of a Chicago winter to share her expertise on specific strategies to incorporate phonemic awareness into our teaching. Four of our literacy program staff are also employed by the college to teach the beginning level ABE classes. This creates consistency between the two organizations and also coordinates much of what the ALC does with the CLC ABE program. About 20 volunteer tutors and two or three CLC ABE teachers who taught the lowest-level ABE classes and ALC staff attended the sessions. Our goal was to pull together everything we had learned to this point and effectively revise our program so that we could move students from one-on-one tutoring sessions into our ABE classes. We wanted the learners to be able to transition smoothly and have consistency between the literacy program methods and the techniques used in the classes. At that time, we were looking at phonemic awareness as an additional tool to use in the classes. The reaction of the tutors to the training was positive and their enthusiasm and conviction that this was the missing piece of our instruction helped the learners accept the "new" methods we started to incorporate.

Two or three years later, we realized that a curriculum change needed to be our next step. The ALC tutors and staff were having success with their individual students. It was time to expand. One of the first changes ALC staff incorporated was how we think about what we teach (in class and in tutor training). Since 1997, we have been working to incorporate the development of phonemic awareness skills into the beginning reading (lowest) level classes and into the new tutor training program. With input from teachers at each level, we are beginning to implement these skills into the subsequent (midlevel) classes, another step towards our original goal of smoothing transitions for our learners.

The college agreed that it was necessary to update the curriculum for all ABE and General Educational Development (GED) levels. We now have three curriculum teams, each serving two levels of class. Each team meets with the teams from the levels above and below them to discuss what skills should be covered at each level, what content is appropriate at each level, and what methods should be used at each level. The ABE curriculum teams

consist of ALC staff who are teachers, and two midlevel ABE teachers who attended either the Meg Schofield or Wilson Overview training. They understand the underlying reasons behind what we are trying to do. The third team is made up of pre-GED and GED teachers who automatically have a more defined curriculum because of what they teach. By the time students reach those GED class levels, they should not need the same focus as lower ABE class levels.

Implementing Change

Going from being able to teach whatever you want to becoming structured and consistent has been a big change for teachers and tutors. Many students come in wanting to get their GED and find out that first they must learn to be better readers. It is still hard for me as a teacher to say, "You aren't ready yet, let's try this step first." Not everything has changed, however. Although my approach is more structured now, I still base my lesson plans on content in which my students have expressed interest. First we cover concepts, skills, and vocabulary, and then we apply it to that day's material. I get help from colleagues: with a small core of teachers, we find it easy to meet and brainstorm together, share materials and techniques, and help each other to refine ways in which to present different concepts.

Some learners are reluctant to try the multisensory techniques we now use, and a few students each term drop out. They often decide to try again. If they test back into my class, I try to persuade them to stay and give these techniques a try. Other students tell them that these techniques are the best things that ever happened to them. The reluctant participants usually find that this approach to learning makes sense and provides them with the skills they need in order to progress.

Changes to Assessment

Some students come to us through the college's placement testing system, and many are referred to the literacy program by their local library, via the Illinois Employment and Training Center, or by word of mouth. ALC staff administer the state-mandated Slosson Oral Reading Test (SORT). Based on our new knowledge, if a student seems to struggle with vowel sounds and decoding, we decided to administer a modified version of the Wilson Assessment of Decoding and Encoding (WADE). This gives us an idea if the student understands sound/symbol relationships. If they do not understand them, we match them with a specially trained "Quick Start" tutor, who works to familiarize them with the alphabetic principle, short vowels, and consonants. When a student has an understanding of how the sound/symbol system works, we match them with another tutor. Our goal is to move them eventually into a

beginning-level ABE class. We find that students experience the most success if they come into class aware of the 44+ phonemes, six syllable types, and other fundamentals of the Wilson and Lindamood systems. When students leave the beginning reading level, they should have mastered all 44+ phonemes and closed syllables, and be familiar with the other syllable types. For some students, this may take only eight to 16 weeks. For others, who may have undiagnosed learning differences, it may take years.

In the next three class levels, (roughly equal to levels 2.0 to 7.4 on the TABE), students continue to master the remaining syllable types, prefixes, and suffixes. For students continuing from the beginning reading level, it provides an easier transition; for newer students, it is an introduction to the concepts. Included in all levels of curriculum are strategies for reading, writing, infographic interpretation, sight words, critical thinking, and computer skills. Students apply the phonemic awareness and word structure principles to reading materials in all class levels.

Delivery System Change

The ABE classes offered through the college are traditionally 48 or 96 classroom hours per semester. This translates to two classes a week, for three hours each, for eight or 16 weeks, with a five-day gap between weekly classes. By the time beginning reading level students returned the next week, they had forgotten much of what was covered. The Lindamood-Bell model requires a *minimum* of two hours a day, for five days a week, for extended periods of time. A curriculum change wasn't going to be enough; we needed to re-examine our delivery system. While we could never provide the intensity required by Lindamood-Bell, we wondered if a four-morning format would improve our learners' success rates.

Beginning in the fall semester of 2002, for one beginning reading class section, the college approved a pilot class with an intensive format. We changed the morning beginning reading level class to a six-week, four-morning per week, two-hour per day session. Since we still had to work within the 48-hour parameters, we requested two six-week sessions per semester for a total of 96 instructional hours.

Results

These changes seem to have been successful. The attendance rates of the students have increased (see Student Retention graph). The standardized SORT assessments have shown improvements over the test class's six month period from September, 2002, to March, 2003 (see Pre/Post test graph). Aside from quantitative measurements, the learners give us feedback on how well

this format is working for them. Coming every day gives them a feeling of belonging, in addition to providing repetition and reinforcement of what they are learning. The work they do in a structured, predictable format helps them to build on their own achievements. Their self-confidence has increased as evidenced by their writing and reading. They write about being more confident at work, helping their kids with homework, even volunteering to read in public. These are students with 0.0 to 3.9 reading levels (as measured by the TABE), who have struggled for decades to hide what they didn't know. They are now willing to take more risks with their learning, and they decide what topics we will learn about next. They are truly partners in their own educational process.

It has not been easy to implement such a substantial change. The amount of material we want staff and volunteers to know requires significant training time. Three hours of our program's initial tutor training introduces phonemic awareness. Tutors are also offered phonemic awareness workshops as part of a series of monthly tutor in-service training sessions run by ALC staff. Our staff has learned that the volunteer tutors need continuing support to facilitate or maintain confidence and consistency in their tutoring. Many tutors start out in a classroom with one of the paid instructors for extra training and practice, before being confident enough to work one on one with a student. We have invested in books and materials, including sets of the Wilson Reading System, magnetic journals, sound cards, and 8 x 11 inch white boards and markers for classroom use.

Student Retention
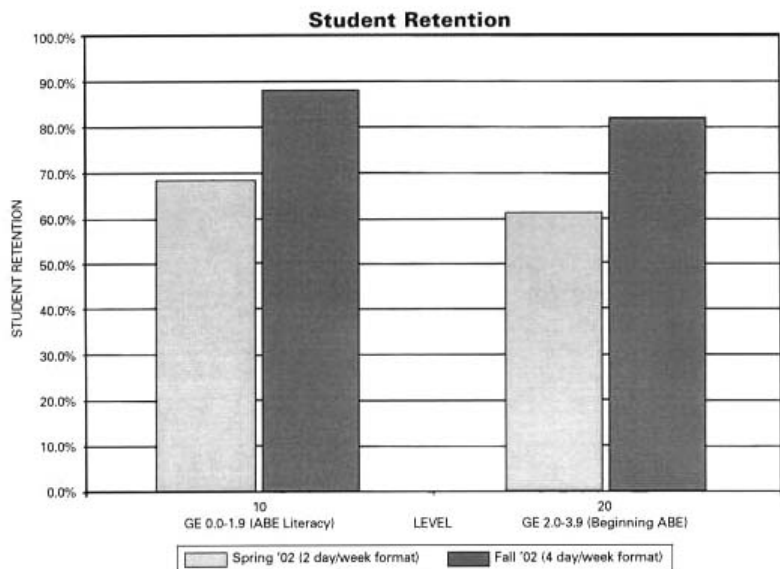
Developing a curriculum that works is an evolutionary process. Eight years ago, we had no long-range plan. ALC was committed to implementing a new program component and, as resources became available, took each

subsequent step. We have found that direct, systematic teaching of phonemic awareness and word structure seems to be an essential component of ABE curriculum. A change in schedule was also important. We are currently mapping out our new curriculum. Our final document will provide the skills, strategies, methods, and materials appropriate for each level of student instruction, and be the basis for teachers to plan their lessons. We hope that specific skills and competencies will be taught using student-generated topics of interest. Even when it is done, we will continue to attend professional development events and adult literacy conferences and incorporate new information as it becomes available.

Test Scores (SORT)
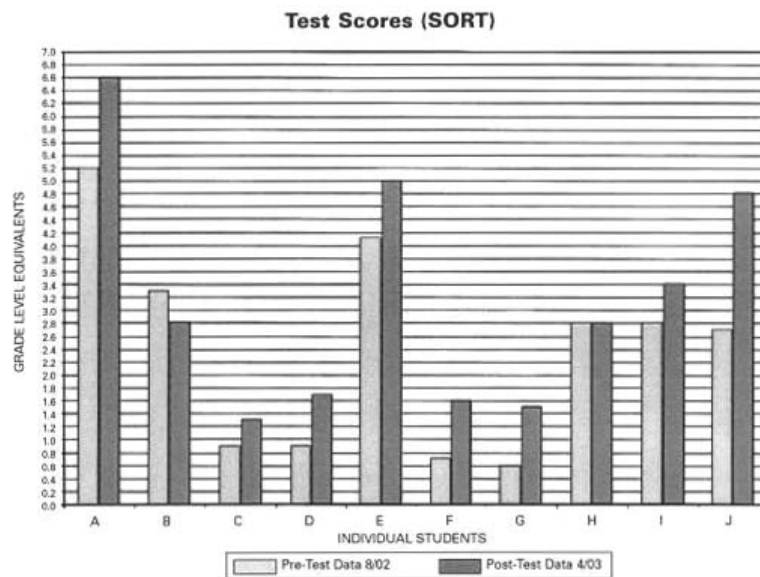
Students have repeatedly remarked, "Why didn't someone show us this a long time ago?" We remind them we are all learning together. A successful curriculum is not static. It must keep changing as we learn new ways to present information and as we build on new research findings. Since including phonemic awareness in every aspect of my teaching, and since changing our calendar, I have not felt as frustrated. The students are getting it. We are all disappointed that the end of term comes so quickly.

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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 http://www.lblp.com

See *Focus on Basics* Volume 5A, August, 2001, on First Level Learners, for more information on the methods the CLC incorporated into its curricula.

About the Author

Mary Lynn Carver has been a part-time faculty member at the College of Lake County, Grayslake, IL, since 1990. After completing a Masters in Adult Education in 2001, she joined the Adult Learning Connection (ALC) as the Assistant Literacy Coordinator at the Waukegan Public Library. On the ABE curriculum development team for CLC, she is on-site staff at the Library's Adult Learning and Technology Center in Waukegan and offers monthly tutor training workshops for ALC volunteer tutors.

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Reading 📖

(To be read by participants *before* the session.)

Reversing Reading Failure in Young Adults
by Mary E. Curtis and Ann Marie Longo
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When most people think of Boys Town, they think of Mickey Rooney or Spencer Tracy, or maybe even the phrase, "He ain't heavy, Father, he's m' brother." They might wonder if it still exists. It does, and today Boys Town is the home of a reading center that is part of the National Resource and Training Center. A laboratory for older adolescents with reading problems, the goals of the Reading Center are to develop research-based programs that prove effective in Boys Town's schools and to disseminate them to other schools around the country. Toward these goals, the Reading Center has developed the Boys Town Reading Curriculum. Our purpose in this article is to describe that curriculum, along with the research and experiences that led us to design it the way we did.

Although boys and girls typically come to Boys Town two to three years behind in reading, some are as far as five to six years below grade level. We needed a curriculum that would help students at several different points along a continuum of reading development. We also needed a curriculum that would give us huge results in a relatively short period of time; the average length of stay for Boys Town youth, placed mostly through courts and social service agencies, is 18 to 22 months.

Prior to coming to Boys Town, we both had worked in the Harvard Reading Laboratory with students who ranged in age from seven to 50 years old. Based on our experiences, we knew our curriculum needed to incorporate the principles that we had found successful in our one-on-one work in the Lab (Chall & Curtis, 1987). We knew that instruction had to have a developmental framework, that students' strengths had to be used to build on their needs, and that learning had to take place in stages. Unlike the lab, we wanted group instruction rather than one-on-one. We also knew that our teaching materials and techniques would need to appeal to our audience of young adults. We will discuss each of these elements in detail.

A Developmental Framework

We knew that our students' skills in reading were not going to be acquired overnight; they would develop gradually. Jeanne Chall's stages of reading development (1996, 1983) was the theory that helped us the most in recognizing how we as teachers could best accelerate this growth (see box below).

Chall's Stages of Reading

Stage	Characteristics
Stage 0: Prereading	Story can be retold while looking at book previously read; letters of alphabet can be named; names can be written; some signs can be recognized
Stage 1: Decoding	Relationships between letters and sounds, and between printed and spoken words are being learned; simple texts with predictable words can be "sounded out"
Stage 2: Confirmation	Stories and short selections are read with increasing fluency; "ungluing from print is taking place
Stage 3: Reading to Learn	Reading is used to learn new information, new ideas, new words and concepts
Stage 4: Multiple View Points	Wide reading from a broad range of complex materials is occurring; a wide variety of perspectives and attitudes are being expressed
Stage 5: Construction	Reading occurs rapidly and efficiently; reading is used for personal and professional needs

According to Chall, reading is a process that changes as the reader becomes more able and proficient. She suggests that, in the beginning stages of learning to read, students learn how to recognize and sound out words -- the basics of the alphabetic principle. With practice, their reading becomes more fluent and automatic, increasing their ease in dealing with texts that use concepts and themes already within their experiences. At this point, students have learned how to read. The challenge they face next is acquiring the ability to use reading as a tool for learning. This involves working with texts that go beyond what they already know, thereby increasing their vocabulary as well as their ability to think critically about what they read.

Build on Strengths

The content of each of the four courses in our curriculum is designed specifically to reflect students' current level of reading development, along with the level to which they need to go next. In each course, we try to make sure that we are building on strengths. Take Mark, for example. He was 16 years old when he began the program. Although he had difficulty reading text above the third grade level, his vocabulary knowledge and listening

comprehension skills were at about the seventh to eighth grade levels. Mark was placed in the first course in our curriculum, where students' strength in understanding is used to address their need in decoding. Although he struggled when he was asked to read, we interested Mark enough in the content of what he was reading to make that struggle worth-while. Later, when we asked him what he would say to other students entering the program, Mark said, "No matter how hard the work is, just stick with it ... People making me read made me read better because I got used to reading."

Proceed in Stages

In each of our courses, we strive to use a three-step process when introducing new concepts and skills. First, we demonstrate or model the new material. Next, we give students an opportunity to practice, with the teacher as a guide. The third step involves independent practice with feedback.

For example, to promote understanding of the alphabetic principle, we teach the concept of a syllable and then model how words can be broken into these parts. Following that, students use computer software to practice the reading and spelling of words divided into syllables. Finally, students are provided with independent practice via a cloze task with syllables. (In cloze tasks, portions of words or sentences are omitted, and learners must try to fill in the "blanks.")

We use this same strategy when working on increasing students' knowledge of word meanings. We use direct instruction to introduce definitions and examples of different contexts in which words can be used. We then give students activities like games and puzzles to engage them in discussions that provide supported practice. Finally, students practice independently when they incorporate the vocabulary words in written responses to short readings.

Since our goal was to develop a reading curriculum that could be disseminated nationwide, we needed to keep costs in mind. One-to-one tutoring is way too expensive for high schools. So, we knew from the outset that we had to get results with groups. We had another reason for wanting to work with groups. For the young adult with reading difficulties, inappropriate classroom behaviors often contributed to academic failure. By working in groups, our kids would also have opportunities to practice the social skills that are so critical to their future success (Connolly, Dowd, Criste, Nelson, & Tobias, 1995).

We designed our curriculum specifically for the older adolescent. Although the characteristics of effective reading instruction are the same,

regardless of the learner's age, the specific techniques and materials used must be age appropriate. For instance, when working with young children, it's fine to teach the *"oa"* sound with words like *boat* and *coat*. But when working with older adolescents, who can often read words like this on sight, such an approach can turn them off. In selecting our materials and techniques, we paid particular attention to ensuring that they would be appealing to young adults. When we teach the *"oa"* sound, we use words like *cockroach* and *scapegoat*.

Four Courses

Each of the four courses in our curriculum lasts about 16 weeks. In each course, students meet for about 45 minutes a day, five days a week. This amounts to almost four hours of direct reading instruction a week as compared to Adult Basic Education students, who average between 5.5 and 13.0 hours of instruction per week, according to the Department of Education. Our courses are usually taken as electives, allowing students to complete their regular high school program while they are receiving help in reading.

Decisions about where to place students in the curriculum are based on whatever diagnostic data are available. On Boys Town's home campus, we give the *Diagnostic Assessments of Reading* test (Roswell & Chall, 1992), an individually administered, criterion referenced test (see page 16 for more on the DAR). Other sites we work with use other kinds of information for placement, including both standardized test data and curriculum-based measures.

Our experiences, both in the Harvard Reading Lab and in working with the Boys Town Reading Curriculum, convinced us that an accurate diagnostic picture of the students is one of the key ingredients for accelerating their growth in reading. Another key ingredient is ensuring that instruction is focused clearly on the components most critical for growth at each level of reading development. In the sections that follow, we talk about how each of our courses has been designed to accomplish this.

Foundations of Reading

Foundations, the course for young adults reading below the fourth grade level, maps onto Chall's Stage 1 of reading development. Our goals in this class are to teach the most common letter-sound correspondences, and to provide opportunities to apply this knowledge while reading books aloud. About ten students make up a Foundations class, along with a teacher and, when available, a paraprofessional. For about ten minutes each day, students work in pairs on spelling software (Spell It 3, by Davidson), which we have customized to teach up to 17 different phonics rules. Groups of students also spend about ten minutes each day playing a game with words that fit the rule

they are working on, like Concentration or Wheel of Fortune (see also Curtis & McCart, 1992). Students learn very quickly that time is limited, and they know the more they are on-task, the more fun they will have.

The remainder of class each day is spent in a small group, four or five students with a teacher, reading aloud from a novel. Novels are at a high enough level to provide practice in applying the phonics rules being learned, and interesting enough to make the effort it takes to do so worthwhile. Novels we've used include *Whispers From the Dead* by Joan Lowery Nixon and *Toning the Sweep* by Angela Johnson. The reading is done collaboratively, with students and teacher taking turns reading and passing back and forth at unexpected times. This technique requires everyone to follow along and to stay engaged. The teacher supplies unknown words when necessary, while at the same time encouraging students to identify un-familiar words. Informal discussions about the novels help to maintain comprehension and interest. Homework includes finding words that do and do not fit rules, and sentence writing.

Adventures in Reading

Adventures, the course that corresponds to Chall's Stage 2 of reading development, is intended for those reading between the fourth and sixth grade levels. The goals in this course are to improve students' ability to recognize words and their meanings, and to increase oral reading fluency. As in Foundations, students work in pairs for about ten minutes each day, on computer software customized to improve their reading vocabulary (*Word Attack 3,* by Davidson). They spend about ten minutes each day in small groups playing games that provide practice with the words, like *Password* and *Jeopardy.*

Oral reading is part of Adventures for the same reason we use it in Foundations: students need informed practice as they learn to read. We use the same procedure for oral reading in this class as in Foundations, and the emphasis continues to be on application and enjoyment during reading. In Adventures, however, fluency rather than accuracy is the focus. Novels we've used to promote these goals include *Something Upstairs* by Avi and *Flight #116 is Down* by Caroline B. Cooney. Homework includes crossword puzzles, cloze sentences, and analogies -- all providing additional practice on the same words used in the computer software and the games.

Mastery of Meaning

Mastery, which relates to Chall's Stage 3 of reading development, is designed for those between the sixth and eighth grade levels. The goal in Mastery is to

build up knowledge of word meanings to improve comprehension. The classes run anywhere from ten to 15 students per teacher.

The design of the activities and materials in Mastery are based on five principles of effective vocabulary instruction drawn from the research literature (McKeown & Curtis, 1987):

1. students get numerous opportunities to learn a word's meaning;
2. words are presented in a variety of contexts;
3. students are asked to process words in active, generative ways;
4. distinctions as well as similarities among words' meanings are stressed;
5. improvement in students' ability to use words in speaking and writing, as well as to recognize their meanings, is emphasized.

Students read mostly informational text, including articles from materials like Disasters and Heroes, Jamestown Publishers, and The Kim Marshall Series, Reading, Educators Publishing Service. Because students are now making the transition from "learning to read" to "reading to learn," much of the reading is done silently. Homework includes writing assignments using target vocabulary words, along with cloze passages and sentence completions.

Explorations

The final course in the curriculum is designed to correspond to Chall's fourth stage of reading development. Intended for those reading at the eighth grade level and beyond, the goal in Explorations is to promote the ability to integrate information, via both reading and writing. Students learn study skills like note taking and summarizing in the context of materials taken from a variety of content areas. *Strategies for Reading Nonfiction* by Sandra Simons, published by Spring Street Press, is a resource that we use frequently. Students practice using study skills when they work on problem-solving software (*Where In Time Is Carmen Sandiego*, Broderbund). Use of study skills is also required on an activity we call the Explorations Board, where they respond in writing to short-answer and essay questions. Homework provides additional practice in using reading and writing as tools for learning.

Assessing Effectiveness

We use curriculum-based information, data from norm-referenced tests, and consumer data to assess the effectiveness of the program. In the first three courses, students take weekly pre- and post-tests on the content being taught, and feedback on weekly writing assignments is provided via rubrics. Explorations' students get weekly updates on their progress.

Results from curriculum-based measures have been quite encouraging. For instance, by the end of Mastery, students can use nearly 75% of their words correctly in writing, as compared to 35% before the course begins. The curriculum-based measures have also helped us to see which students may need some additional help or additional challenge. Students appreciate data like these as well. Even when they get less than 100% on their post-tests, they can see improvements from their pre-tests, and this keeps them motivated.

We use norm-referenced tests for evaluation because results from national samples, as well as results from the various sites we work with, provide baselines for gauging how much reading growth students are making. We picked the tests to correspond to the components addressed in each course. For example, in Foundations and Adventures, we have given students the basic reading and vocabulary sub-tests of the *Woodcock-Johnson, Revised* (Woodcock & Johnson, 1989). Average gains after 36 weeks of instruction have been more than two grade levels. In Mastery and Explorations, students take the vocabulary and comprehension sub-tests of the *Stanford Diagnostic Reading Test* (Karlsen & Gardner, 1995). Gains on these measures average one year for every semester of instruction.

At the end of every course, we ask our students (our "consumers") questions about the class activities, materials, assignments, and so on. Responses are always positive. Particularly revealing is the question that asks kids what advice they would give others who are just starting the program: "It helped improve my learning and spelling abilities. Take advantage of the opportunity to learn to do your work. I liked the classes and the computers are fun. Most of all I liked the games we played and I didn't even mind reading so much."

Creating an Effective Reading Program

Although the content of this curriculum was designed specifically to appeal to older adolescents (15-20 years old), we believe that the following factors make the program successful and can do the same for any ABE program.

Instruction is based on theory and research:
A curriculum must have a strong foundation in theory and research. When students are continuously engaged in tasks that are at the appropriate level of reading development, accelerated growth will be the result.

Instruction is structured and planned:
For anyone who has failed in school, an environment that is clear, consistent, and encourages risk-taking is crucial. When learners know ahead of time what they will be asked to do, and that help will be available when they need it, they feel safe and in control.

Teachers are trained:
Teacher training and consultation are essential ingredients for a successful program. Teachers need to understand the rationales behind curricula, the goals and principles of what they are teaching, and the reading profiles of their students. They must also be able to ask questions, seek advice, and receive feedback once instruction has begun.

Classroom atmosphere is positive:
A program needs to make sense to students and provide them with hope. They need to know why they have been placed in a particular class, and more importantly, what they will be able to do when they get out.

Students are challenged:
Teachers and students alike need to define success both by how much is learned as well as by how well tasks get performed. When success is measured by how much is learned, students are willing to be continually challenged. As challenge results in growth, motivation will increase.

Concluding Remarks

Concern about illiteracy abounds, yet solutions are difficult to find. Indeed, in many circles, reading failure in older adolescents and adults is viewed as failure too late to overcome. The Boys Town Reading Curriculum has success-fully reversed reading failure in young adults. This success would not have been possible without the cooperation and help of the teachers and students for whom the curriculum is designed. This is what really makes the curriculum work. It was developed in vivo rather than in vitro, keeping us continually aware of the needs of the teachers and the students we were seeking to help. To them we owe a special thanks.

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Reading 📖

(To be read by participants *before* the session.)

Teaching Reading to First-level Adults: Emerging Trends in Research and Practices

by Judith A. Alamprese

Reading 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 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 give 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.

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Judith A. Alamprese is an educational researcher with Abt Associates, in Washington, DC. She has worked closely with many states, including Connecticut and Pennsylvania, on adult education change initiatives, and has conducted a variety of studies of ABE over the past 15 years.

Reading 📖

(To be read by participants *before* the session.)

The Theory Behind Content-based Instruction
by Thomas G. Sticht
Focus on Basics, Vol. 1, Issue D, December 1997, pp. 6-10

In adult basic education, including the learning of English for speakers of other languages (ESOL), content-based instruction is instruction that focuses upon the substance or meaning of the content that is being taught. This is in contrast to "general literacy" or "general language" instruction, which uses topics or subject matter simply as a vehicle for teaching reading and writing, or the grammar or other "mechanics" of English language, as general processes (Brinton, Snow, & Wesche, 1989). Various "general literacy" programs may also emphasize the learning of general processes such as "learning to learn," "critical thinking," or "problem solving" skills. In such instruction, the emphasis is upon developing the general processes, and the content that is used is generally treated as of only incidental interest.

In this paper, I will first provide a perspective from cognitive science that emphasizes the importance of both content and processes in human cognitive activity, including literacy. Then I will discuss a program of research on content-based instruction which has been considered influential for workplace, health, and family literacy programs that integrate content with basic skills instruction (Shanahan & Neuman, 1997). This research was the first to apply concepts from both behavioral and cognitive science to the development and evaluation of an entire, operational adult literacy program.

The new content-based program was demonstrated to be more effective in achieving both content-related and general literacy outcomes than the general literacy education programs that professional adult literacy providers had already put into operation. Its effectiveness was replicated when it repeatedly replaced existing general literacy programs at sites in six different states from the west to the east coasts. No other research has been found in the field of adult basic education that provides this type of evidence for a content-based program's effectiveness.

To be sure, many projects demonstrate that basic skills instruction can be integrated with theme- or content-based instruction in numerous job-related, "life skills," and other "functional" basic skills programs (see, for example, Gedal, 1989, for an example of a job-related adult literacy program;

Sissel, 1996, for health-related and other types of content-based adult literacy programs). But to my knowledge, except for the research reviewed, no research compares content-based programs to process-oriented programs that are already in place. For this reason the present paper cannot provide an extensive review of research on the effectiveness of content-based instruction.

I am also unaware of any research in adult literacy education in which the researchers were able to take an existing program and replace it with one that reflected their theoretical positions and consistently produce better outcomes than the one replaced, and that this could be replicated by various teachers and administrators among different adult literacy student populations from across the nation. These are tough criteria for evaluating research-based programs, but they are the criteria that we need to apply when evaluating the claims of advocates of different approaches to adult literacy education.

Content and Process in Cognition

One of the achievements of cognitive science is the confirmation of the dual nature of cognition given in the dictionary definition: all human intellectual activities, such as thinking, communicating, problem solving, and learning, require both processes and content (knowledge). This implies that attempting to raise people's cognitive abilities to high levels simply by improving processes such as "reading," "writing," "critical thinking" is nearly futile. To perform these processes well requires high levels of content knowledge on which the processes can operate.

Cognitive psychologists have studied information processing in reading. They have found that what people know about what they are reading greatly influences their ability to comprehend and learn from texts. In one study, young adults in a remedial reading program required 11th grade "general reading" ability to comprehend with 70% accuracy if they lacked much knowledge relevant to what they were reading. On the other hand, those with high amounts of knowledge about what they were reading were able to comprehend with 70% accuracy with only sixth grade "general reading" ability (Sticht, et al., 1986).

The "Architecture" of Cognition

The influence of computer scientists who strive to develop artificial intelligence has focused more attention on the role of knowledge in human cognition (Sticht & McDonald, 1989). It has also lead to the concept of a human cognitive system that is based on the metaphor of the mind as a computer. In this approach, the mind is considered to have a long term

memory that stores knowledge. This long term memory is essentially infinite in capacity.

In addition, the human cognitive system contains a working - or short term - memory that contains our thoughts of the moment. The working memory calls on knowledge in our long term memory, or what is sometimes called our knowledge or data base. It uses that information in the comprehending, learning, communicating, and reasoning that it is involved in at the moment. But, unlike the long term memory, the capacity of the working memory is severely limited. We cannot keep too many things in mind at one time because of the limited capacity of our working memories.

Among the important findings from studies of the limited capacity of working memory is that the capacity can be expanded if some of the mental processes involved are automated. For instance, in reading, it has been found that students who must occupy their limited working memory in decoding print to speech, as in phonics, cannot comprehend well what they are reading. Comprehension requires additional processing "space" in working memory, particularly in regard to addressing knowledge in long term memory and merging it with the new information gleaned from the book (see Sticht, Beck, Hauke, Kleiman, & James, 1974, for an early discussion of the concept of automaticity and its role in decoding and comprehension during reading; Adams, 1996, brings the discussion up to date).

To efficiently read and comprehend, the decoding aspect of reading must become automatic, that is, performed without conscious attention. This can only be accomplished by hours and hours of practice in reading. This is one of the reasons why adults who leave literacy programs having completed just 50 to 100 or so hours of instruction do not make much improvement in general reading comprehension: they have not automated the decoding process. A second reason is that, to markedly improve reading comprehension, one must develop a large body of knowledge in long term memory relevant to what is being read. Like skills, the development of large bodies of knowledge takes a long time.

The 1940's

In World War II, the military services conducted extensive programs aimed at providing new recruits with reading skills of a functional nature. Soldiers and sailors learned to read so they could comprehend material about military life. Because the time for teaching literacy was very limited, usually less than three months, the reading instructional materials had the complexity of materials typically encountered by the end of the fourth grade of public education, but they did not cover the breadth of content that a typical fourth grader would

have encountered. Rather, they taught reading by emphasizing a relatively narrow body of content knowledge about the military. Further, the readers were designed to build on the new recruit's experiences and prior knowledge about the world acquired before entering service. For instance, the Private Pete series starts with Pete at home on the farm. Then he goes to a recruiter and signs up to join the Army, rides a train to camp and is assigned to a barracks, and so forth. Because that is the procedure the vast majority of new recruits in literacy programs followed in joining the Army in the 1940's, this was content—prior knowledge—that they could talk about and comprehend, but they could not necessarily read words like "farm," "recruiter," "train," or "barracks."

Given the need to train soldiers quickly, the military programs were designed so that the recruits would only have to learn what they did not know. If a soldier had some basic decoding skills and could already recognize some words in print, emphasis was on providing practice in reading to develop word recognition skills to levels of automaticity, to reduce the processing load in working memory (cognitive process), and to develop new vocabulary and concepts about military life (cognitive content). Evaluation studies showed that literacy program graduates achieved job effectiveness ratings that were 95% as good as those of average ability, non-literacy student personnel (Sticht, Armstrong, Hickey, & Caylor, 1987).

The War on Poverty Era

During the 1960's, the military services recruited personnel with better literacy skills, but they also required higher skill levels due to the increased technological complexity of the military environment (Sticht, Armstrong, Hickey, & Caylor, 1987). During this time, I directed research teams that developed content-based literacy programs that continued the practice of focusing on a relatively narrow body of functional content. This time the literacy programs used materials not about general military life, but about specific job content. In this case, personnel who were going to be trained as cooks—both native and limited English speakers—learned word recognition and comprehension skills by reading from cooks materials. Those who were going to be automobile mechanics read mechanics' materials, those becoming medics read medics-materials.

Because most of the new recruits in the military's literacy programs of the late 1960's and the 1970's were not at the very beginning levels of reading -- most had skills at the fourth to sixth grade levels -- emphasis was on reading for comprehension and thinking. For instance, in one curriculum, concepts from the behavioral sciences were used to create a competency-based, individualized, self-paced series of modules on the use of tables of content, indexes, the body of manuals, procedural directions, and filling out

forms. This strand emphasized the performance of "reading-to-do" tasks. In these, information was found in job materials, held in working memory until applied, and could then be deleted from working memory without storage in long-term memory.

A second strand of activities focused on "reading-to-learn" tasks. In these, new knowledge in long term memory was constructed from information brought into working memory and integrated into old knowledge already in long term memory. This strand of activities drew on cognitive science research on the importance of multiple modes of representing knowledge. Personnel, working alone or in teams, read passages about first aid procedures and were taught to draw pictures about what they read to bring their prior knowledge to bear on providing a context for the first aid knowledge. They also learned to draw flow charts of the first aid procedures to develop analytical, procedural, thinking skills and to acquire the new content at a "deeper" level. By learning to make classification tables from passages of connected prose, they could better compare and contrast various types of materials, equipment, or methods, such as different communications techniques, for example, hand and arm signals, messengers, telephones, radios.

General literacy programs geared toward improving the ability of personnel to read their job materials were already in place. The new job content-based programs were compared to these. The studies showed that general literacy programs made only small improvements in participants' abilities to read and comprehend job-related materials in the six weeks of full-time study permitted for literacy training. But in the same amount of time, the job-content literacy programs made about as much improvement in general literacy as the general literacy programs made, but three to five times the amount of improvement in job-related reading that the general literacy programs made (see Figure 1).

Figure 1. In a comparison of general and content-based adult literacy programs, both of which aimed at improving job-related reading, the content-based programs of job-related knowledge produced as much gain in general literacy programs did, but three to five times the gain in job-related reading that the general literacy program made.
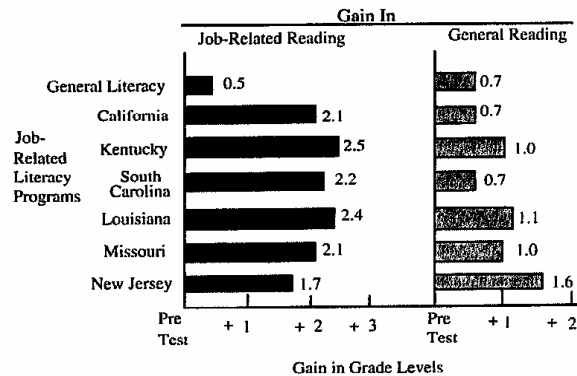
Sticht et. al. (1987) provide detailed sources for statistical analyses for the more than 12,000 adult students in the general and job-related literacy programs of Figure 1 (see below), along with other studies and data related to content-based literacy instruction in job contexts.

Applications

The job-content-based approach to literacy development has been applied to content-based adult literacy instruction in civilian contexts, particularly in workplace literacy programs. Adults generally want literacy improvements to pursue some other goals, such as getting their citizenship, improving their parenting abilities, getting into post-secondary education, or getting into a job or into job training. The latter is certainly true for the millions of adults who wish to get off of welfare and into a good, well-paying job.

Many research and demonstration projects show that reading can be taught using the content of job training - or other contents, such as parenting, religious study, health, - right from the beginning levels of learning to read. Adults who want job training and are at the beginning levels of reading can learn and practice decoding skills during a part of the study period; during the rest of the period they can learn job vocabulary and concepts by listening to audio tapes, by "hands-on" experiences with job tools, demonstrations, conversations, and illustrated books. If the adults have difficulty learning decoding by phonics, they may need training in phonemic awareness, so they can hear the different sounds in the oral language, before they proceed with learning phonics knowledge. Those with fairly well-developed decoding skills can engage in practice reading in job-related materials to develop word recognition and comprehension skills. They can learn analytical thinking skills that involve the use of graphics technologies such as lists, matrices, flow charts, and illustrations.

By embedding literacy learning within the content of job training, adults can more rapidly progress from literacy education to job training to work. But to become broadly literate, adults must engage in wide-ranging reading for some years. Research indicates that it may take typical children six to eight years to become as competent in reading and comprehending the written language as they are at understanding oral language (Sticht & James, 1984). It takes the typical reader with high school skills 12 years of reading broadly across a number of content areas - science, literature, history, to become a 12th grade level reader. So becoming highly and broadly literate when starting from a low baseline of both knowledge—vocabulary, concepts—and automaticity of word recognition takes a long time.

Adults, however, typically do not have a long time to learn literacy. For this reason, the content-based approach combines decoding and comprehension education with relevant content learning. This offers the fastest way to get adults from basic literacy to entry level competence in reading in some desired domain. Then, by following a program of lifelong learning, including continuous, well-rounded reading, a person can become literate enough to qualify for higher education or advanced job training to move into better paying careers or to simply enjoy the many personal, social, and cultural benefits of higher knowledge and disciplined thinking skills.

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Reading 📖

(To be read by participants *before* the session.)

Theory to Practice, Practice to Theory
by Anne Murr
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A tutor-based program goes through multiple changes to serve its first-level learners better

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 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 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 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.

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Handout 📄

Action Plan

Area for Improvement: **Date:**			
Action Steps	**By Whom**	**By When**	**Resources Needed**
1.			
2.			
3.			
4.			

Information About NCSALL

NCSALL's Mission

NCSALL's purpose is to improve practice in educational programs that serve adults with limited literacy and English language skills, and those without a high school diploma. NCSALL is meeting this purpose through basic and applied research, dissemination of research findings, and leadership within the field of adult learning and literacy.

NCSALL is a collaborative effort among the Harvard Graduate School of Education, World Education, The Center for Literacy Studies at The University of Tennessee, Rutgers University, and Portland State University. NCSALL is funded by the U.S. Department of Education through its Institute of Education Sciences (formerly Office of Educational Research and Improvement).

NCSALL's Research Projects

The goal of NCSALL's research is to provide information that is used to improve practice in programs that offer adult basic education (ABE), English for Speakers of Other Languages (ESOL), and adult secondary education services. In pursuit of this goal, NCSALL has undertaken research projects in four areas: (1) student motivation, (2) instructional practice and the teaching/learning interaction, (3) staff development, and (4) assessment.

Dissemination Initiative

NCSALL's dissemination initiative focuses on ensuring that practitioners, administrators, policymakers, and scholars of adult education can access, understand, judge, and use research findings. NCSALL publishes *Focus on Basics*, a quarterly magazine for practitioners*; Focus on Policy,* a twice-yearly magazine for policymakers; *Review of Adult Learning and Literacy,* an annual scholarly review of major issues, current research, and best practices; and *NCSALL Reports* and *Occasional Papers*, periodic publications of research reports and articles. In addition, NCSALL sponsors the Connecting Practice, Policy, and Research Initiative, designed to help practitioners and policymakers apply findings from research in their instructional settings and programs.

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