

Adult Reading Components Study (ARCS): NCSALL Research Brief

Strucker, J. & Davidson, R. (2003, November). *Adult reading components study (ARCS)* (NCSALL Research Brief). Cambridge, MA: NCSALL.

NCSALL's Adult Reading Components Study (ARCS), conducted by John Strucker and Rosalind Davidson at Harvard Graduate School of Education, was designed to describe the various types or clusters of readers enrolled in US adult basic education (ABE) programs, including both native speakers and those in English for speakers of other languages (ESOL) classes. The goal of the study was to help practitioners and policymakers understand who adult learners are as readers and how to gear instruction to their specific reading needs.

Nine hundred and fifty-five randomly-selected learners (676 ABE and 279 ESOL) were interviewed and assessed at learning centers in Texas, Tennessee, New York, Rhode Island, Connecticut, Massachusetts, and New Hampshire. They were given a battery of reading and language assessments to determine their instructional needs. Over half of this testing was done by local ABE and ESOL practitioners who were trained to administer the battery and conduct the interviews in a uniform manner. Each of the students in the study was tested in phonological awareness, rapid naming, word recognition, oral reading, spelling, vocabulary, and background knowledge. Researchers also interviewed students about their educational history and reading habits.

In this research brief, we present some preliminary findings from the ARCS. These findings and implications for practice related to the findings, are presented in two sections: 1. Native English Speakers' (ABE) Clusters, and 2. Native Spanish Speakers' (ESOL) Clusters. Then we refer readers to additional resources based on the ARCS.

NATIVE ENGLISH SPEAKERS' (ABE) CLUSTERS

For the 676 students in ABE classes, 51 percent had repeated at least one grade, and 22 percent reported having trouble with reading in grades K-3. Of those who grew up in the U.S., 53 percent reported getting either Chapter 1 (reading support) and/or Special Education help in K-12.

The mean word recognition score for these students was a 6.62 grade equivalent (GE). Their mean oral reading mastery level was GE 7.9,

and their mean receptive vocabulary score was equivalent to a GE 6.5. On a test of background knowledge, the mean for the group was below average range for the test, and the mean score on a word analysis test (Woodcock-Reading Mastery Word Attack) placed this group of students in the 26th percentile.

From the 676 adult basic education students assessed in this study, the researchers identified 10 “clusters” (students with similar reading profiles) in three groups. The table below details the three common groups and the clusters within each group for the 676 ABE students in this study.

TABLE 1: PERCENTAGE OF ABE STUDENTS IN THE TEN CLUSTERS IN THREE COMMON GROUPS OF READING SKILL LEVELS

Groups and Clusters of Reading Skill Levels	Percentage of Students in ABE Sample
<i>Group 1: GED / Pre-GED</i>	34%
Cluster 1: Strong GED	9%
Cluster 2: Pre-GED with Vocabulary/Background Information Needs	11%
Cluster 3: Pre-GED with Vocabulary/Spelling/Rate Fluency) Needs	14%
<i>Group 2: Intermediate Students</i>	56%
Cluster 4: High Intermediates with Difficulties in Print Skills/Rate	9%
Cluster 5: Intermediates with Stronger Print than Meaning Skills	17%
Cluster 6: Intermediates with Low Reading Rate	5%
Cluster 7: Low Intermediates	16%
Cluster 8: Low Intermediates/Should-Be-in-ESOL	9%
<i>Group 3: Lower Level/Beginning Students</i>	11%
Cluster 9: Beginners	8%
Cluster 10: Reading/Rate Impaired	3%

In general, many adult basic education students below the GED level have reading skills similar to those of children at risk for reading difficulty. Phonemic awareness problems that existed in childhood persisted into adulthood. Their reading comprehension and reading rate (fluency) seem to have stalled at middle school levels. Perhaps this is because, although they got extra help with reading in the primary grades from Chapter 1 or special education teachers, they got no such help in middle or high school. Because their reading was stalled at middle school levels, their background knowledge and vocabulary also top off at that level.

Some of the specific findings about this group, and the implications for practice related to each finding, are listed below:

GED-level and low-level/beginning readers have different reading profiles from intermediate readers.

Implication: GED group needs help in passing the test and building skills (in preparation for post-secondary education). Low level/beginning students, because of poor phonemic awareness and word recognition skills, need direct, systematic, sequential instruction in these skills.

In the intermediate group, who comprise the largest percentage of adult students, students appear to have learned some word attack skills; they know basic phonics, but don't make strong use of those skills.

Implication: The primary needs for intermediates are increasing fluency and developing a more literate (above grade equivalent 4-5) vocabulary and background knowledge. Without middle school background knowledge in history, geography, science, and math, these students have an inadequate preparation for the GED or for post-secondary education. For the intermediate group of adult students, practitioners should focus on increasing students' reading fluency (using oral reading) and on acquiring background knowledge and vocabulary.

The researchers also advocate for further research aimed at identifying strategies for teaching vocabulary so that students can achieve accelerated growth in reading.

NATIVE SPANISH SPEAKERS' (ESOL) CLUSTERS (ANALYZING SPANISH SPEAKERS ENGLISH READING SKILLS)

Of the 279 ESOL students tested in the ARCS, 78% were native speakers of Spanish. They were interviewed in Spanish and given both English and Spanish reading components tests. The interview included questions on the learner's childhood educational history; Spanish reading problems, if

any; parents' levels of education/years living in the US; time spent studying English; home and work literacy practices and spoken language use in Spanish and English; educational goals; and health.

The researchers used the data from four English tests and five Spanish tests to create clusters of similar learners. While the size of the sample used in this analysis means that these findings shouldn't be generalized across all Spanish speakers, they can be suggestive. Key findings from this analysis and related implications include:

Contrary to what many ESOL teachers told the ARCS researchers to expect, more than 80% of the native Spanish speakers had adequate or better native language literacy skills.

Implication: For many of these students who have adequate-to-strong native language literacy skills, an "English-as-a-Foreign-Language" (EFL) approach might produce faster growth than traditional survival/conversational ESL approaches. These students should be given the opportunity to apply their literacy and school-based skills to the task of learning English. This might mean more formal EFL courses that teach grammar and vocabulary sequentially, using basic EFL texts as well as materials taken from a real-world context. For these already literate adults, reading and writing English may actually facilitate the acquisition of oral-aural skills in English.

Unlike the ABE students discussed previously, ESOL Spanish speakers' reading ability in Spanish was directly related to years of Spanish school completion: the more years completed, the stronger the skills. It is also possible that the years of school completion in Spanish is related to the speed of English skills acquisition.

Implication: Most of these students were did not have reading disabilities as children. As discussed above, students with strong skills in Spanish might benefit from a more formal EFL approach, as if they were normally developing high school students taking English as a foreign language.

All participants, regardless of level, were surprisingly weak on English consonant sounds.

Implication: Literacy programs often quickly gloss over English phonemes (letter sounds) in beginning ESOL classes because the learners who are already literate in Spanish seem able to chunk English words correctly into syllables immediately. This is because they transfer this chunking skill from Spanish. But it is important for all ESOL students to practice producing and perceiving English consonant sounds. English has a lot of medial and final consonant blends (-nt, -st,) that are difficult to perceive in the natural speech stream, but they are nevertheless important because they often carry vital syntactic and semantic information. In

addition, because English vowels can be pronounced several different ways, formal attention to basic English phonics patterns and rules is a valuable investment for their future pronunciation and spelling, even if learners seem to already know how to decode English.

The two clusters of Spanish speakers who have low levels of education in Spanish also have severe decoding problems and show other signs of reading disabilities. Despite an average of almost ten years in the US and almost three years of ESOL instruction, unlike students in the other clusters, their English skills remain at early beginning levels.

Implication: Initial instruction in English for these students might emphasize oral-aural conversational skills at first, then introduce English reading and writing later using a direct, structured, and sequential approach such as Wilson, Orton-Gillingham, Lindamood, etc.

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

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

A Tool to Aid in Diagnosing Reading Difficulties

Whether to get a better job, attend community college or a trade school, or to enrich their lives in other ways, adults come to literacy classes to become better readers. Reading is not a single skill, it is a composite of several sub-skills any one of which can be weak enough to be the cause of a low level of reading comprehension.

Learners usually receive a silent reading comprehension test such as the TABE, ABLE or similar assessment when they first enroll. While such an assessment is necessary for an approximate class placement, it tells a teacher little about the learner's instructional needs; the instructor needs to know the learner's abilities on each of the major sub-skills of mature reading comprehension.

An Interactive Resource

Users enter a learner's grade equivalent reading scores on a few critical skills - word recognition, spelling, word meaning, oral reading rate, and on silent reading comprehension. Input of the learner's scores (reading profile) is then matched to one of the several distinctive reading profile groups we derived from the Adult Reading Component Study (ARCS). Information is given that highlights the strengths and weaknesses of learners with this reading profile.



A resource for Learning About Reading Components and More...

In addition to the interactive Match a Profile, there is a Mini-Course on assessment and instruction of reading components, downloadable tests and word lists, references, and links to research. A section describes the methods, and findings of the ARCS project, the research on which this website is based.

The Website is for....

All ABE Teachers

Although the site has most relevance for teachers of basic reading, all ABE teachers are involved in the reading education of their learners.

Administrators of Literacy Centers

Administrators will learn more about reading development and the advantage of an extended initial assessment of enrollees in order to group learners who have similar instructional needs.

Adult Education Curriculum Resource Personnel

Knowing more about reading development will help resource personnel evaluate materials and methods for teachers and literacy centers.



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

This interactive website has two tracks:

From the homepage,

you can select

either “Match

a Profile” or

“The Mini-Course”

(you can switch

between tracks

at any time.)

► Match a Profile

Introduction to Reading Profiles and Reading Components

Not sure what reading profiles and components are? This page explains them.

Introduction to Match a Profile

What test scores will you need to match a research-based profiles? This page tells you.

Match a Profile

Ready to match a profile? This page contains the data form you will use to input your learners' scores. Once you click “Perform Analysis,” you will go to the description of the research-based profile you matched.

Browse All Profiles

Interested in viewing any of the other research-based profiles featured on this site? From this page, you can browse through the descriptions of all 11 profiles as well as comparisons of profiles that are in the same Silent Reading Comprehension group.

How Did We Create the Profiles?

Would you like to know how we created the research-based profiles? This page tells you.

The Word Meaning Test (WMT)

Would you like a free word meaning test to use in your program? From this page, you can view and download one we have developed.

The screenshot shows the homepage of the NIFL website. At the top, it says "ASSESSMENT STRATEGIES AND READING PROFILES" and "Research-based assessment practices for the adult education classroom". Below this is a welcome message: "WELCOME TO THE INTERACTIVE WEBSITE FOR ADULT EDUCATION PRACTITIONERS". The main content area is titled "ARCS - The Adult Reading Components Study at NCSALL" and describes the study's purpose. It lists two website tracks: "Match a Profile" and "Take the Mini-Course". There is a "Reading Profile" graph showing scores for various components (VR, SP, VM, SPC) and a "Mini-Course in Reading" menu with options like "Reading Components", "Print Skills (Alphabetics)", "Meaning Skills", "Assessments Drive Instruction", "Using a Questionnaire", and "Using Assessments".

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

► The Mini-Course



Introduction

to the

Mini-Course

What sections

make up the

Mini-Course?

This page tells

you what you

will find.

Reading Components

What are reading components? These pages introduce the two groups of components.

Print Skills (Alphabetic): Phonemics, Word Recognition, Sight Words, Word Analysis, Spelling, and Rate & Fluency

Need more information on Print Skills (Alphabetic)? These pages provide extensive information.

Meaning Skills Background Knowledge, Word Meaning (Vocabulary), and Silent Reading Comprehension

Need more information on Meaning Skills? These pages provide extensive information.

Assessment Drives Instruction

How is assessment related to instruction? Why is testing silent reading alone not enough? Would you like to view descriptions of the eleven research-based profiles featured on this site? These pages explore assessment and the profile descriptions.

Using a Questionnaire

Would you like to use a learner questionnaire in your program? This page lets you view and download the questionnaire used in the ARCS.

Using Assessments

Which assessments are used around the country? What kinds of assessments can you use with your learners? This section tells you.

References

Interested in the research? Find citations here.

Resources

Would you like to download word lists, the Word Meaning Test, or an informal Word Analysis Inventory? Interested in finding the web addresses of other adult education sites? This page can help.



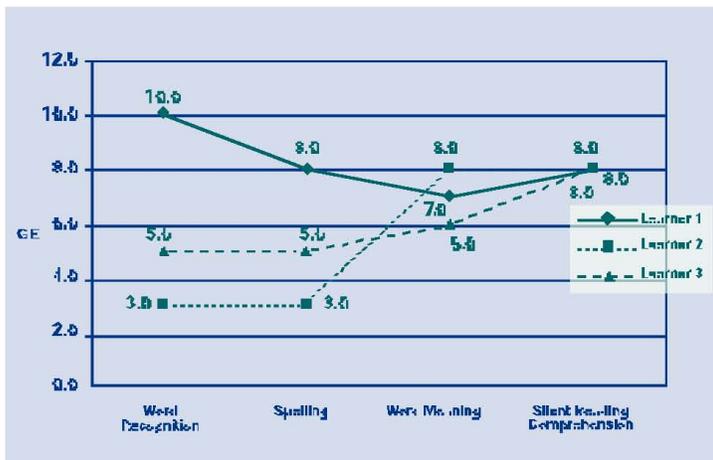
QUESTIONS? COMMENTS? CONTACT US....

E-mail: ncsall@gse.harvard.edu

Call: (617) 495-4843

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

Three Learners from a High Intermediate Class



Time taken for diagnostic reading assessments can pay off in focused lessons that give learners the best opportunity to become better readers in the shortest amount of time.

The graph is of ABE learners from the ARCS data set. It shows grade equivalent levels (GE) on four reading components for three learners. If these learners were entering ABE classes, an entrance test would show all three learners reading silently with comprehension at GE 8.

Therefore, all three would be placed in the same high intermediate literacy class. However, the readers have distinctive arrays of abilities that require different focuses of instruction.

Learner 1 is a non-native speaker of English, literate in his first language and progressing well toward his goal of a community college education. He needs more word meanings (vocabulary) and background knowledge in order to raise his silent reading comprehension.

Learner 2, a native English speaker, has a typical dyslexic's profile, and although she has partially compensated for her deficiencies by using her vocabulary to support word recognition in context, she needs a systematic program of word analysis to raise her independent reading level.

Learner 3, also a native English speaker, shows a significant difference between his print skills and his reading comprehension level. His difficulties are not as severe as those of Learner 2 but they do give evidence of a moderate early reading problem. He is not a candidate for a one-on-one program, but he does need a word analysis assessment to see what sound-symbol pairings he has not mastered.

Time taken for diagnostic reading assessments can pay off in focused lessons that give learners the best opportunity to become better readers in the shortest amount of time.

EFF **HOT** *topics*  STRATEGIES AND TOOLS FOR TEACHING WITH EFF

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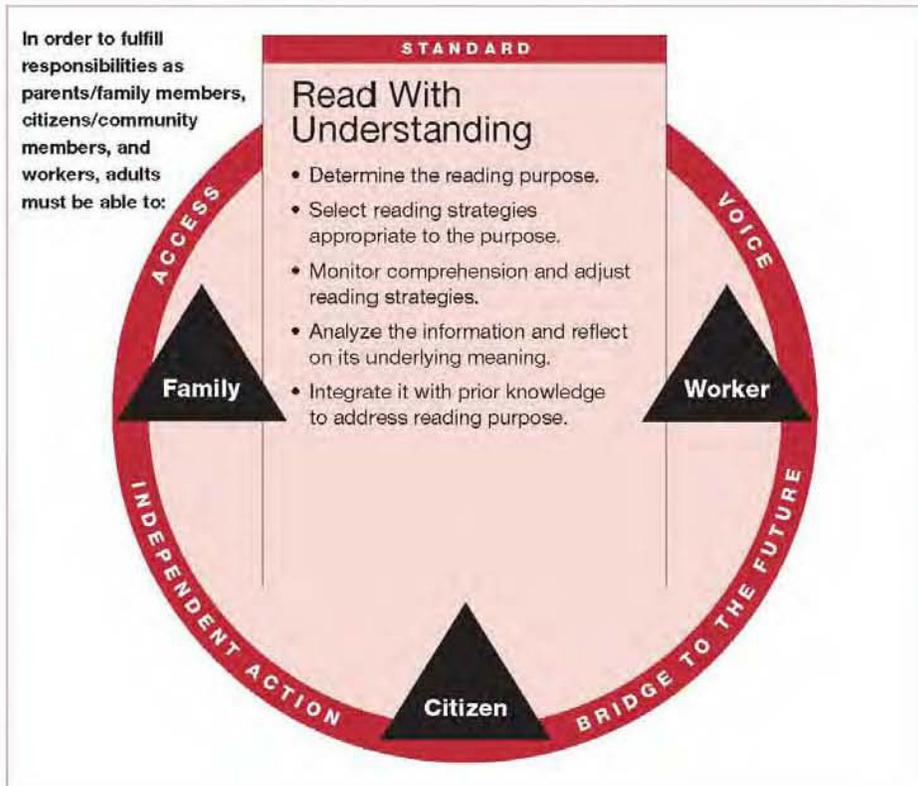
Read With Understanding

In this issue we focus on the EFF Standard *Read With Understanding* and research-based instructional practices that will help students reach their goals. Many articles in this issue are based on work carried out as part of the EFF Reading Project, a two-year partnership between the National Institute for Literacy and the National Center for Family Literacy integrating research on the teaching of reading into EFF's purposeful and contextual approach to instruction.

This issue of HOT Topics is about one of the hottest topics in education today—reading.

The EFF approach to teaching and learning embeds researched-based reading instruction in the broader context of a standards-based approach to adult education. This approach is also based on solid research about how standards improve instruction and accountability. Standards make the goals and content of teaching and learning activities transparent to the teachers and students and make clear what knowledge and skills should be the focus

See *Read With Understanding*, page 2



Read With Understanding,

continued from page 1

of instruction and assessment. The EFF Standard *Read With Understanding* is one of sixteen EFF Standards that define the core knowledge and skills that adults need in their roles as family members, community members and workers.

Teachers want to learn and use the most valid instructional practices available that will result in higher levels of student achievement. In the first article, Amy Trawick introduces the key research on reading instruction and explains how the EFF Standard *Read With Understanding* frames the four elements of evidence-based instruction. The issue also includes practical application strategies and models for teaching and learning used in the ten programs that participated in the EFF Reading Project as well as an article by Marilyn Gillespie on teaching reading to ESL students.

The article "Using the EFF Teaching and Learning Cycle to Plan Reading Instruction" describes how two teachers used the EFF Teaching/Learning Cycle to plan and carry out standards-based instruction focusing on *Read With Understanding*.

One of the ways that standards-based instruction improves instruction is by integrating assessment at every step of the teaching/learning cycle. The article "RWU Assessment Prototype" is a brief update on the development of assessment tools for the EFF Standards. The *Read With Understanding* assessments, developed as the prototype for accountability assessments for all the EFF standards, complete the circle of goals, instructional practices, assessment, and accountability needed for standards-based educational improvement. ●

The EFF/NCFL Reading Project

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

The programs that took part in the project:

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

Read With Understanding: Up Close and Personal

by Amy R. Trawick

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

Connecting Reading Research to RWU

Read With Understanding (RWU) is one of 16 EFF applied learning standards. Like the other fifteen EFF Standards, RWU is conceptualized as an integrated skill process that adults use to accomplish goals and purposes in their lives. The components of the *Read With Understanding* Standard (see page 1), describe a process that skilled readers engage in as they make sense of the

symbols on a page. The first component states that the reader determines the reading purpose; however, a reader does not necessarily carry out the remaining components in sequential, discrete steps. Rather, the components are integrated as the reader draws on sets of underlying skills in order to read with understanding to accomplish his or her purposes.

Recent reports that review and synthesize research on reading instruction have

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

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

Skills refers to what the reader can do with that knowledge as he or she reads. For example, in the area of alphabeticity, it is helpful to have knowledge that *b* says /b/, *a* might say /a/, and *t* says /t/; it is even more useful for reading purposes to be able to apply this knowledge in the skill of decoding when one encounters the word *bat*. In the area of comprehension, the reader must have the skill of determining a purpose for reading. Similarly, a skilled reader knows how and when to monitor comprehension.

Strategies refers to intentional ways that readers perform skills. For example, Joe, a novice reader, sees the sentence, “The bat hit the ball with a smack” and gets stuck at the word *bat* (a skill). He decides to try to decode the word by ap-

The Four Elements

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

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

plying one of several possible strategies. He might try segmenting the word into individual sounds--/b/+/a/+/t/. Or, he might decide to look for a word he knows inside the larger word. To decode *bat*, then, he might find the word *at*, put a /b/ in front of it—/b/+/at/—and come up with *bat*. He might use another strategy, comparing the unknown word to a full word he knows—*cat*—substituting a /b/ for the /k/. Any of these strategies might be used for accomplishing the skill of decoding.

More complex strategies aid the reader in using comprehension skills. Susan has a variety of strategies that will

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

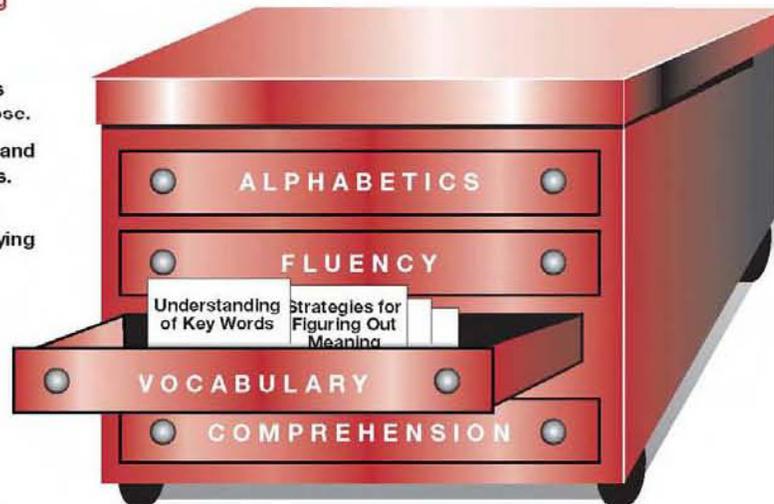
(continued on page 4)

The Reader's Tool Chest

Knowledge, Skills, and Strategies
Used Flexibly and in Combination to
Read With Understanding

Read With Understanding

- Determine the reading purpose.
- Select reading strategies appropriate to the purpose.
- Monitor comprehension and adjust reading strategies.
- Analyze the information and reflect on its underlying meaning.
- Integrate it with prior knowledge to address reading purpose.



Up Close and Personal, continued from page 3

strategies, applied appropriately, can help her accomplish the skill of finding the main idea and supporting details.

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

Expert Performance of RWU

Consider how a skilled reader approaches the reading process. We might think about this process as choosing tools from a reading toolbox. Necessarily, the toolbox is large, and it contains a variety of knowledge, skills and strategies. Each one is useful in certain situations, and the skilled reader knows when and how to use them.

What does this toolbox look like? Re-

search on how people develop expertise tells us that the knowledge base of experts is not only broad but also organized for efficient retrieval. So instead of a hodgepodge of tools thrown willy-nilly into a box, we want to be sure that we envision an organized toolbox for our skilled reader, maybe even a tool chest with drawers representing key sets of knowledge, skills and strategies. Because these drawers are organized, the skilled reader has easy access and can accomplish a wide range of tasks in a wide range of situations. In fact, a skilled reader chooses wisely among these tools, using them flexibly and in combination, as she works through each of the components that make up the integrated skill process *Read With Understanding*.

For example, as a reader monitors her comprehension (the third RWU compo-

nent), she may realize that something in the passage doesn't make sense. She may then zero in on certain words that she thinks she might have mis-read, applying appropriate tools from her alphabetics drawer. If she concludes that word recognition is not the issue, she might check her understanding of key words, borrowing from her vocabulary drawer. If the passage is especially difficult and she had originally read it very slowly, she might decide to re-read the passage more fluently (fluency drawer) and see if understanding flows more easily. Or, she might decide she needs a graphic organizer to help her make sense of the information (comprehension drawer).

The point is, that in the course of trying to read with understanding, this reader and other skilled readers pull from the tools they have available to them, choosing those that address the issue at

hand. A skilled reader is able to draw appropriate tools from the tool chest, knowing when and how to use them, because he has metacognitive abilities. Metacognition is the awareness of one's own thinking and the ability to monitor and regulate thinking to achieve cognitive goals. In designing instruction using the Standard *Read with Understanding*, teachers consider ways to support readers in regularly attending to their own understanding and making decisions about how to solve problems as they read.

Further Implications for Teaching

Research with students in adult basic education classes has shown that unlike skilled readers, who have equally developed sets of tools across all four elements, students in adult and family literacy programs are more likely to have strengths in some of the sets and gaps in others. Teachers should assess students' skills in order to identify their strengths and gaps, consider the implications for their ability to *Read With Understanding*, and focus instruction where needed.

The recent synthesis reports on reading instruction identified effective instructional practices that help readers build the sets of knowledge, skills, and strategies that are the focus of the EFF Reading Project. In general, the reports conclude that two approaches are essential for building expertise in reading: explicit instruction in knowledge, skills, and strategies and opportunities to use and practice these learnings in reading texts. In teaching *Read With Understanding*, teachers provide explicit instruction about these knowledge, skills, and strategies within the context of larger activities that engage students in reading material in pursuit of their role-based goals. Addressing these goal-related contexts provides the motivation for students to read, which in turn reinforces learning and facilitates further growth in each of the sets of knowledge, skills, and strategies.

Conclusion

What is clear from the data gathered by EFF in its assessment research is that adult readers at all levels of development draw on/work through all the components in the *Read With Understanding* Standard. However, the knowledge, skills, and strategies available to the novice reader are much more limited than those available to an expert reader. These differences frame the reader's access to both texts and tasks, and are perceptible on the performance continuum, which illustrates what performance looks like at different points in the process of building expertise in *Read With Understanding*. (See pages 12 and 13.)

The key to moving readers along the continuum toward expertise is effective instruction in the *Read With Understanding* Standard. This includes supporting students in building their tool chests of knowledge, skills, and strategies. It also requires giving students practice in choosing the right tool at the right time as they attempt to construct and apply meaning in reading activities grounded in topics and tasks that matter to them. ●

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For more information on the EFF Reading Project visit
<http://www.nifl.gov/partnership/forreading/family/eff/effrp.html>

"The EFF Reading Project training made it possible for practitioners in family literacy programs to understand and to apply a standards-based approach to teaching reading with both children and adults, based on research. Teachers involved in the project, most of whom had little prior training in teaching reading, began to create learner profiles based on tools which were designed to assess learners' decoding, fluency, and comprehension skills in reading. Teachers began to employ the types of instructional strategies evidenced through research to be effective to address phonemic awareness, phonics and word analysis, fluency, vocabulary development, and comprehension with children and with adults. Teaching learners a variety of strategies, based on their particular area of need, has made a difference in learners' motivation and their reading progress."

—Susan Finn-Miller,
Professional Development Specialist
 Lancaster, Pennsylvania

"The more parents and teachers understand the reading process, the better they are able to make decisions about their own and their children's learning."

—Nancy Sledd,
National Center for Family Literacy

Learning to Read in English

by Marilyn Gillespie



Learning to read is challenging for any adult, but especially so for adults who are also learning how to speak English. Unfortunately, very little research has been undertaken with this population of learners. This year the National Center for ESL Literacy Education (NCLE) completed a thorough review of what research has been undertaken with adult learners. In addition, they examined second language reading research undertaken with K-12 learners and provided key findings that are useful to practitioners working with adults. (Burt, Peyton & Adams, 2003). This article contains a summary of their findings.

ESL Literacy Learners are Diverse

The authors point out that adult ESL literacy is especially complex because adults come from such diverse backgrounds and have so many widely differing previous educational experiences. Since students are often placed in classrooms based on their oral proficiency in English, the literacy levels within a single ESL classroom may span from those with almost no literacy to those with college degrees or higher. In classrooms where ESL learners are grouped by literacy level, students' oral language abilities may range from beginner to advanced; the structures of their first language writing system may vary widely (such as between Spanish and Chinese); and, they may have quite different prior experiences with school.

Components of Second Language Reading Proficiency

NCLE's review suggests that first language reading ability is a less significant predictor of second language reading ability than is second language proficiency, especially among lower proficiency learners. They suggest four components of second language proficiency that are among the most important for teachers to take into account.

Vocabulary Knowledge. To improve vocabulary knowledge, and to provide students with many opportunities to read comprehensible texts, teachers can preview text-specific vocabulary with students before learners start to read. In addition, they can explicitly teach high-frequency vocabulary.

Syntactic Proficiency. Studies also show that students who understand the structures of English are better able to understand the underlying meaning of written texts. English language learners need to learn about the relationship between form and meaning and to identify cues that signal that connection (for example,

the use of the *-ed* to form an adjective, as in "a parked car"). This implies that teachers need to integrate grammar instruction with reading instruction and to use what students read as a context to examine and learn about grammatical structures. As students get better at syntactic processing, more mental space is freed up for understanding the larger meaning of a reading passage.

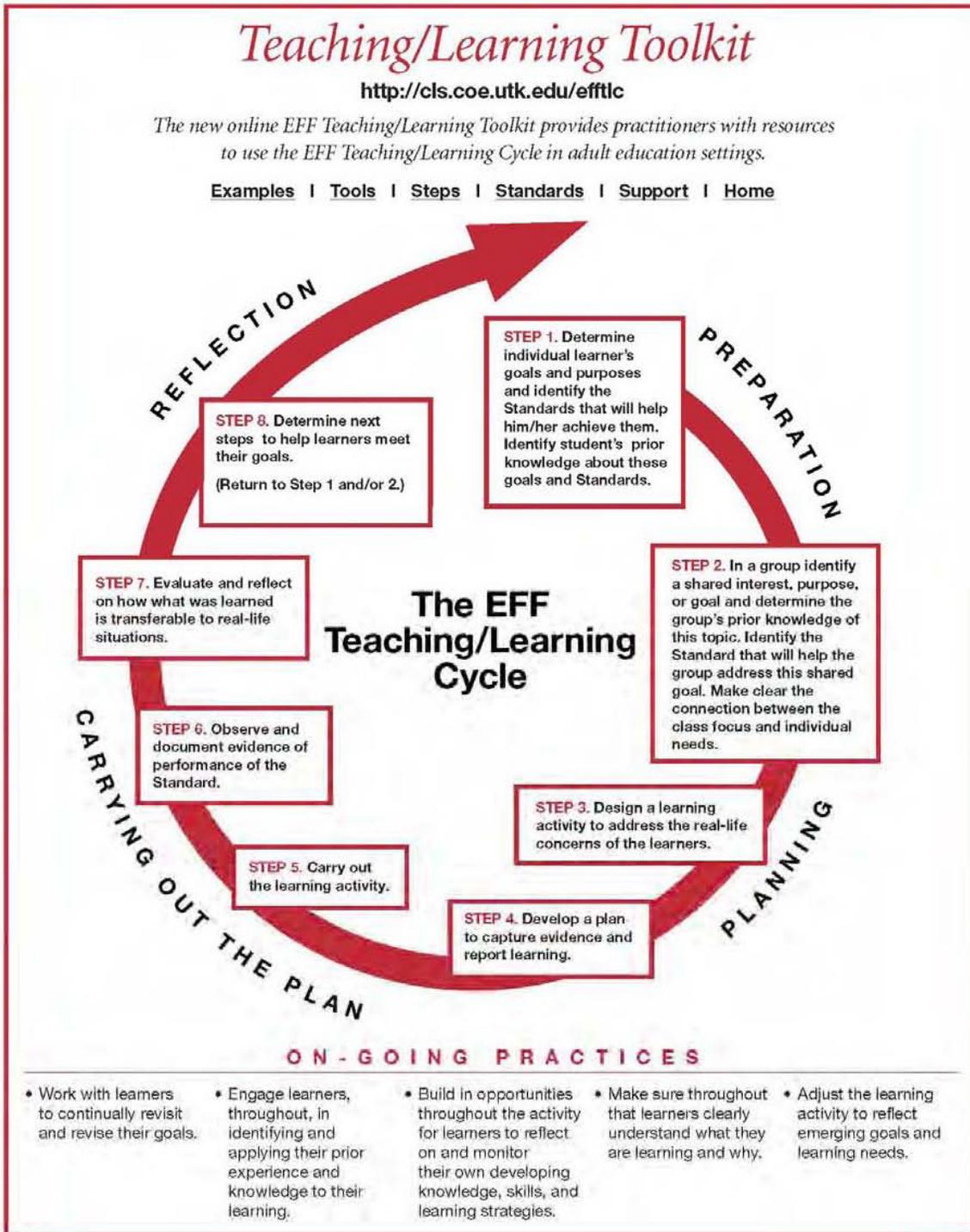
Phonological processing. Research shows that explicitly teaching the letter-sound correspondences in the English writing system through phonics instruction can improve English language reading ability. Teachers can use matching letters to sounds; matching morphemes (units that signal meaning, such as past tense markers), meanings and pronunciation; oral reading and choral reading to improve phonological processing.

Schema Activation. An important part of reading comprehension involves "reading between the lines" or using our background knowledge of the world to fill in what is not stated explicitly in a text. To help learners to build schema, teachers can provide background knowledge on a topic before beginning to read by selecting texts that build on ideas and concepts students are already familiar with. For unfamiliar themes they can use visual aides and other kinds of pre-reading activities such as having students brainstorm ideas about a topic and compare practices in their home countries and in the U.S. ●

For more information, see: Burt, M.; Peyton, J.K.; Adams, R. (2003) *Reading and Adult English Language Learners: A Review of the Research*. Washington, DC: The Center for Applied Linguistics. Copies of this publication can be requested for free from the Center for Applied Linguistics:

<http://www.cal.org/ncle>

Telephone: 202-362-0700



Using the EFF Teaching and Learning Cycle to Plan Reading Instruction

Below is an illustration of how Cheryl Williams and Patricia Murchison, two teachers who participated in the EFF Reading Project, used the EFF Teaching/Learning Cycle. Cheryl and Patricia teach in an Even Start Family Literacy Program in a large early childhood development center in Norfolk, Virginia. One day they heard a heated discussion among the parents they teach about junk food and healthy

snacks for their children. Cheryl and Patricia recognized an opportunity to help these parents learn more about healthy snacks while improving their reading comprehension. The table below describes how they used the EFF Teaching/Learning Cycle to plan and carry out this learning activity focused on improving reading comprehension in order to learn more about improving their children's eating habits. ●

Cycle Steps	Step-by-Step Activities
<p>1. Determine individual learner's goals and purposes and identify the Standards that will help him/her achieve them.</p> <p>Identify student's prior knowledge about these goals and Standards.</p>	<p>Individual learners in the program identified their primary goals as:</p> <ul style="list-style-type: none"> • passing the GED Exams • improving reading comprehension to understand work-related materials and information they receive from community agencies. <p>All students identified the EFF Standard: <i>Read With Understanding</i> as a standard that would help them achieve these goals and self-assessed their ability to use the standard during intake. Students also took the TABE, and Cheryl reviewed the diagnostic information provided by the test. She also administered Independent Reading Inventories to some students to gain insight into the knowledge, skills, and strategies they were using.</p>
<p>2. In a group, identify a shared interest, purpose or goal and determine the group's prior knowledge of this topic.</p> <p>Identify the Standard that will help the group address this shared goal. Make clear the connection between the class focus and individuals' needs.</p>	<p>Cheryl led the class in discussing an issue they had with the snacks, which they and other parents were bringing in for the children at the Center. Students decided that their concern was reflected on the Parent/Family Member Role Map in the Broad Area of Responsibility: Meet Family Needs and Responsibilities. They wanted to find out how to make healthy snacks and to share this information with other parents. They knew that some of the material they found on this topic would be difficult to read, and they wanted to learn reading strategies that would enable them to build their skills so they could understand and learn from this more difficult material.</p> <p>The class decided to focus on the Standard <i>Read With Understanding</i> so that they could make progress on their larger goals as well.</p> <p>Cheryl's goal was to bring in a variety of reading materials at their instructional level, but text that would challenge them, as well. She was prepared to select from the EBRI (Evidence-Based Reading Instruction) strategies to accomplish this goal.</p>
<p>3. Design a learning activity to address the real-life concerns of the learner(s).</p>	<p>Students determined that they would read and discuss what was involved in making healthy snacks and getting children to eat them and then share this information with the other parents by making and putting up posters in the Center. Cheryl used the components of the standard RWU as a guide to planning instruction and then guided the students in:</p> <ul style="list-style-type: none"> • formulating questions as a way of determining their purpose for reading • selecting reading materials: pamphlets, magazines, newspapers, food labels, books, and internet information • developing the knowledge, skills, and strategies in word analysis, fluency, vocabulary, and comprehension processes to support the components of the RWU standard • reflecting on their strategy use.

Cycle Steps	Step-by-Step Activities
<p>4. Develop a plan to capture evidence and report learning.</p>	<p>Cheryl planned to include opportunities for students to:</p> <ul style="list-style-type: none"> • Read aloud to practice and assess fluency • Complete the <i>Read With Understanding Diary</i> to develop their metacognitive awareness of their own reading and to give her insight into strategies that were and were not working for them • Show their understanding of the content in the posters they created.
<p>5. Carry out the learning activity.</p>	<p>Cheryl engaged students in a KWRL activity (see below) as a way for students to generate questions about the topic, and then students used these questions to determine their purposes for reading texts. She set aside a portion of each class to engage students in strategy lessons related to <i>Read With Understanding</i>. The focus of these strategy lessons was determined from her observations of students' progress. Lessons included skimming, using text features to locate information, and identifying main idea and details. Students then used (and, thus, practiced) these strategies in small groups as they read their self-selected articles. Cheryl also regularly led a lesson called "Unlocking Words" to support students in building word-level strategies.</p>
<p>6. Observe and document evidence of performance of the Standard.</p>	<p>Cheryl led the class in filling out their RWU Diaries and provided opportunities for completing the Diary on their own. She reviewed the Diaries, noting strengths and gaps in how students were performing Read With Understanding. These more structured assessments of student reading were supported by her own informal observations and note-taking. She used these assessments to inform her daily lessons. She also realized that students seemed to use the same strategies again and again, and she decided to introduce new strategies during the next T/L cycle.</p>
<p>7. Evaluate and reflect on how what was learned is transferable to real-life situations.</p>	<p>Students completed a written reflection at the end of each day and at the end of the cycle. During these reflections, they noted material they had read, evaluated its difficulty (for them), and wrote about changes they were noting in their reading. They also reflected on how they might use the reading strategies they were learning in other situations. Most students found connections with their work-related goals, and others described how these strategies would help them when they took the GED tests. Cheryl followed up with class discussions about these potential applications.</p>
<p>8. Determine next steps to help learners meet their goals. <i>(Return to Step 1 and/or 2)</i></p>	<p>Students noted that they tended to resort to re-reading when their comprehension breaks down and wondered what else they could do. As they discussed developing a new shared priority, what effective discipline looks like, they wanted to continue to explore other "fix-up" strategies.</p>

K-W-R-L Shared Priority: Providing healthy snacks for children			
What do I know?	What do I want to know?	What resources are available?	How will I show what I have learned?
<p><i>Healthy snacks help children grow.</i> <i>Healthy snacks give them healthy teeth.</i> <i>Healthy snacks give them healthy skin.</i> <i>Some healthy snacks are:</i></p> <ul style="list-style-type: none"> • Cheese/crackers • Raw vegetables • Fruits 	<p><i>Why should our kids eat healthy snacks?</i> <i>Effects of healthy snacks?</i> <i>How often? How much?</i> <i>What are healthy snacks?</i> <i>What are unhealthy snacks?</i> <i>How can I encourage kids to eat healthy snacks?</i> <i>What are the risks of not giving kids healthy snacks?</i></p>	<p><i>Nutrition books</i> <i>Parenting books/magazines</i> <i>WIC</i> <i>Pamphlets</i> <i>Internet</i> <i>Food labels</i> <i>School child nutritionist</i></p>	<p><i>Snack chart</i> <i>Memo - Providing healthy snacks</i> <i>Newsletter</i> <i>Workshop</i> <i>Bulletin Board</i> <i>Posters</i></p>

The RWU Diary: A Tool for Reflection and Assessment

During the EFF Reading Project, we developed two important tools for reading and reflection and assessment: *The Read with Understanding Diary* and *The Read with Understanding Guide*. We were looking for a way to assess use of the standard during actual reading, and we wanted something that could be used at any reading level by either teachers or students. Of more importance, we wanted a tool that would demonstrate the power of the *Read With Understanding* Standard.

Teachers may use the diary to take notes as they observe students reading. They can then ask questions as a way of getting more specific information about students' reading abilities and strategies. Informal conferences such as these provide forums for the question/answer/assessment process. For example, imagine that a student has read an article of specific interest to her:

- The teacher asks, "Why did you decide to read this section?" *The teacher is able to gain insights into the student's purpose for reading.*
- The teacher asks "Where have you read something new? Could you read that section to me?" *The teacher notes fluency and the strategies the student uses to figure out unknown or difficult words.*
- The teacher asks "Did anything you read give you trouble? Where did that happen? What gave you the difficulty? What did you do?" *The teacher is able to gain information about how well students monitor comprehension and adjust reading strategies.*

Over time, these informal conferences can help the teacher and student build a picture of the banks of strategies students are drawing from to Read With Understanding and then set new goals for reading improvement.

Teachers and students can use the RWU Diary/Guide in a number of other ways as well:

- The teacher can "prompt" strategy use by asking questions from the Guide.
- The students can refer to the Guide on their own when their comprehension breaks down.
- If the student has been working to develop a particular reading strategy, the teacher might suggest that he/she read a selection incorporating the strategy and use the Diary to record the experience.
- Students might use the Diary on their own, as they reflect on their use of components as they develop metacognitive awareness.
- Copies of completed diaries can be kept in student portfolios. Teacher and student can review them periodically to track strategy use and to see what kinds of insights the student is gaining into his/her reading. ●

READ WITH UNDERSTANDING DIARY	
TEXT: _____	DATE: _____
NAME: _____	
Read With Understanding	What did you do? How did you do it?
• Determine the reading purpose.	
• Select reading strategies appropriate to the purpose.	
• Check comprehension and adjust reading strategies.	
• Analyze the information and reflect on its underlying meaning.	
• Integrate it with prior knowledge to address reading purpose.	

READ WITH UNDERSTANDING GUIDE

TEXT: _____

DATE: _____

NAME: _____

Read With Understanding	What did you do? How did you do it?
<ul style="list-style-type: none"> • Determine the reading purpose. 	<ul style="list-style-type: none"> ♦ What is your general purpose in reading this text? ♦ What are some specific things you want to get out of this reading? <i>TRY:</i> Read the title and look at the pictures. What do you notice about the way the text looks? Are there headings? Turn the headings into questions. What are the questions you think this text will answer?
<ul style="list-style-type: none"> • Select reading strategies appropriate to the purpose. 	<ul style="list-style-type: none"> ♦ Should you read this text fast or slowly? ♦ How often will you stop to check your understanding? <i>TRY:</i> Every heading/page/chapter ♦ How will you keep up with the answers to your questions? <i>TRY:</i> Make a chart ♦ How often will you make new predictions/questions? <i>TRY:</i> Every heading/page/chapter ♦ What will you do if you come to word you don't know? <i>TRY:</i> Tips for Tackling Long Words
<ul style="list-style-type: none"> • Check comprehension and adjust reading strategies. 	<ul style="list-style-type: none"> ♦ Tune in to whether or not you are understanding as you read. <i>TRY:</i> Stop every paragraph or page and: <ul style="list-style-type: none"> • Cover the text and tell yourself what you read. • Answer any questions you wrote at the beginning. • Think of new questions for the next section. ♦ Use different strategies when you get stuck: <i>TRY:</i> Reread, break down words you don't know, use context clues, use the glossary or margin notes, look at pictures/charts on the page.
<ul style="list-style-type: none"> • Analyze the information and reflect on its underlying meaning. 	<ul style="list-style-type: none"> ♦ Can you summarize the main ideas from the readings? ♦ Can you make sense of the author's writing? <i>TRY:</i> Making a graphic organizer or text map to "see" the information in a different form.
<ul style="list-style-type: none"> • Integrate it with prior knowledge to address reading purpose. 	<ul style="list-style-type: none"> ♦ Did you meet your general purpose? Your specific purpose? How do you know? <i>TRY:</i> Writing or telling someone what you learned or the answer to your pre-reading questions.

RWU Assessment Prototype

A Scenario

Several beginning ESL students in Mary's mixed level class in the local correctional facility are preparing for an end-of-instructional-cycle assessment that will let them know if they are ready to move to a more advanced reading level. For the past four weeks, they have focused on reading about family and community relationships, using material drawn from the newspaper and from students' family stories. Read with Understanding Level 2 (on page 13) and the EFF Teaching/Learning Cycle are the guides that Mary has used in developing her teaching plans. She developed learning activities and instruction that included multiple opportunities for students to assess their reading skills.

These 'instructionally-embedded' assessment activities mirror the type of performance assessment that students will take for accountability purposes. Students are used to documenting the evidence of their reading performance: they are comfortable using a tape recorder for oral reading; they are used to being observed as they use the reading strategies they have learned; and are familiar with using rubrics to rate their performance.

From the online EFF assessment task collection, Mary selects the most appropriate Level 2 Read With Understanding performance assessment for her students. She chooses an assessment task that can be administered to a small group of students, with individual oral reading. The task calls for students to read two simplified utility bills (one for telephone services and one for electricity), write simple one or two word responses to short questions, and respond orally to questions about the utility bills.

She administers the task to her students and scores their reading performance using a scoring rubric that accompanies the assessment. Because she periodically checks her scoring with another trained scorer and because she has kept up to date with training in scoring assessments, Mary is confident that her scores of 'proficient' for two students and 'advanced' for the third are valid and reliable.

She administers two more assessment tasks to these students. On the basis of the scores from the three tasks, all three students exit Level 2 and move to Level 3.

This assessment scenario is almost a reality. It is based on the experience of a teacher who piloted Level 2 *Read With Understanding* assessment tasks during the spring of 2003, one final step in the preparation of EFF *Read With Understanding* Assessment Tasks. The process and tools for using EFF reading performance tasks will be fully described in the *EFF Read With Understanding Accountability Assessment Handbook*, in production. The Guide will include:

- the full RWU Performance Continuum, a summary developmental description of six levels of performance on the Standard;
- "Use Scenarios," narrative descriptions of the implementation and use of the assessment tasks in a variety of state administrative, program, and classroom settings;
- sample model assessment tasks for the six EFF RWU Levels, with examples of learner performance;

- guidelines for developing instructionally-embedded assessments;
- guidelines for administering, scoring and reporting tasks for accountability purposes; and
- guidelines for training scorers.

The classroom scenarios will be similar to the one given above, giving more detail about the manner in which instructionally-embedded assessment tasks and accountability assessment tasks may be selected, administered, scored and reported to meet the particular needs of the learner and the instructional context.

The Guide will be available in early 2004 for use by state and program administrators. For more information, contact the EFF Assessment Consortium Co-Directors: Regie Stites, Technical Director, regie.stites@sri.com or Brenda Bell, Field Research Director, bsbell@utk.edu. ●

EFF RWU LEVEL 2***At Level 2 Adults Are Able To:*****1. Read With Understanding**

- Determine the reading purpose.
- Select reading strategies appropriate to the purpose.
- Monitor comprehension and adjust reading strategies.
- Analyze the information and reflect on its underlying meaning.
- Integrate it with prior knowledge to address reading purpose.

2. Use Key Knowledge, Skills, and Strategies

- Decode and recognize everyday, simple words in short, simple text by breaking words into parts, tapping out/sounding out syllables, applying pronunciation rules, using picture aids, and recalling oral vocabulary and sight words;
- Demonstrate familiarity with simple, everyday content knowledge and vocabulary;
- Monitor and enhance comprehension (using various strategies such as rereading, restating, copying and rephrasing text, making a list of new words, or using a simplified dictionary);
- Recall prior knowledge to assist in selecting texts and in understanding the information they contain.

3. Show Fluency, Independence, and Ability to Perform in a Range of Settings

- Read and comprehend words in small blocks of simple text slowly but easily and with few errors.
- Independently accomplish simple, well-defined, and structured reading activities in a range of comfortable and familiar settings.

4. Accomplish a Variety of Reading Purposes

- Accomplish a variety of goals, such as:
 - ✓ Reading aloud a picture book with very simple text to a young child.
 - ✓ Reading a short narrative about a community concern in order to identify and think about one's own community issues.
 - ✓ Reading about entry-level job duties in order to decide whether or not to apply.
 - ✓ Reading simple greeting cards to choose an appropriate card for a friend.
 - ✓ Reading a simple chart about job benefits to figure out if hospitalization is covered.
 - ✓ Reading utility bills in order to understand how and when to pay them.
 - ✓ Reading short narratives about immigrant experiences to reflect on and learn about one's own heritage.
 - ✓ Reading the newspaper weather forecast to decide on appropriate clothes for a weekend trip.

Family and Child Education (FACE) Programs Participate With Purpose in the RWU Project

Teaching with the EFF Standard RWU includes creating a real world context for instruction by identifying shared priorities that provide a purpose for practicing reading, constructing meaningful learning activities that address that purpose, and identifying appropriate texts that support the purpose and student goals. These texts must also provide opportunities for students to use the Four Reading Elements: alphabets, fluency, vocabu-

lary, and comprehension. Participants in the FACE cohort of the EFF Reading Project drew on cultural, familial, and personal interests and goals as the contexts for reading instruction in the adult education component of the program. A consistent goal for all parents in FACE programs is to support their children's literacy development. The purposes described here focus on bringing reading activities and strategies into other components of their family literacy programs as well.

FACE Program	Purpose for Reading	Learning Activities	Selected Text	Instruction in RWU
Blackwater Community School <i>Gila River Reservation</i> <i>Coolidge, Arizona</i>	<ul style="list-style-type: none"> To access information about the history of Gila River Indian Reservation To understand loss of the O'Otham Language as a result of river diversion and relocation of tribes To discover ways to reclaim the language and culture and share these with children 	<ul style="list-style-type: none"> Accessed internet articles describing desert life and history of Gila River Listened to elders tell stories Read recipes and created Rebus Charts for children in English and O'Otham Created Desert Scrapbooks and translated into O'Otham Created books for children 	<ul style="list-style-type: none"> <i>A Pima Remembers</i> by George Webb <i>Pima Indian Legends</i> by Anna Moore Shaw Variety of internet articles Variety of children's literature 	<ul style="list-style-type: none"> Practiced note taking and highlighting main ideas Rewrote passages in their own words Summarized passages to build comprehension Created vocabulary charts of O'Otham and English terms Engaged in repeated readings of text to children
Chi Chi'I Tah/Jones Community School <i>Navajo Nation</i> <i>Vanderwagon,</i> <i>New Mexico</i>	<ul style="list-style-type: none"> To access information about topics of interest related to television programming To make decisions related to children and adult television viewing 	<ul style="list-style-type: none"> Generated questions about the cartoon, <i>Sponge Bob</i> Read articles to find answers about origination and opinions of program Developed methods to guide children's viewing of TV programs 	<ul style="list-style-type: none"> Internet articles <i>TV Guide</i> 	<ul style="list-style-type: none"> Analyzed story structure evident in cartoons and children's books Identified character traits and motivations Compared and contrasted different points of view Created "Word Banks" to study vocabulary and created a "Word Wall" Learned to write definitions, using the dictionary as guide Made "Flash Cards" to use in dyads.
Crownpoint Community School <i>Navajo Nation</i> <i>Crownpoint,</i> <i>New Mexico</i>	<ul style="list-style-type: none"> To identify developmentally appropriate social/emotional growth in children To develop vocabulary for labeling and discussing feelings To become more understanding of self, of other adults, and of children To support young children in their literacy development 	<ul style="list-style-type: none"> Discovered and named different feelings experienced by characters in short stories and short biographies Identified and named their own feelings Developed communication strategies to discuss positive and negative feelings Discussed how to help children to name their own feelings 	<ul style="list-style-type: none"> Variety of children's literature Short stories Short biographies Community resources 	<ul style="list-style-type: none"> Teacher read aloud daily to model fluency Participated in dialogic reading with children to monitor comprehension Developed concept maps to categorize types of feelings and associated terms Created a "Word Wall" of relevant vocabulary

FACE Program	Purpose for Reading	Learning Activities	Selected Text	Instruction in RWU
Little Singer Community School <i>Navajo Nation Winslow, Arizona</i>	<ul style="list-style-type: none"> To access information about Navajo history To learn about Navajo rights To discover how to take action related to rights 	<ul style="list-style-type: none"> Participated in small and large reading groups Wrote daily reflection and response pages related to history Created art works based on responses to the readings 	<ul style="list-style-type: none"> <i>Dinetah: An Early History of the Navaho People</i> by Lawrence Sundeberg Chapters and articles about Manueliot, Navajo leader Treaties Biographies 	<ul style="list-style-type: none"> Practiced using text features common to history texts: timeliness, photo captions, bold print Explored underlining as a strategy for locating important information Participated in daily discussion related to the reading and its connection to their reading purposes.
Rough Rock Community School <i>Navajo Nation Chinle, Arizona</i>	<ul style="list-style-type: none"> To access information about health issues prevalent among these and other families in the community: diabetes, depression, and alcoholism To learn how to take action in order to Walk in Beauty 	<ul style="list-style-type: none"> Listed and graphed major diseases that affect the families in the program Selected focus (diabetes) and made a KWRL chart to guide their reading Small groups read and reported to large group Developed Power Point presentations to share Developed Four Directions Wheel with information on disease and diet 	<ul style="list-style-type: none"> <i>A Journey to Wellness</i> Navajo Curriculum: <i>Walking Across the Navajo Nation</i> 	<ul style="list-style-type: none"> Read to find answers to self-posed questions on KWRL chart Used charts and graphic organizers to summarize information gained from reading in order to share with others Adapted a commercial phonics program to correspond with the Navajo alphabet Developed a culturally appropriate alphabetic system

Using Purposeful Instruction to Build Key Knowledge, Skills, and Strategies: Examples From Other Programs

Adult students in Wyndham, Maine, decided to give a gift to a district superintendent who was leaving the school system. Knowing that she liked to listen to books-on-tape in the car, the class created an audiotape of each class member reading a special text. Each student selected a favorite poem, short narrative, or children’s book and developed fluency through Read-Aloud practice sessions. When they were satisfied with their oral reading, they made a tape recording and presented it to the superintendent.

These students also participated in weekly book discussion clubs. Each student assumed a role—selector, questioner, summarizer, life connector, or vocabulary enricher—and came to the group prepared to participate in a rich discussion of the selected text.

Parents in the Southwest Corner Even Start Program in Pennsylvania

used graphic organizers to analyze book chapters. The herringbone organizer was a favorite for separating main ideas from detail.

The Pennsylvania group adapted the RWU Diary by rewriting the Standard in simple language. Each component was posted on a separate sheet of chart paper. As students learned new strategies, they were noted on the appropriate charts. After each in-class reading experience, students wrote in their diaries and recorded use of newly learned strategies.

Parents in the Susanna Wesley Family Learning Center in Missouri read to their children during Parents and Children Together Time. They developed fluency by reading children’s books aloud in practice sessions with other adult students, who provided feedback. Then, they shared the books with their children.

Parents in the Manchester Literacy Center in Delaware engaged in “concept sorts,” dividing words related to their career study into categories. Students then shared with each other the reasons for their decision-making, making clear the connections they saw between the various terms.

A student in Easton, Pennsylvania, developed a pamphlet about safety in the home by summarizing material she had been reading. She worked with her teacher to plan the “safety” book because of an incident in which her son pulled a tablecloth off a table on which was a lighted candle. She started thinking about the need for safety, talked with her teacher about it, and then went to the library to research the topic. Her pamphlet was added to the rich collection of texts available for student use in the classroom. ●

EFF Hot Topics (Highlights on Teaching Topics) is a publication of the EFF Center for Training and Technical Assistance. Each issue concentrates on a specific topic, highlighting examples of actual practice and offering strategies and tools for using EFF in the classroom.

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Online Resources

■ **The Equipped for the Future website** is a LINCS Special Collection. Visit this site to learn more about EFF, the NIFL's standards-based system reform initiative. The EFF website will provide you with information on such topics as: the history of EFF, the Content Framework and Standards, EFF publications, EFF resources, and EFF training events.

Site address: www.nifl.gov/lincs/collections/eff

■ **The Equipped for the Future Online Discussion** features targeted discussion about the EFF initiative. Subscribe to the discussion, or read the archived messages for this or previous years. This online forum is the logical place to turn for EFF information and resources, and to join in the ongoing conversation about EFF by people using EFF.

Site address: www.nifl.gov/lincs.discussions/nifl4eff/equipped_for_future

You can also subscribe to the list by sending an e-mail message to: listproc@literacy.nifl.gov (Leave the subject line blank. In the body of the message type: Subscribe NIFL-4EFF your first name your last name)

■ **Equipped for the Future publications** may be ordered from the ED Pubs Clearinghouse. EFF publications are free of charge, unless otherwise noted. Online versions of the documents can be accessed directly, including the *EFF Content Standards*, the *EFF Voice* newsletter, the *EFF Assessment Report*, and the *EFF Evaluation Report*. For the complete list of EFF publications and products, go to:

www.nifl.gov/lincs/collections/eff/eff_publications

■ **The Partnership for Reading website** is another rich resource for information on reading instruction. *Research-Based Principles for Adult Basic Education Reading Instruction* cited in Amy Trawick's article can be downloaded at:

http://www.nifl.gov/partnershipforreading/publications/html/adult_ed/adult_ed_1.html

The web version, *Adult Education Reading Instruction Principles and Practices* has additional information on instructional practices and is found at:

http://www.nifl.gov/partnershipforreading/adult_reading/adult_reading.html



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Comprehension Strategy Instruction*

WHAT IS READING COMPREHENSION?

The definition of reading comprehension may appear to be both simple and obvious. In fact, it is anything but. Reading comprehension seems like a simple concept because for good readers, the comprehension process has become more or less automatic. Most of the time good readers don't think about what they are doing to make sense of text, to find important information, to learn how to do something, or to follow events in a story. That's why one might answer, "Comprehension is understanding what you read."

And it is, of course, but those who have studied reading prefer a definition that emphasizes that good readers work at understanding. They are active and intentional, *constructing meaning* by using the message in the text and their own prior knowledge. So comprehension involves *interacting with text* in various ways. Michael Pressley (2001) says that good readers:

- Are aware of why they are reading a text
- Gain an overview of the text before reading
- Make predictions about the upcoming text
- Read selectively based on their overview
- Associate ideas in text with what they already know
- Note whether their predictions and expectations about text content are being met
- Revise their prior knowledge when compelling new ideas conflicting with prior knowledge are encountered
- Figure out the meanings of unfamiliar vocabulary based on context clues
- Underline and reread and make notes and paraphrase to remember important points

* From McShane, Susan (2005). *Applying research in reading instruction for adults: First steps for teachers*. Washington, DC: National Institute for Literacy

- Interpret the text
- Evaluate its quality
- Review important points as they conclude reading
- Think about how ideas encountered in the text might be used in the future (Pressley, 2001, Active comprehension strategies section, para. 1)

Of course, we don't read everything this way. Readers who use all of the strategies listed above have a serious need to learn and use the information in the text. If we are reading to locate a specific piece of information or reading for pleasure we don't use all of these strategies. Even so, the list reminds us that comprehension requires considerable work from the reader.

Definition of comprehension

The complex process of comprehension is described in the Rand report, *Reading for Understanding* (2002), in this way:

We define reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. We use the words extracting and constructing to emphasize both the importance and the insufficiency of the text as a determinant of reading comprehension. Comprehension entails three elements:

- *The **reader** who is doing the comprehending*
- *The **text** that is to be comprehended*
- *The **activity** in which comprehension is a part*

In considering the reader, we include all the capacities, abilities, knowledge, and experiences that a person brings to the act of reading. Text is broadly construed to include any printed text or electronic text. In considering activity, we include the purposes, processes, and consequences associated with the act of reading (Snow, C. E., 2002).

Reading purposes

A further description of this active process is found in the National Reading Panel report, which says that “a reader reads a text to understand what is read, to construct memory representations of what is understood, and to put this understanding to use” (NICHD, p. 4-39).

Readers also have more specific purposes:

- To learn about something (as in reading an interesting newspaper or magazine article)
- To research a subject or study for a test
- To be entertained
- To learn how to do something (as in directions)
- To find specific information (as in looking for the due date on a bill, finding details on the charges on a doctor's statement, or checking the TV listings)

To find specific information, we usually scan the text rather than reading word for word. But if we don't find the information that way, or if we don't understand what we find, we read more carefully. Obviously when studying or trying to follow the directions, we care about understanding and remembering what we read. But even when reading for pleasure, it's important to understand. If we don't get it, it's not very pleasurable! So although we may take different approaches for different purposes, comprehension is the goal.

Underlying skills

Comprehension requires active, strategic thinking, but it also requires basic reading skills: decoding (word identification), fluency, and vocabulary (knowledge of word meanings). Unless decoding is automatic and reading is fluent, comprehension suffers. So another way to understand the reading process is to see it as a *hierarchy of skills* (Pressley, 2001). Beginning with letters and sounds, moving to identification of words, fluent use of those skills, and understanding of the meaning of words and sentences, *comprehension is the culmination of a series of processes*.

WHY IS COMPREHENSION–STRATEGY INSTRUCTION IMPORTANT?

Comprehension is what reading is all about, so we know it's important. But if many readers acquire comprehension strategies informally (NICHD, 2000), p. 4-5), why do we need to teach it?

Awareness of comprehension breakdowns

First, evidence suggests that many young readers (and perhaps low-literate adults as well) are not aware that they have a comprehension problem: they often don't know how much they're missing. One researcher looking at readers' awareness of their comprehension processes found that "both young and mature readers failed to detect logical and semantic inconsistencies in the text" (Markman, 1977, 1981, as cited in NICHD, 2000, p. 4-39). In one study even 11- and 12-year-old

readers demonstrated this lack of awareness. After listening as three or four samples of explicitly contradictory texts were read to them, 25-40% of the children failed to notice the inconsistencies most of the time. They thought they understood the material and didn't notice that it didn't make sense (Markman, 1979).

You may have noticed this lack of awareness in your work with adult learners. Sometimes discussion reveals their misunderstandings about a text or their lack of background knowledge in the subject matter. You can tell they are sometimes not aware that they aren't "getting it," or if they are aware at some level, that they don't know what's causing the problem. Your job is to figure out how to address the underlying causes of the comprehension breakdown.

Causes of comprehension problems

Adults may be reading without "demanding that it makes sense" or reading one word at a time without much thought, or failing to make important inferences and connections because of their limited background knowledge.

Vocabulary and background

knowledge. A lack of word knowledge and general "world knowledge" are common and significant problems for ABE and family literacy learners. People who don't read well don't read much, and therefore don't learn new words the way good readers do, through reading. In addition, adults who didn't finish high school probably don't have content knowledge typically acquired in science, literature, and social studies classes (Snow & Strucker, 2000). Reading requires inferences, and inferences are based on prior knowledge (Hirsch, 2003). Adults may know a great deal about their work and special interest areas, but much of what they read in class may require experience with "book learning."

Principle 11

Adults who qualify for ABE have poor functional literacy comprehension achievement. Although they may be able to perform simple comprehension tasks, such as recalling ideas from simple stories and locating a single piece of information in a simple text, they are often unable to combine (integrate and synthesize) information from longer or more complex texts (Kruidenier, 2002).

Knowledge of the structure and conventions of different genres (types of literature) is also important to comprehension. Drama and poetry require different kinds of thinking than narratives do. In order to understand these forms of literature, readers must make more inferences,

for instance, or pay attention to visual imagery and the rhythm of the language. Satire is sometimes hard to recognize if one is not familiar with this type of writing, and it's possible to entirely misunderstand the author's message. In addition, consumer informational literature, insurance notices, bills, and business letters often have special forms and use language in specialized ways.

So as you learn about the comprehension strategies detailed in the following pages, don't forget about building vocabulary and content knowledge. It's impossible to quickly make up for years of missed schooling and books not read, but you can't ignore the problem. (For additional details on vocabulary instruction and addressing background knowledge, see Chapter 6.)

Decoding. Other learners who have comprehension problems may actually be struggling with basic word identification and as a result, can't pay attention to the meaning. For these adults, who are missing the forest for the trees, reading may be more about getting the words off the page than getting to the meaning. Be sure to address their decoding problems, too, or you may end up treating effects and ignoring causes.

Knowledge of comprehension strategies. Adult learners simply may not be aware of strategies they could use to achieve better understanding (Kruidenier, 2002). Poor readers probably don't know what good readers do. The process is mostly invisible, and efficient readers may appear to be simply "running their eyes over the text." It isn't obvious that a lot of strategic thinking is going on.

Principle 12

ESL adults, on average, tend to have lower functional literacy comprehension achievement in English; the percentage of ESL adults among the ABE target population is greater than the percentage among the general population (Kruidenier, 2002).

A trend in the adult literacy research: ABE adults' knowledge about reading, or their meta-comprehension, is more like that of children who are beginning readers. They are less aware than good readers of strategies that can be used to monitor comprehension, view reading as decoding as opposed to comprehending text, and are less aware of the general structure of paragraphs and stories. Comprehension strategies, such as how to monitor comprehension during reading and how to determine a text's basic structure, may need to be taught (Kruidenier, 2002).

In short, you need to teach adult learners to use comprehension monitoring and repair strategies. They are not likely to develop these strategies without instruction (NICHD, 2000, p. 4-40), and we know this kind of instruction is effective: “The general finding is that when readers are given cognitive strategy instruction, they make significant gains on measures of reading comprehension over students trained with conventional instruction procedures” (NICHD, p. 4-40).

These strategies are tools that open the door to the world of print. One way to understand this phenomenon is to compare a reader who doesn't have these tools to a child who doesn't know he is near-sighted. When he first gets glasses he is amazed at the detail that he didn't know others were seeing.

WHO NEEDS COMPREHENSION-STRATEGY INSTRUCTION?

We know that nearly one-half of American adults have Level 1 or Level 2 literacy skills, the lowest of five levels defined by the National Adult Literacy Survey (NALS) (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993). We also know that most adult learners in basic education and family literacy programs are among that number.

The NALS Level I group ranges (at the low end) from those who can't read and understand even simple texts to those who can perform simple literacy tasks, such as locating a piece of information in a short text. Level 2 adults are somewhat more advanced, but still are unable to put together information from more than one text to find an answer or solve a problem. These findings suggest that even those with basic reading skills are often unable to read well enough--to use skills and strategies flexibly enough--to make use of the information in the materials they read.

Principle 13

Adults with a learning disability tend, on average, to have lower functional literacy comprehension achievement and are over-represented within the ABE target population (Kruidenier, 2002).

Principle 14

Participation in an adult literacy program may lead to an increase in reading comprehension achievement (Kruidenier, 2002).

Principle 15

Providing explicit instruction in reading comprehension strategies may lead to increased reading comprehension achievement (Kruidenier, 2002).

The focus of comprehension–strategy instruction

Because comprehension requires basic decoding skills and fluency, comprehension-strategy instruction is most often directed at mid-high level readers. In fact, the research reviewed by the National Reading Panel was conducted with students in third grade and above. However, even beginners need to engage in meaningful reading and therefore can benefit from learning to monitor their understanding and to apply some simple strategies as they read. Strucker (1997a) suggests that learners at fourth grade level and below need to be taught pre-reading strategies explicitly. For example, they should learn how to use pictures, section headings, and summaries to predict content and learn how to activate their prior knowledge by asking, “What do I already know about this?” (Of course, as noted above, their background knowledge in some areas may be limited, and when you conduct pre-reading activities with groups and notice a lack of knowledge or a misunderstanding of facts, you may need to provide some of this knowledge as efficiently as you can before continuing the reading activity. (See section on addressing background knowledge, page 65.)

We may conclude, then, that all the adults in basic education classrooms, regardless of their reading level, can benefit from comprehension-strategy instruction. Meaningful reading, including practice of important comprehension strategies, should be part of every lesson for all adult learners. (See section on listening comprehension on page 76 for a suggestion that supports weaker readers' participation in strategy-instruction activities.)

HOW CAN WE ASSESS COMPREHENSION?

Because comprehension is the ultimate goal in reading, all the learners in your program need comprehension assessment. You are probably already giving a standardized test that measures silent reading comprehension.

Tests

Reading comprehension tests are available in written and oral forms. Most standardized instruments are written tests of silent reading comprehension, most often in a multiple-choice format. The learner reads a passage and answers questions about it. Curriculum-based tests, like those found in reading comprehension workbooks, are typically multiple-choice or short-answer tests. Informal reading inventories (IRIs) usually include oral comprehension assessments. The individual being assessed reads a passage or story aloud and then answers questions asked by the test administrator.

Alternative measures

Alternative measures may allow the learner to demonstrate comprehension in other ways (writing, speaking, or performing) and may allow you to glimpse other aspects of reading outcomes. Many classroom activities are natural opportunities for informal assessment. You may ask learners to write reactions to literature selections in their journals or to chart both sides of an argument. Classroom discussion and projects allow adults to think critically about texts and to apply their learning to their lives. Learners also may reach and display new depths of understanding by doing performance readings of poetry or drama selections.

A Comprehension Assessment Plan

Initial planning: *Analysis of the results of standardized tests may provide details about specific areas of strengths and needs. Oral reading comprehension tests, like those included in informal reading inventories, often include listening comprehension assessments, which may be useful in identifying strengths of weak readers. Listening comprehension is an indicator of reading comprehension potential.*

Ongoing progress monitoring: *You may find curriculum-based and alternative assessments to be most helpful.*

Outcomes measurement: *For you and the learners, a collection of journal writings, a list of materials read, and workbook or other curriculum-based test summaries may provide meaningful information about the outcomes of reading instruction. For external stakeholders, you will need a standardized measure with equivalent alternate forms for pre- and post-testing.*

WHAT KIND OF COMPREHENSION-STRATEGY INSTRUCTION IS MOST EFFECTIVE?

The National Reading Panel, in their review of the literature on comprehension, identified 16 categories of comprehension instruction in the research, but only the eight listed below appear to have “a firm scientific basis for concluding that they improve comprehension in normal readers” (NICHD, 2000, p. 4-42).

Comprehension strategies for readers

Most of the items in the following list are strategies that readers apply to construct meaning from text. You as a teacher must use appropriate instructional strategies to enable adults to learn and use these comprehension strategies as they read. These comprehension strategies are described in detail on the following pages, along with suggestions for instructional approaches.

- Comprehension monitoring
- Graphic organizers
- Story structure
- Question answering
- Question generating
- Summarization
- Multiple-strategies instruction
- Cooperative learning (an instructional approach)

An idea from the research with children: "To improve ABE learners' comprehension of texts used during instruction (those ABE learners above Grade Equivalent 3), teach them strategies that can be used during the reading process and that enable them to become actively engaged in understanding a text. Eight effective strategies have been identified: comprehension monitoring, cooperative learning, graphic organizers, story structure, question answering, question generation, summarization, and multiple strategies (combining the above when appropriate)" (Kruidenier, 2002).

Issues in teaching comprehension strategies

Review the general suggestions below and keep them in mind as you read about the comprehension strategies and plan ways to teach them.

Decision making and lesson planning. A great many strategies have been identified, so you will need to plan how and when to introduce them. The goals are (1) to help adults become proficient in using the strategies and comfortable enough to use them outside of class in independent reading, and (2) to ensure they know when to use them, so they use the right strategy at the right time. Achieving these goals will take time, so you should plan for plenty of practice and be sure to revisit the strategies once in a while. You will also need to be selective, choosing a few strategies that have multiple applications and introducing them one at a time.

Remember that adults who have busy lives and only a limited amount of time for education may take longer to get good at a strategy

than children who have a reading lesson every day. Be careful to teach each strategy until it is well learned, and avoid overloading the learners.

Choosing materials. Basic decoding skills and fluency are required for comprehension, so think about the readability level when you are choosing materials for comprehension-strategy instruction. When working on a new strategy, learners will be more successful if the material doesn't require too much other work, that is, if the words and subject matter are familiar (Duke & Pearson, 2002). In a multi-level group, you could introduce the strategy by reading the material aloud so weaker readers can follow the thinking without struggling with the words. Then for practice they could work in small groups on different texts at appropriate levels.

Bear in mind, too, if you use a readability formula to gauge reading level, that some formulas look only at the length of words and sentences, not the difficulty level of vocabulary. Knowledge of word meanings is also extremely important. If there are too many unfamiliar words in a text, it's not a good choice for comprehension-strategy learning. Of course, context clues may allow learners to define some terms, but without basic knowledge of the subject matter, a reader may be unable to use the clues. So be careful also to consider the knowledge base in your classroom when choosing materials. It works both ways: limited knowledge is a problem, but the background knowledge they do have can work in their favor. Adults can often comprehend material that appears to be too difficult when they know a great deal about the subject.

Finally, remember that adults have practical goals in mind. Especially for work-related goals, they may need practice reading technical materials. And of course, beginning readers may need to comprehend everyday items, such as utility bills, medication directions, and government forms. Such texts often provide “very little context for guessing” (Strucker, 1997a), so you may need to teach vocabulary up front and be sure to provide practice with varied examples. Research suggests that using such real-life

A trend in the adult literacy research: ABE adults' knowledge about reading, or their meta-comprehension, is more like that of children who are beginning readers. They are less aware than good readers of strategies that can be used to monitor comprehension, view reading as decoding as opposed to comprehending text, and are less aware of the general structure of paragraphs and stories. Comprehension strategies, such as how to monitor comprehension during reading and how to determine a text's basic structure, may need to be taught (Kruidenier, 2002).

materials may result in gains in reading comprehension (Kruidenier, 2002).

Keep all these issues in mind when choosing materials for comprehension-strategy instruction:

- Decoding ability/reading level
- Background knowledge
- Interests
- Experience
- Goals

Listening comprehension. Many of the strategies you'll learn about on the following pages should be modeled and practiced orally. After all, reading comprehension is mostly thinking, and the strategies are related to language and linguistic comprehension generally, not only to reading (J. Sabatini, personal communication, July 2004). That's good news for teachers in multi-level classrooms, because it allows those who don't read well to participate in comprehension-strategy instruction.

Much of what you'll do to introduce the strategies to the whole group will obviously involve speaking--explaining and demonstrating by "thinking aloud" and at times, reading aloud. If you begin by reading a demonstration text aloud to the group, weaker readers may be introduced to the strategies at the same time as other learners. They may even practice the strategies after listening to a tape recording of the text.

As you know, adults often can understand materials that they cannot read. Using taped readings or reading to learners allows them to work with more difficult, adult-interest texts occasionally, instead of being limited to material they can read independently, much of which may be too simple to require the more advanced comprehension strategies. They can practice the thinking skills required for reading comprehension while using materials they understand and find interesting. They also may be more able to participate in cooperative learning activities.

Of course, this is not to suggest that these adults do not need to build decoding skills and practice reading with materials they can read independently and fluently. All the reading components are important, and all needed components should be addressed with each learner.

One further caution may be appropriate regarding oral practice. Some adults who have reading problems may also have broader language-processing problems and/or attention deficit* and may find it hard to follow and recall lengthy chunks of oral language (E. A. McShane, personal communication, August 2004).

With these general thoughts in mind, read on to learn details about the specific strategies found to be effective with children by the National Reading Panel. As you read, bear in mind that you will need to select one or two strategies initially, try them out, and then continue using them to increase your own comfort with the strategies--and the learners', too of course. Some are easier to implement than others. You might consider beginning with a couple of the comprehension-monitoring strategies that follow.

* Individuals may have difficulty using any or all of the forms of oral and written language: speaking, listening, reading, and writing. Short-term memory problems create additional complications in using language. People with attention problems may have trouble concentrating and maintaining focus on a task and may be easily distracted by noise or movements in the immediate environment. These difficulties are common characteristics of individuals with learning disabilities or Attention Deficit/Hyperactivity Disorder (AD/HD) You may notice these individual differences, and if so, you should, of course, adapt activities to ensure that all the learners are able to profit from comprehension-strategy instruction.

1. Comprehension monitoring

These strategies are intended to develop meta-cognitive abilities in readers, that is, to help them think about their own thinking. Using these techniques, readers learn how to (1) actively monitor their understanding, (2) identify specific problems when comprehension breaks down, and (3) take steps to solve their comprehension problems.

You might try one or more of the following techniques. Most are broadly applicable to any kind of continuous text and various reading purposes.

Thinking aloud. One way to teach adults how good readers monitor their understanding is to show them how you do it. In other words, this technique is both a strategy for readers and an instructional approach you can use with any of the other comprehension strategies as well.

Here's how it works: You read a passage to the learners and think aloud about how you process the information (Davey, 1983; Kibby, n.d.). When you run into problems, you express your confusion and talk through your thinking as you solve the problems. Following are examples of strategies you might demonstrate:

- Stopping to reread or restate a difficult section
- Summarizing long sentences or other bits of text and putting them in your own words
- Looking back in the text to locate the person or thing that a pronoun refers to
- Identifying important or not-so-important information
- Using various strategies to identify or determine the meaning of an unknown word

Example

Teacher reads aloud (in italics) and thinks aloud (in brackets).

There were three main causes for the uprising.

[OK, I'll be looking for three causes.]

First and most important was the economic situation in the country.

[That's number one, the economic situation.]

(Reading on--further details)

There was also a popular movement gaining strength that centered on a young leader, etc.

[Is that number two? Hmm, I'm not sure. I'd better read on to check.]

(Reading on)

It's clear the uprising was rooted in recent, if not ancient history, as explained by journalist Browne, etc.

[Wait a minute. This is almost the end. Did I miss the third cause? I guess I had better read it again.]

(Rereading)

The chaos surrounding the earthquake and concern about the nation's ability to repair and rebuild contributed to the unrest.

[I wonder if this is it. It seems pretty different from the other two. I think that's it. I'll read on and see if I get any other clues. Maybe the writer has more to say about the three causes later on.]

After you demonstrate your thinking processes you can ask the learners to practice thinking aloud, too, to make them more conscious of their understanding and their thinking processes.

Restating. You can teach learners to stop periodically (after each section, for example) and try to restate what's been read in their own words. If they have trouble with this, they know they're not getting it.

Asking questions. Another way they can monitor their understanding is to ask themselves who, what, when, where, and why questions after each section or page. If they can't answer these questions they know to stop and reread. (Be aware that this strategy may work best with stories, news articles, and other narrative texts because they are likely to have all the "5 Ws" represented.)

Coding text. Readers are actively engaged with the content when they make notes as they read. You can teach a simple shorthand/code that allows the reader to make quick responses to the text. If writing in a book is not an option, learners can use small adhesive notes. The INSERT system is one example of such a code (Vaughn & Estes, 1986). It may be especially helpful as a study strategy.

Interactive Notation System for Effective Reading and Thinking (INSERT)

= -- I agree
X -- I thought differently
+ -- New information
! -- WOW
? -- I don't get it
* -- I know this is important

Monitoring and repair strategies. You also may teach specific strategies for solving comprehension problems (Davey, 1983; Kibby, n.d.). You describe and demonstrate the different kinds of problems that can arise while reading. Then, taking them one at a time, teach appropriate repair strategies, by modeling, providing guided practice, and independent practice.

Examples of comprehension problems:

- I can't read this word.
- I don't know what this word means.
- I'm confused. I don't get it. This doesn't make sense. This doesn't fit with something I know (from an earlier part of the text or the reader's life experience).

Examples of repair strategies:

- **Problem—*I can't read this word.***
Step 1: If it's a short word, try to sound it out. If it's longer, look for familiar rimes or syllables and put them together to sound it out. (Do

you recognize the word? Does it make sense in the sentence? If yes, go on reading. If not, try step 2.)

Step 2: Read to the end of the sentence and think of a word that makes sense. (Does this word match some of the letter sounds? If yes, go on reading, but make a note to check on the word later. If not, maybe you don't know the meaning of the word, and that's why you don't recognize it. Go to the next strategy.)

- **Problem—*I don't know what this word means.***

Step 1: Read the sentence to the end and see if you can make a guess about the meaning based on context clues (the meaning of the words around it and the rest of the sentence). Hint: Use context clues to decide what kind of word it is. (Is it, for instance, an action word, a name of something, or a word that describes something?)

Step 2: See if the word has any prefixes or suffixes you know or any familiar word parts. Try using those along with context clues to figure out the meaning.

Step 3: If you can't make a good guess about the meaning from context, decide if you must understand this word to understand the text. If not, skip it but make a note to look it up in the dictionary later. If the word is important, look in the dictionary or ask someone.

- ▶ **Be aware that none of these repair strategies is foolproof. Some texts contain few useful context clues, and even prefixes are sometimes unhelpful or even misleading. For example, the prefix *pro* usually means *before, forward, or for*. Knowing this meaning doesn't help define the word *proportion*.**

- **Problem—*I'm confused. I don't get it. This doesn't make sense. This doesn't fit with something I know.***

- Reread the sentence or passage.
- Read on to see if it gets clearer.
- Try reading aloud.
- Look at the words in the confusing part. Maybe a word is being used in an unfamiliar way. Check the word(s) in the dictionary or ask someone.
- Talk about your problem with others.

- ▶ **Even common words have many uses. Pay attention to the words in instructional text and pre-teach words that are used in unfamiliar ways. If a reader encounters such a word that you haven't pre-taught, you may find this a good "teachable moment."**

2. Graphic Organizers

Graphic organizers are diagrams or charts that visually represent the relationship of ideas and information. Most often they are used to illustrate the organization and structure of a text.

Texts are structured in different ways. Stories often introduce a setting, main and supporting characters, a problem, a series of events, and a resolution of the problem, typically in approximately this order (though not always). Learners may find “story maps” helpful in following and remembering events and characters. (See section on story structure, page 173.)

A nonfiction piece may be organized around a sequence of chronological events. History texts, for example, often present events in time order. The purpose of the writing may dictate other structures. An article may be organized to make a persuasive argument, with a main thesis and supporting details, or to define or describe something, with the introduction of the topic followed by a series of examples. Graphic organizers may help readers to become familiar with these common text structures and to understand the flow of information and ideas within a particular structure.

Organizers are most often used with nonfiction, especially content-area texts like science and social studies, and adult learners may find graphic organizers most useful for analyzing and summarizing content they need to learn. However, graphic tools also are useful for other pre- and post-reading activities: activating prior knowledge, setting a purpose for reading, and keeping track of what is learned.

Teaching graphic organizers. You will want to select a graphic tool (see the following examples) that matches your instructional objective, and begin by demonstrating how to use it with an article or story the class has read. In a multi-level class you might try tape recording the material or reading it to the weaker readers so that everyone has experienced the same text and all are able to participate.

Be sure to start with a simple organizer: It should be a tool, not a source of frustration. Carefully explain the purpose of the tool and *when* to use it. Then have the whole group compose one, with individuals suggesting entries. The next steps might be to ask small groups or pairs to try using the organizer while you observe and assist. Groups should work with material they can read easily, or use a taped reading. Finally, when you see that learners are using the strategy correctly and comfortably, they can do it on their own. Following are examples of graphic organizers.

- KWL Chart**—Use the KWL chart to help learners think about what they already know about a topic (access prior knowledge) and develop a purpose for reading. It's also a review tool, when they make notes of what they've learned.

KWL Chart		
Name: _____		
Topic: _____		
What I Know:	What I Want to Know: or What I Wonder:	What I have Learned:

- Tables**—A simple table may be used to illustrate various relationships: similarities and differences, inferences and text clues, or main ideas and supporting details.

MAIN IDEA

Detail

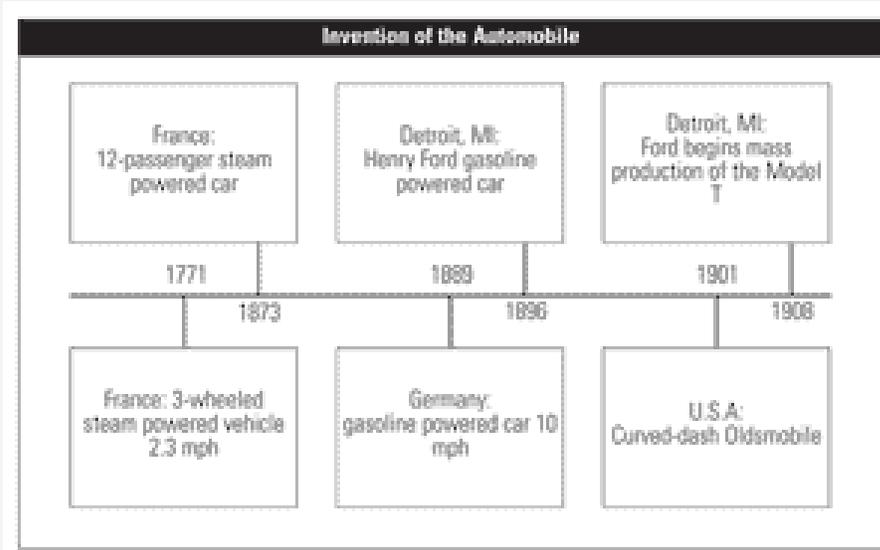
- **Semantic Map/Web**—Use semantic mapping to illustrate a main idea and details, to review or summarize facts and concepts learned from reading about a topic, or to brainstorm and organize ideas before writing.



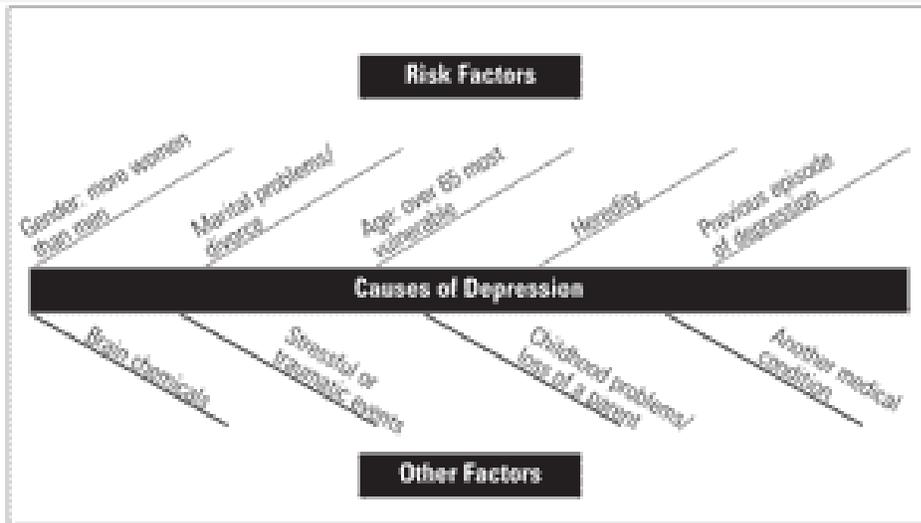
- **Timelines**—A timeline illustrates events in order and may be useful in reading history or following events in a news or fictional story. The timeline below shows how to arrange events so they don't take up too much horizontal space.

Children's Language Development				
Key Events	<ul style="list-style-type: none"> • Babbles • Laughs, giggles, cries • Makes noise when talked to 	<ul style="list-style-type: none"> • Understands no-no • Babbles • Tries to repeat sounds 	<ul style="list-style-type: none"> • Says first words • Understands simple directions • Points to people and objects 	<ul style="list-style-type: none"> • Puts two or more words together • Pronounces most vowels and some consonants
Time	Birth to 5 months	6-11 months	12-17 months	18-23 months

The timeline below shows how to arrange events so they don't take up too much horizontal space.



- **Fishbone/Herringbone**—A fishbone/herringbone diagram may be used to show complex cause and effect relationships.



3. Story Structure

The idea of teaching story structure is based on the fact that all stories have similar features and all have plots that are organized into episodes. By analyzing a story's structure, the reader becomes aware of the important story elements, and this awareness facilitates comprehension and memory.

To introduce this strategy you might begin with these five questions that represent the basic story elements (NICHD, 2000, p. 4-91).

1. Who is/are the main character(s)?
2. Where and when did the story occur?
3. What did the main character(s) do?
4. How did the story end?
5. How did the main character feel?

You should begin with a story the class has read and demonstrate the question-and-answer activity for them. Then the whole class might practice going through the process with another story. Learners also could practice this strategy in small groups or pairs.

To reinforce this kind of thinking and make it more concrete you could have the learners construct another kind of graphic organizer, a story map like the one below.

To make the analysis of story structure more concrete and explicit for struggling readers, you can have them read a story in sections (introduction, body, and conclusion), ask questions about main characters, and setting, record the answers on cards, and line up the cards under the appropriate story sections. Find details on this approach in *Teaching Adults Who Learn Differently* (Skinner, Gillespie, & Balkam, 1998).

Story Map	
Title	
Setting	
Characters	
Problem	
Event:	
Event:	
Event:	
Event:	
Resolution	

4. Question Answering

This strategy is a modification or expansion of the time-honored approach to comprehension: asking questions. Teachers ask questions during or after learners' reading, and learners may look back at the text to get the answers if they need to.

The goal of question-answering instruction is to “aid students in learning to answer questions while reading and thus learn more from a text” (NICHHD, 2000, p. 4-86). This strategy may be especially helpful for school-based learning and test taking, but when questions require higher-level thinking, adults also may apply this kind of thinking to a variety of reading tasks (Duke & Pearson, 2002).

To build higher-order thinking skills you have to ask good questions. Research suggests that if you mainly ask factual questions, readers will learn to focus mostly on facts when they read. On the other hand, if you ask questions that demand higher-level thinking and use of background knowledge in combination with textual information, they will tend to think this way when they read (Duke & Pearson, 2002). Of course, literal comprehension is vital; a reader can't make inferences and draw conclusions without control over the basic facts. Just don't stop there. Ask questions that require learners to think about their reading.

Teaching readers to make inferences. When readers make inferences they put information from different parts of the text together with their own knowledge to arrive at understandings that are not directly stated. Making inferences is sometimes called “reading between the lines.”

This kind of thinking while reading doesn't come naturally to all learners, but it is important, and may be especially important for adults in basic education and literacy classes because their general knowledge in academic content areas may be limited. The less a reader knows about the subject matter of a text, the more inferences will be required. If a learner is reading a short article about the Civil War and doesn't have much background knowledge, he may have to infer (for example) that Robert E. Lee was an important leader of the southern army. This reader will have to work harder to figure out “who the players are” than another who knows more about the war.

Adult learners may not understand that readers are expected to make inferences about text. They may not realize that they should make inferences while reading as they do in listening. Explicit instruction may be required. Here is a possible sequence.

1. Begin by defining *inference* and explaining why reading between the lines is necessary for full comprehension.
2. Then use a scenario based on everyday life to illustrate how we all make inferences every day. You might tell this story, for instance,

“People these days stay pretty active even when they get up in years. Yesterday I stepped into the hall to put out some bills for the mailman before the holiday, and I saw my elderly neighbor walking toward the building carrying two big grocery bags. Another neighbor stepped up to help her, and as they came into the building, I overheard them talking. The older woman said, ‘Would you look at all this food! And I had to buy such a big turkey! I haven’t cooked one in years. I hope I remember how!’”

Then ask the learners, “What do you think is about to happen?” (The older woman is probably having company for a holiday dinner.) “Where do you think these people live?” (They probably live in an apartment building.)

Be sure to ask, “What makes you think so? What clues did you use?”

Explain that as readers we figure out things that are not directly stated by using exactly the same kind of thinking they just used in listening: We use our knowledge of the world or of the subject matter.

3. Model the thinking process by reading a passage to the group and thinking aloud, demonstrating how you make inferences. Be sure to point out the text clues that support your inferences. Here's an example from the Partnership for Reading booklet for parents, *A Child Becomes a Reader: Birth Through Preschool*.

The following is a list of some accomplishments that you can expect for your child by age 5. This list is based on research in the fields of reading, early childhood education, and child development. Remember, though, that children don’t develop and learn at the same pace and in the same way. Your child may be more advanced or need more help than others in her age group. You are, of course, the best judge of your child’s abilities and needs. You should take the accomplishments as guidelines and not as hard and fast rules. (Armbruster, Lehr, & Osborn, 2003, p. 25)

Here is one way to demonstrate what a parent might infer from this passage:

“It seems like the list that’s coming up will tell some things that 5-year-olds can do. I guess that’s what they mean by ‘accomplishments that you can expect.’ But it says children are all different, and I’m the best judge of my child, so I think that means I shouldn’t be upset if my child can’t do everything on the list.”

4. Next ask pairs or groups to read a passage and discuss their inferences. Be sure they specify the clues (evidence) they used, and encourage them to challenge each other if the evidence seems insufficient to justify the conclusion. Observe and assist the groups if they need help finding these “invisible messages” (Campbell, 2003).

5. Have individuals practice with another text, and complete a table like the one below (Campbell, 2003), writing information from the text in the left column and the corresponding inference on the right.

Text Cues	Invisible Message
1. Accomplishments you can expect	Things most 5-year-olds can do
2. Children don't learn and develop at the same pace.	My child may not do everything on the list-or may do more things.
3. Guidelines, not hard and fast rules	Children vary. I shouldn't be upset if my child doesn't match the guidelines.
4.	

6. Provide feedback on this activity and more practice as needed.

Analyzing questions. After explicitly teaching this kind of thinking, you may teach learners to analyze questions to see where and how to find the answers. You might try the question-answer relationship (QAR) approach (Raphael & McKinney; Raphael & Pearson, as cited in Duke & Pearson, 2002). Three QARs may be taught:

- *Right There* questions, when the answer is directly stated in the text,
- *Think and Search* questions, when the reader must do some searching—combining information from different parts of the text, and
- *On My Own* questions, when the question requires the use of prior knowledge combined with text information.

Analyzing questions in this way helps readers know how to find the answers.

Answering questions may be understood as the foundation for generating questions, the next strategy. Before you can expect readers to ask good questions of themselves, you have to give them examples of different kinds of questions (Curtis & Longo, 1999). It makes sense to first focus on questions you ask. Then, when the learners are aware of different kinds of questions and have practiced finding answers, you might try the question generating strategy, modeling as in the example below.

5. Question Generating

This strategy requires learners to ask and answer questions about their reading. “The assumption is that readers will learn more and construct better memory representations when self-questions are asked while reading” (NICHD, 2000, p. 4-89).

As active readers we're thinking while we're reading, asking questions and seeking the answers—although we may not articulate the questions. If you pay attention to your thoughts, you may discover that when you are having a “comprehension breakdown” you ask questions like these:

- What's going on here?
- Why did the character say that?
- Why is the author so emphatic about this point?
- Why did the author include this information? What's the connection with the last section?
- What's the difference between this plan and the old one?
- How does this information fit with the article I read yesterday? Are the two authors saying different things? How could the ideas be reconciled?

When you become aware of your own questioning you can model this process by thinking aloud with different kinds of texts: asking questions and demonstrating how you find the answers. You could use QAR analysis again here, thinking about where the answers might be found. Be sure to plan this activity carefully to include examples of different kinds of questions so you can show the different strategies for finding answers.

For example, some of the questions above could be answered by reading on and perhaps using inference to draw a conclusion. Some would require looking back to other parts of the text to recall events in a story or to review information. Still others may require other sources. Sometimes reading raises questions that require further reading.

The question-generating strategy may be used in reading both fiction and nonfiction texts. By showing learners how to be questioners and encouraging them to analyze their questions to decide where the answers may be found, you are helping them to become active readers and thinkers. Research with children offers strong evidence that this strategy improves reading comprehension, as reflected in specific tasks: remembering what is read, answering questions based on the text, and identifying main ideas through summarization (NICHD, 2000, p. 4-88).

As a next step, analyzing questions may be a good skill to transfer to real-life reading tasks. When adults need to read something because they have questions, using this strategy may be helpful, because they figure out where the answers to different kinds of questions may be found. What kind of question is it? Does the notice or manual or letter have all the answers in it, or is it necessary to get more

information? They could formulate their own questions and analyze them: deciding for each one if it's a *Right There*, a *Think and Search*, or an *On My Own* question. Then they could read to find answers and check back afterward to see if their analysis was correct.

6. Summarization

A summary is “a brief statement that contains the essential ideas of a longer passage or selection” (Harris & Hodges, 1995, p. 247). According to the National Reading Panel report, the aim of summarization instruction is “to teach the reader to identify the main or central ideas of a paragraph or a series of paragraphs” (NICHD, 2000, p. 4-93). Readers first learn how to summarize a single paragraph; then when working with longer passages, they create a summary of the paragraph summaries.

Summarizing is difficult, but research suggests that teaching learners this strategy is worth the effort. Summarization training has been shown to be effective in improving learners' ability to compose summaries and also has important transfer effects. Studies on children indicate that learners have better recall of the summarized information and are more successful in answering questions about the text than those who were not taught to summarize (NICHD, 2000, p. 4-46). Summarization improves comprehension, perhaps, because readers who are asked to summarize spend more time reading and must pay close attention to the text (NICHD, p. 4-92).

Summarization is often applied to expository (nonfiction) texts. It is a valuable study skill because readers cannot remember everything they read, so they need to be sure they focus on the most important facts and ideas. Because most adult learners want to improve their reading for important reasons—often to pass the GED tests or to understand and use work-related materials—explaining this rationale may be a good way to introduce instruction in the summarization strategy.

Almost all of the summarization research reviewed by the National Reading Panel was done with children in grade five and above (NICHD, 2000, p. 4-92). Researchers may have focused on older children because summarization is a difficult skill in itself, and to teach it as a tool for improving reading skills assumes a significant level of existing reading and writing competence. In addition, readers must be able to distinguish important from less important ideas and make general statements that apply to a set of similar/related facts or examples. These are advanced thinking skills.

You may find some of the activities on the next few pages most appropriate for the better readers and critical thinkers in your class. Suggestions for first steps—introducing the underlying thinking skills to beginners—are also included.

Identifying main ideas. A key feature of the summarization process (and the first step in learning to summarize lengthy texts) is identifying main ideas in paragraphs. A main idea statement may be understood as a one-sentence summary of a paragraph (Carnine, Silbert, & Kameenui, 1997). To introduce the concept, begin by defining terms:

- The *topic* of a paragraph is its subject, “the general category or class of ideas . . . to which the ideas of a passage as a whole belong” (Harris & Hodges, 1995, p. 258). It usually can be stated in a word or phrase: tornadoes, mammals, local preschools, a healthful diet, the Vietnam War, or job hunting.
- The *main idea* of a paragraph is a statement of what the paragraph is about—“the gist of a passage; central thought” (Harris & Hodges, 1995, p. 148).

In other words, the main idea is what the writer has to say about the topic.

Example

The topic of the paragraph is local unemployment.

The main idea is that the local unemployment rate has recently increased.

Sometimes the main idea is directly stated in a topic sentence. Recognizing a topic sentence is simpler than inferring an unstated main idea, but learners still may need practice. You will need multiple examples of well written paragraphs that have topic sentences. A good source for these is a comprehension skills workbook. Show several examples of paragraphs with topic sentences at different locations in paragraphs. Explain that readers should not assume the first sentence is the topic sentence.

Of course, most of the time there is no topic sentence, and the reader must infer the main idea. Here are some ideas for teaching learners how to identify an implied (unstated) main idea.

- *Mapping:*
Make a map of the paragraph, leaving the center bubble empty, and writing each idea or piece of information in a separate bubble. Compose a sentence that applies to all the bubble elements and “pulls them all together.” Write the sentence in the middle bubble.
- *Questioning*
Try this three-step procedure (Hancock, 1987):
 1. What is the topic of the paragraph?
 2. What is the author’s purpose in writing about the subject?
 - To define, explain, or describe something?
 - To persuade the reader to agree with an opinion or to take some kind of action?
 - To criticize or defend a person or action?
 3. Given the purpose, what is the author trying to make the reader understand about the topic? (If the author is defining something, what is the definition? If the author is trying to persuade, what is the primary argument?)

In working with beginners, you may need to begin by teaching the underlying skills. Composing a main idea statement requires learners to

generalize; they must discover what a series of facts or ideas have in common and then choose language that expresses this common theme. You might start with simple tasks, as in the next suggestion.

- *Generalizing: The underlying skill*

Write a series of simple narrative paragraphs in which one person is described as doing several things. In each sentence the person is doing something else. The task for learners is to state the main idea. You give explicit directions: Name the person and tell the main thing the person did in all the sentences.

“Tom cooked two eggs. He poured orange juice into a glass. He put cereal into a bowl. He poured milk into a bowl.”

Main idea: Tom made breakfast. (Carnine, Silbert, & Kameenui, 1997, p. 249)

When learners are able to do this, make the task a bit more complex by creating sample paragraphs in which different persons do different things. The learners must then decide on a general term to describe the people as well as the actions (Carnine et.al.).

Other approaches to summarization. The summarization studies reviewed by the National Reading Panel used variations of so-called “rule-based procedures” (NICHD, 2000, p. 4-93; Duke & Pearson, 2002). The example below is a procedure for summarizing a paragraph (McNeil & Donant, as cited in Duke & Pearson).

- *A rule-based procedure*

Rule 1: Delete unnecessary material.

Rule 2: Delete redundant [repetitive] material.

Rule 3: Compose a word to replace a list of items.

Rule 4: Compose a word to replace individual parts of an action.

Rule 5: Select a topic sentence.

Rule 6: Invent a topic sentence if one is not available.

Of course, to know what is unnecessary the reader must already have at least a sense of the main idea of the paragraph, so you might want to have learners create paragraph maps first and/or work with a partner to think through the decisions to delete material. See Appendix D for an example of this procedure.

- *The GIST procedure*

GIST, which stands for Generating Interactions between Schemata and Texts, is another summarization strategy (Cunningham, as cited in Duke & Pearson, 2002 and in Allen, 2004). GIST calls for readers to begin by summarizing the first sentence of a paragraph using no more than 15 words. Then they read the next sentence and create a summary of the two sentences. Proceeding in this way with each sentence, they end up with a summary of the whole paragraph using no more than 15 words.

GIST may be adapted for longer selections and more advanced learners by working with paragraphs instead of sentences. They compose a one-sentence summary of the first paragraph, then do the same for the second

paragraph, and then combine the two summaries into one sentence. Working one paragraph at a time in this way, they end up with a short summary of the entire selection.

- *Summaries of longer texts*

More advanced learners may develop both reading and writing skills by composing summaries of a textbook chapter or other lengthy text. A rule-based approach for creating written summaries is suggested below (Sheinker & Sheinker, as cited in Carnine, Silbert, & Kameenui, 1997, p. 327).

1. Skim a passage.
2. List key points.
3. Combine related points into single statements.
4. Cross out least important points.
5. Reread list.
6. Combine and cross out to condense points.
7. Number remaining points in logical order.
8. Write points into paragraph in numbered order.

7. Multiple Strategies Instruction

Many of the strategies above are best used within a multiple-strategies approach (NICHD, 2000, P. 4-44, 45, 46). In the studies reviewed by the National Reading Panel two or more strategies were taught in the context of an interaction between teacher and learners, usually in small groups (NICHD, p. 4-77).

Most of the research included in the Panel's review were studies of "reciprocal teaching" (NICHD, 2000, p. 4-79, 80). In reciprocal teaching, the teacher first models the comprehension process, showing how she/he interacts with text, using two or more of the following strategies in combination: question generation, summarization of main ideas, clarification of word meanings or confusing text, and prediction of what will come next in the text. The teacher explains how and when the strategy is used and provides guidance as the learners practice applying the strategies in working through a passage. Gradually, as they become more skilled in the use of the strategies, the teacher releases control of the process, and the readers use the strategies independently in their reading.

This not a formulaic approach; it reflects what good readers do while reading. Readers learn to use the strategies flexibly as needed, depending on the text. In pairs or small groups, learners may take turns in the teacher role, acting as the questioner, the clarifier, the summarizer, or the predictor (Snow & Biancarosa, 2003; Allen, 2004). Through interactions with the teacher, the text, and other learners, they acquire the habit of active reading, reasoning, and problem solving.

In other approaches reviewed by the National Reading Panel, more strategies were taught in combination, including comprehension monitoring, story structure, vocabulary instruction, and others. Cooperative learning (see below) is often used to provide practice of these strategies.

- ▶ **An idea from the research on children: To improve ABE learners' general reading comprehension achievement (those ABE learners reading above Grade Equivalent 3), teach them to use a repertoire of several strategies that they can use consciously and flexibly as needed while reading and that enable them to become actively engaged in understanding a text. Combinations of the following strategies are suggested by the research: comprehension monitoring, cooperative learning, graphic organizers, story structure, question answering, question generation, and summarization.**

Issues in multiple-strategies instruction. Learners should have basic decoding skills to make use of the multiple-strategies approach. In fact, much of the research on reciprocal teaching that was reviewed by the National Reading Panel was done with students in fourth grade and above, and older students (seventh and eighth graders) benefited most. We might conclude that these multiple-strategies approaches are likely to be most effective with mid- to high-level adult readers (NICHD, 2000, p. 4-79).

A further caution has to do with the realities of adult learners' attendance and "time on task." Because these are complicated, multi-faceted approaches, you will need to make time to introduce and model, and provide practice and feedback with several examples. As always, consider the needs and strengths of your group and the realities of your setting when choosing comprehension strategies to teach.

8. Cooperative learning

This approach may be useful in the classroom to build skill and confidence in using strategies that may transfer to independent reading. Adults also may discover from this experience that it's helpful (and OK!) to get another perspective or another person's thinking about a difficult reading task, and this is important learning, too.

A variety of cooperative learning approaches are possible. Adults may work in pairs or small groups.

If you have not used cooperative learning in your class before, you will need to introduce it carefully, stressing that adults can learn a lot from each other by practicing skills together and discussing them. You should also monitor group work to be sure everyone is participating and comfortable with this approach.

The National Reading Panel based its recommendations on research done with children in grades three through six, and this approach is probably most suitable for learners who have moved past the basic decoding stage and are comfortable reading or otherwise demonstrating their skills in front of others. If you are concerned about weaker readers feeling embarrassed, you might start by having them work in pairs, matching people with partners who have similar skills.

If you decide to give it a try, you could choose any of the research-based strategies, for instance, one of the comprehension monitoring strategies. Begin by introducing and modeling the strategy. Then if your class is new to cooperative learning or if you want to be sure everyone understands how to use the strategy before asking them to work together, you might provide *individual* practice with monitoring and feedback. When you think the learners can do it fairly confidently, decide how to pair or group them for cooperative learning. Choose reading materials that all group members can read, and keep in mind the importance of interest and background knowledge. Be sure to give explicit directions for the activity and post them in plain sight during the activity. Following is an example of how a strategy might be introduced to cooperative learning groups. This example is based on the self-questioning strategy for comprehension monitoring.

Sample directions

1. Read each section of the article silently. Look up when you are finished.
2. Take turns asking and answering who, what, when, where, and why questions about each section. When it's your turn, ask and then answer your own questions as best you can. If you want help, signal the group.
3. Discuss the section as a group for 3-5 minutes. Focus on answering the questions and any problems anyone has.

Small-group learning can be a powerful approach, especially in a mixed-level class. The research indicates that children of all abilities benefit from working and learning together (NICHD, 2000, p.4-71).

Of course, adult basic skills classes typically include a much wider range of abilities than is found in elementary school classes, so grouping decisions should be made carefully. Pair or group learners with similar abilities, to the extent that this is possible.

When adults get comfortable with this approach they may find it to be a good break from individual study and large-group activities. Some may find it easier to speak up in a small group. For learners who are working one-to-one with tutors, the experience of interacting with their peers may be both enlightening and reassuring.

Instructional approaches for comprehension strategies

Teaching reading comprehension is complex, and although research has identified effective strategies for *readers to use*, it does not tell us exactly which *instructional approaches* work best in developing strategic readers. According to the National Reading Panel report, the literature on strategy instruction for reading comprehension “has yielded valuable information,” but “has not provided a satisfactory model for effective instruction as it occurs in the classroom” (NICHD, 2000, p. 4-119). In other words, the research seems clear about the particular strategies readers should learn, but not so clear about how teachers may most effectively teach them to use these strategies.

In fact, the Panel emphasizes that preparing teachers to be effective providers of comprehension-strategy instruction is a lengthy process (NICHD, 2000, p.4-120, 126). Researchers “have not identified a specific set of instructional procedures that teachers can follow routinely” (NICHD, p.4-125).

However, there is good news! Much of what you know about good teaching will apply in your work with reading comprehension strategies. And if you are a strategic reader, you can learn how to pass on your “good habits.” Pay attention to your own reading behavior. Analyze what you do and plan ways to describe and model your thought processes. These are the first steps. Then follow these general guidelines from the National Reading Panel report:

...teachers help students by

- *Explaining fully what it is they are teaching: what to do, why, how, and when,*
- *Modeling their own thinking processes,*
- *Encouraging students to ask questions and discuss possible answers among themselves,*
- *Keeping students engaged in their reading by providing tasks that demand active involvement.* (NICHD, 2000, p. 4-125)

Once again in this quote we see the emphasis on explicit instruction—explaining and modeling all aspects of the task or skill and leaving nothing to be inferred.

The value of discussion. During the lesson and after teaching a strategy, allow time to talk about readers' impressions of a text, conclusions they

have drawn, unanswered questions, or difficulties with the strategy. Even the best explanation and modeling up front can't address all the complexities that sometimes arise as readers work with a text and a strategy. Discussion prompts readers to articulate their responses to the material, requires them to defend their thinking in case of a disagreement, and encourages them to ask clarifying questions. It also allows you to glimpse their thinking processes and identify the source of problems and confusion. You may want to get into the habit of making time to talk (J. Strucker, personal communication, May 13, 2004).

Taking a multiple-component approach. Because basic reading skills are essential to comprehension, building decoding skills and developing fluency and vocabulary may result in improved comprehension. When working with beginning and intermediate readers, remember these foundation skills and plan reading lessons to address all the needed component skills, at appropriate levels of difficulty.

- ▶ **An idea from the research with children: To improve ABE learners' reading comprehension, use a multiple components approach to instruction in which all aspects of the reading process are addressed, as needed, including phonemic awareness, word analysis, and vocabulary, as well as reading comprehension (Kruidenier, 2002).**

WHAT DOES COMPREHENSION–STRATEGY INSTRUCTION LOOK LIKE?

The sample activity on the next page is one way to introduce comprehension monitoring, with a combination of two strategies.

Sample Activity to Introduce a Comprehension-monitoring Strategy

Goal	Directions
<ul style="list-style-type: none"> Improve self-monitoring of comprehension 	<ol style="list-style-type: none"> Introduce the strategies by explaining how they work and why they're useful. <p>Example: Sometimes when we're reading silently we stop paying attention or we just read the words without thinking about them and we end up missing out on what the reading is all about. I'm going to show you a couple of things you can do to stay focused and pay attention to the meaning, so if you don't understand something you'll be aware of it and can do something about it.</p> <p>First, we're going to practice stopping often to think about what we've read and to restate it in our own words. Then we're going to make quick notes when we learn something new or when we have a question about something we've read.</p>
<p>Focus</p> <ul style="list-style-type: none"> This activity involves two simple strategies that may be taught together: (1) stopping and restating and (2) coding text. (See the section on working with beginners, page 188.) 	<ol style="list-style-type: none"> Model these strategies by reading and thinking aloud. <ul style="list-style-type: none"> Demonstrate how to stop after every paragraph and restate what's been read. Show how to use the following codes to mark the text to reflect your understanding or comprehension problems. <p>?? = I don't understand ++ = This is important (or) This is new information</p> <p>Be sure to demonstrate more than one kind of comprehension breakdown, perhaps an unfamiliar word, an "I wonder what this means?" question, and an example of more serious confusion. To demonstrate the coding you might use an overhead transparency of the page.</p>
<p>Materials</p> <ul style="list-style-type: none"> For this activity you'll need nonfiction texts related to learners' goals and interests. Reading level is also important. Because the focus is on building awareness of comprehension and comprehension problems, the material may need to be slightly difficult--that is, above the learners' independent reading levels. So they will encounter problems. You'll need practice materials at different levels for learners in a multi-level class. But you can introduce the strategy with the same text for all, because you'll be reading aloud. The thinking processes apply broadly to different materials. Text sources for this activity include 	<p>Sample text and strategy modeling</p> <p>(Teacher reads aloud in italics and thinks aloud in brackets. Coding is in bold print.)</p> <p>Disease-causing germs often are transmitted by contaminated hands because people fail to take a few simple precautions. ?? Germs may spread from hands to food, usually when food preparers don't wash their hands after sneezing, using the bathroom, changing a baby's diaper, playing with a pet, or caring for a sick person. ++ Germs are also transmitted when a cook handles raw, uncooked foods, like chicken, and then touches raw fruits or salad vegetables, for instance. ++ Cooking the chicken kills the germs, but the vegetables remain contaminated.</p> <p>[Well, that was pretty clear. Diseases can be spread from hands to food if we don't wash our hands after coming in</p>

popular newspapers and magazines, GED and pre-GED workbooks, and high-interest/low-level materials from commercial adult education publishers.

Grouping

- Large or small groups and pairs

contact with germs. And that happens any time we go to the bathroom, sneeze, or change the baby. That's interesting about the meat and vegetables. I didn't know that I had to worry about raw chicken. I wonder why we have to cook meat to kill the germs but we can eat raw fruits and vegetables? I don't really know what contaminated and precautions mean, but it looks like contaminated means it has germs on it. Remain contaminated sounds funny, but I think I get it. They're still contaminated? Maybe I can figure out precautions if I keep reading. I know what caution means.]

Preventing contamination is simple: wash your hands frequently, with soap and warm water to kill germs. (The CDC recommends washing vigorously with warm, soapy water for at least 20 seconds.) As another precaution, remember to wash fruits and vegetables before eating.??

[Now I'm confused. How do you wash the fruits and vegetables? You're supposed to wash your hands in warm water to kill germs, but the list on the page before said to keep hot foods hot and cold foods cold. If I wash the salad vegetables in warm water they won't be cold anymore. Does that mean they'll get more germs? And if I use cold water, does it kill the germs? And what about soap? We don't need soap to wash the veggies, do we?]

You could talk briefly about how these questions might be answered, what next steps should be, etc. For instance, you might note that if the reader is unclear about something in the text, one strategy is to read on to see if the topic or concept is explained more fully further on. Another is to talk to someone else about it (a part of this activity). However, the focus of this activity is noticing the comprehension breakdown, so you wouldn't want to get too far "off track." Strategies for solving problems should be introduced in other lessons.

3. Assign or hand out reading selections to the learners, and ask them to practice stopping after each paragraph, restating (silently), and using the codes to mark the text. If the selections are in textbooks and you don't want them to write in the books, they could use small adhesive notes for coding.
4. Pair learners who have read the same selection and ask them to discuss what they've learned from the article and to share their experience with the strategies. They should talk about their problems and confusions and whether/how they resolved them. (They might also read and think aloud with each other, perhaps taking turns with different paragraphs, reading and restating.)
5. Circulate and note the problems and solutions they discuss. You can use this information in planning for next steps. Are they using the strategies correctly? Were the

reading selections too difficult or too easy? What kinds of problems did they have? Were there lots of vocabulary problems, for instance?

6. In the large group, ask learners to react to their practice with the strategies. How helpful were they? Were there problems? Did it help to talk about their selection with a partner?

Working with beginners. For beginning or struggling readers, you might need to teach one strategy at a time. For instance, you could just teach them to stop and restate. Another option is to stop more frequently, after every sentence instead of every paragraph. And of course, regardless of what kind of text you use to introduce and model a strategy, learners should use material at an appropriate level for practice. You should also be aware that weaker readers working with simpler texts may have comprehension problems unlike the fairly sophisticated ones modeled above. When they think aloud about what they've read you might discover they have the wrong idea about what some words mean. Even when they think they've understood. During practice, you will want to pay attention to the pairs' discussions to identify the problems they're having, so you can offer help as needed.

SUMMARY: Comprehension–Strategy Instruction Tips in a Nutshell

- *Provide instruction in comprehension strategies for learners at all reading levels.*
- *Teach learners how and when to use several broadly applicable, research-based strategies.*
- *Teach strategies explicitly, explaining what to do, and how and when to apply the strategies.*
- *Teach strategies one at a time, providing plenty of opportunities for guided practice to ensure learners can use them independently.*
- *Model the strategies for learners by thinking aloud as you read.*
- *Consider applying the comprehension strategies to listening comprehension, especially when working with weaker readers: read text aloud or use taped readings.*
- *Consider readability level and learners' background knowledge when choosing texts for comprehension-strategy instruction.*
- *Because decoding, fluency, and vocabulary are required for comprehension, include instruction/practice in all appropriate components in reading lessons.*

Reading Assigned for Session Two 

Applying Research in Reading Instruction for Adults: First Steps for Teachers

McShane, S. (2005). *Applying research in reading instruction for adults: first steps for teachers*. Washington, DC: National Institute for Literacy.

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Overview of *Understanding What Reading Is All About: Teaching Materials and Lesson Plans for Adult Basic Education Learners*

WHAT IS IN THIS GUIDE?

Reading teachers are often guided by what they know about the stages and components of the reading process, but they may not share this information with learners. By understanding how others become fluent readers, learners can reflect on their own process of improving reading skills. This guide offers a set of 13 lessons designed to help learners understand the components of reading that are part of becoming a more fluent reader, and to guide them as they work with the teacher to set their own goals for reading. The lessons can be used as an independent mini-course, or they can be integrated into an existing curriculum. The guide is not intended as a comprehensive reading course or curriculum; rather, it can inform teachers and students as they plan learning activities that address the goals and skill needs of learners. For example, some learners, particularly those at a beginning reading level, may benefit from a highly structured curriculum of direct reading instruction, and this guide can help point them in that direction.

WHO IS THIS GUIDE FOR?

The guide is for teachers of adult basic education learners who read at a 0-6 reading level. Students can take the information they learn from the lessons in this guide and apply it directly to their own reading. It can also be adapted for use with ESOL learners. However, some activities are not appropriate or may need to be modified for beginning-level ESOL learners. The Center for Adult English Language Acquisition (CAELA) Brief, *How Should Adult ESL Reading Instruction Differ from ABE Reading Instruction?*, provides helpful information and research-based suggestions for helping ESOL learners learn the components of reading. It is available at: www.cal.org/caela/esl%5Fresources/briefs/readingdif.html.

For more information on the research on adult reading instruction, go to: www.nifl.gov/partnershipforreading/publications/adult.html From this web page, you can download the report *Research-based Principles for Adult Basic Education Reading Instruction* and review the web document “Adult Education Reading Instruction Principles and Practices.”

WHY SHOULD I TEACH THESE LESSONS?

To many new readers, the process of learning to read is mysterious; some learners may think that reading is simply about being “intelligent.” These lessons will help demystify the process of learning to read; students can begin to understand that there are distinct but integrated skills involved in reading. By becoming more reflective about the components of the reading process, students can begin to analyze their reading strengths and needs, learn about strategies for increasing their reading proficiency, and articulate their purposes and goals for reading in their lives as family members, community members, workers, and lifelong learners.

HOW CAN I INTEGRATE THESE LESSONS INTO MY EXISTING ABE CLASS?

Use this guide in a flexible manner. Scan through it to see what seems practical to you. For example, you may use the first few lessons at the beginning of your own curriculum as a way to help learners set goals and assess their reading skills. You may wait until a later date to introduce other concepts, like sight words or vocabulary development. You can also teach the 13 lessons straight through, then move on to your own curriculum, using this guide as a foundation. Be aware that the lessons vary in length; you may want to combine some of them to fit your class schedule. These lessons introduce strategies, but do not go into them in depth. Some of the teachers who piloted these lessons found it helpful to devote more time to practicing strategies as they were introduced by using supplemental materials.

OVERVIEW – LESSON BY LESSON

Lesson One: The Demands of Reading

Learners will review their own reading habits and strategies and will identify the kinds of reading they would like to improve.

Lesson Two: Goals for Reading, Part 1

Learners will be able to explain the role reading plays in their lives, by identifying the kinds of text they need or want to read regularly. They will also explore the role they would like reading to have in their lives by investigating what reading means to experienced readers.

Lesson Three: Goals for Reading, Part 2

Learners will continue to explore what, how, and why experienced readers read and apply this knowledge to their own reading process.

Learners will set reading goals in their roles as family members, workers, individuals, and community members.

Lesson Four: The Components of Reading

Learners will understand that reading is a developmental process, with several components. Learners will develop an awareness of their own stage of reading development. Learners will be able to identify the skills they need to learn in order to become proficient readers.

Lesson Five: Analyzing Words

Students will learn how to use (and practice) the following word analysis strategies: Wilson Reading System “tapping strategy” to divide words into individual sounds; “word family” approach for decoding; and base word and suffix identification. Learners will reflect on which strategies they find most useful.

Lesson Six: Reading Words by Sight

Students will learn a “sky writing” strategy for reading phonetically irregular “sight words.”

Lesson Seven: Reading with Fluency

Students will learn about the role reading fluency plays in proficient reading. Students will learn about the importance of reading often as a way to promote fluency. Students will learn how to use the Wilson “scooping” strategy to promote reading fluency.

Lesson Eight: Developing Reading Vocabulary

Students will understand the important role vocabulary plays in reading. Students will learn how to use the following strategies for learning new vocabulary: use context clues to “guess” the meaning of an unfamiliar word; use knowledge of known words; use knowledge of prefixes.

Lesson Nine: Developing Reading Comprehension

Students will understand the important role comprehension plays in reading. Students will learn how to use the following strategies for understanding what they read: a “pre-reading routine” to establish a context for new information; a “post-reading questioning” process to assimilate new information; image-making to promote understanding.

Lesson Ten: Developing an Individual Reading Profile

Learners will analyze their strengths and needs in each component of reading. Learners will become more aware of the specific skills they need to work on to become proficient readers.

Lesson Eleven: Reviewing the Individual Reading Profile

By meeting individually with the teacher, learners develop and refine their understanding of their reading strengths and needs and generate a plan for reaching their reading goals.

Lesson Twelve: Understanding Learning Disabilities

Students will acquire a better understanding of what it means to have a learning disability. Students will learn that learning disabilities have no bearing on intelligence. Students will learn about how they can get tested for a learning disability. Students will discuss some strategies for learning and living with a learning disability.

Lesson Thirteen: Improving Your Spelling (Optional)

Students will understand the role spelling plays in reading. Students will learn strategies for spelling phonetically regular and phonetically irregular words.

List of Reading-related Web Sites

LINCS: Literacy and Learning Disabilities Special Collection:
ldlink.coe.utk.edu/teacher_tutor.htm

NCSALL *Focus on Basics* for articles related to reading:
www.ncsall.net/index.php?id=91

EFF Toolkit: eff.cls.utk.edu/toolkit/default.htm

- Look at pages on Examples of Teaching and Learning for Read With Understanding: eff.cls.utk.edu/toolkit/examples.htm
- Look at pages on Standards for Reading With Understanding: eff.cls.utk.edu/fundamentals/standard_read_with_understanding.htm
- Look at Examples of Reading Strategies: eff.cls.utk.edu/toolkit/support_reading_strategies.htm

The National Institute for Literacy Partnership for Reading site for resources and strategies that are successful with children (and might be adapted for use with adults) and adults:
www.nifl.gov/partnershipforreading

Even Start Webcast Archives for addressing reading in the adult education component:
www.famlit.org/ProgramsandInitiatives/EvenStart/Even-Start-Webcast.cfm

Understanding What Reading Is All About: Teaching Materials and Lesson Plans for Adult Basic Education Learners:
www.ncsall.net/fileadmin/resources/teach/uwriaa.pdf

Applying Research in Reading Instruction for Adults: First Steps for Teachers:
www.nifl.gov/partnershipforreading/publications/applyingresearch.pdf