

From Assessment to Practice: Research-Based Approaches to Teaching Reading to Adults.

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Sandra Baxter: Good afternoon and thank you for joining us as we discuss "Research-based Approaches to Teaching Adults to Read". My name is Sandra Baxter and I am the director of the National Institute for Literacy. The Institute is hosting today's web cast and it is being brought to you live from Washington, D.C. The Institute, a federal agency, is charged by Congress to provide national leadership on the issue of literacy across the life span. An important part of our mission is to serve as the national clearing house for resources on reading research, reading instruction and adult literacy.

The Institute is pleased to host this forum on "Research-based Approaches for Teaching Adults to Read". Those who are in the literacy field know that teaching reading is a complex undertaking, especially when the learner is an adult. When adult students arrive in the classroom they can be at just about any level in their reading development, from beginning readers working on the fundamentals to more advance readers ready to begin study for high school level equivalent credentials.

During today's webcast, we will be discussing reading and its components, exploring the practical strategies for using research based principles to teach adults to read and showing how the components of reading can provide a solid framework for assessment and instruction. We look forward this afternoon to hearing from our national panel of experts. Joining me here in the studio are Susan McShane, a reading initiative specialist at the National Center for Family Literacy. Susan has more than 20 years of experience in adult education and family literacy. She is the author of "Applying Research in Reading Instruction for Adults: First Steps for Teachers". She has taught reading students in an adult education reading program, a private community-based organization and a community college developmental reading program. Welcome, Susan.

We also have Dr. John Kruidenier, a researcher and author and a longtime consultant to the National Institute for Literacy. Dr. Kruidenier convenes and manages the Institute's Adult Literacy Research Working Group and he has produced several

publications for the Institute, including a report of the findings of a rigorous review of the literature on teaching adults to read, a summary of that report for practitioners and several newsletters on the uses of research and teaching adults to read. Welcome, John.

We also have with us this afternoon Dr. Rosalind Davidson, also a reading researcher and author. Dr. Davidson is the principal developer of Adult Reading Components interactive web site, an online assessment tool adult educators can use to assess student skills. Welcome, Ros. Again, welcome to our panelists and to you our online audience. John, would you get us started with an overview of the reading research?

Dr. John Kruidenier: Sure. Thank you, Sandra. During our presentation today we hope to lay out a practical and compelling rationale for the use of research-based principles for adult reading instruction. First of all, Ros, Susan and I will show you how the four major components of reading provide a framework for assessing your student's reading ability and how assessment results can lead seamlessly to a program of instruction to improve your students' reading.

Because we don't have a lot of time today, we'll focus on only two of the four components of reading: word analysis and comprehension. We'll use these as examples to show you how research is directly related to practice. Second, we want to present a practical definition of reading that will provide you with an overall framework that you can use for assessing and teaching reading. Most of our time today will be taken by Ros and Susan to show how teachers can use this framework to apply research to practice. They'll present some very practical ideas for reading assessment and instruction that come directly from the research.

All of the information being presented today comes from three resources that were developed by the Institute and these resources are all listed on the last PowerPoint slides. After years of research, cognitive scientists have come to agree that the aspects or components of reading listed on this slide are essential to reading, no matter what the situation is or what the purpose for your reading is. We want to show that these components of reading can provide a very useful framework for adult reading assessment and instruction.

Alphabetic is the use of written letters to represent spoken words. English is an alphabetic language and the letters in the

alphabet are used to represent speech sounds. Alphabeticity is made up of two components. Phonemic awareness is knowledge of the individual sounds used in our language. Word analysis is knowledge of the connection between these sounds and the letters used to represent them. Word analysis is more than what is taught with basic phonics instruction. It also includes, for example, sight word recognition and knowledge of word parts, like roots, prefixes and suffixes.

Comprehension is called "constructing meaning" because we not only have to get the words off the page when we read, we also have to combine the ideas we get from the page with what we already have in memory or what we already know. We like to think of the components of reading as the strands that make up a rope. All of the individual strands in the rope, the basic components of reading, are essential for skilled reading. Alphabeticity and fluency go together to make a print-based strand. These components are mostly concerned with decoding the words in a text. Vocabulary and comprehension go together to make up a meaning-based strand. All of these components are needed for skilled reading, no matter what the situation or the purpose for reading is.

We can talk about these strands separately and we can focus on one or another strand when we are teaching, but we have to remember that they are all essentials for skilled reading. Taking away any one of these strands can lead to problems with reading. In addition to all of the components that are involved in reading, it's important to remember that reading develops. We were not born reading. We had to learn to read and it took a considerable amount of time. This has important implications for reading instruction. Generally, as a student learns to read, print-based skills are emphasized at first. We need to decode and become fluent in order to understand what we read and we usually work on comprehension skills most with more advanced readers, though efficient decoding is still important.

The framework involved in components that we are using today is one that was used by the Adult Literacy Research Working Group. The Institute established this group of researchers and practitioners to identify and summarize adult reading instruction research and to think of ways to disseminate this information. The working group looked at two important aspects of reading: instructional studies that investigate ways to teach reading and assessment studies that investigate how well adults read. The group identified emerging principles for adult reading assessment and instruction based on existing adult

reading research. These principles form the basis for the research-based practices we'll be focusing on today. You will find out shortly that we'll also be talking about K-12 reading instruction research. The working group found that where the research with adults is thin, it needs to be supplemented with research done at the K through 12 level.

I'm going to start a discussion of the research by focusing on an important emerging principle related to assessing adults reading ability. This principle is based on assessment profiles research. Assessment profiles are obtained when researchers measure several components of reading, not just one component. The research on which this principle is based clearly shows that assessing all aspects of reading is important. Good readers typically are good at each aspect of reading. Adults in literacy programs are not good readers. They can be at just about any level in each aspect of reading. They might be good at comprehension, but not at word analysis, for example. So assessing just one aspect of reading may not give an instructor enough information about an adult students' reading ability.

A study conducted by John [Strucker] and Rosalind Davidson called the Adult Reading Component Study or ARCS assessed adult students in several components of their reading. Here are two simplified profiles that resulted from this testing showing two student's grade level scores on tests of four components: reading comprehension, word analysis or decoding, fluency as measured with a test of oral reading accuracy and oral vocabulary. Both students scored at the sixth grade level, for example, on a reading comprehension test. If we look at just these student's reading comprehension scores, the students would look the same. We might conclude from the reading comprehension scores alone that they have basically the same needs when it comes to reading instruction. It's obvious, however, when you look at the results from tests of the other components of reading that overall they have different patterns of strengths and weaknesses and are not at all alike. Each of these students will need a different program of instruction based on their individual needs and reading.

Profiles research has some very practical implications for teaching, which Ros and Susan will talk about in a moment. I mentioned earlier that today we will be focusing on just two components of reading, word analysis and comprehension. To introduce our discussion related to word analysis I'm going to briefly present a summary of the word analysis assessment and instruction principles derived from the research.

First of all, a strong line of research clearly demonstrates that adult non readers and beginning readers have almost no phonemic awareness or knowledge of the basic sounds in our language. This develops only as reading develops. Adult beginning readers also have difficulty with decoding or sounding out words. Looking at both the adult and K-12 research, we can conclude that we should provide a significant amount of alphabetic instruction to adult beginning readers including explicit instruction and word analysis. As we will see with the comprehension instruction as well, teaching all of the components of reading is also an important part of word analysis instruction. Doing so is more likely to lead to increased reading achievement. K-12 research has also identified specific practices that can be used to teach alphabetics. And now Ros will share some practical information about assessment. Ros?

Dr. Rosalind Davidson: Thank you, John. Before we begin actually on the assessments, I'd like to review some basic assessment concepts. Standardized tests are those that are administered and scored according to set procedures in order to minimize the effect the differences among examiners may have on an examinees test performance. The two major groups of standardized tests differ in purpose. A norm referenced test compares an examinees score to a large group of others. A criterion referenced test does not compare an examinees score to others. It evaluates a person's ability to reach stated levels of mastery on a particular task.

Before distributing a test, developers of norm referenced tests administer it to a large number, often thousands of people. This is the reference or norming group for this test. They do this in order to find the continuum of performance from high to low achievement on the tasks of the test. An examinees' performance is compared to those of the norming group. Roughly speaking, an examinees score that is above average of the norming group indicates better than average ability on the tested skill. The Test of Adult Basic Education, the TABE, and the Adult Basic Learning Examination, the ABLE, are examples of widely used norm referenced tests.

On criterion referenced tests learners are not compared to any norming group. A single grade equivalent or percentage correct, the criteria, needed to indicate mastery is established for all examinees. Most diagnostic assessments are criterion referenced with graded word lists and graded comprehensive passages.

Alternative assessments are not standardized. Administration and scoring is determined by each teacher or literacy center. Interviews that give information about a learner's literacy activities at home or work, self evaluations of ability and teacher reports all give information about a learner's progress.

Portfolio development and evaluation is another common assessment tool. Learner's work is collected and periodically assessed by the learner, class members and instructors. Portfolios carefully done can be a strong motivational tool. Ongoing assessments are informal evaluations that are made continuously as students participate in class. Listening to a learner read tells a lot about progress in word identification, rate and fluency. Ongoing assessments are necessary not only to check on a learner's initial mastery, but later on on retention of what has been taught. It's often necessary to refresh a formerly learned concept until it's thoroughly mastered and the need to circle back can be indicated with ongoing assessments of the concepts and skills that have been presented.

All right, John talked a bit about phonemic awareness. What skills should we assess in order to find the weak links in readers inefficient word recognition skills? Ability to distinguish the sounds of our language, phonemic awareness, is prerequisite to mastery of the phonetic system of an alphabetic language. The national reporting panel cites the following criterion referenced tests for assessing phonemic awareness.

First is phonemic isolation. It requires recognizing individual sounds and words. For example, tell me the first sound in "paste".

Then there's phonemic identity. That requires recognizing the common sound in different words. For example, tell me the sound that's the same in "bike", "boy, and "bell".

Phoneme blending requires listening to a sequence of separately spoken sounds and combining them to form a recognizable word. For example, what is "S" "K" "OO" "L"?

Phoneme categorization requires recognizing the word with the odd sound in a sequence of three or four words. For example, which word does not belong: "bus", "bun", "rug"?

Phoneme deletion is the most difficult of these tasks and the one that confounds those readers who have phonological problems. This defines a significant number of adult poor readers. It

requires recognizing what word remains when a specified phoneme is removed. For example, say "smile". Now say it again, but don't say "S".

In reference to Rosner's test of auditory awareness skills to assess phoneme deletion can be found on the Institute's ASRP web site that would be listed at the end of this web cast; how you can get to that. Research tells us that adult poor readers who report having had difficulty learning to read as children show persisting poor phonemic awareness. Assessment of phonemic awareness of adult readers who are not progressing is always indicated.

Phonemic awareness and oral language tasks become phonics when in a written language task when the sounds of spoken language phonemes are linked to the letters. The two processes, phonemic awareness and phonics, are tasks of phonological awareness. Memory for the accurate associations between sounds and letters and memory for the visual form of words; for that we sort of test site words as well as a reader's vocabulary all play a part in mastering word recognition. To assess word recognition using graded word lists, you find the highest level on which there is an effortless accurate word identification. Automaticity on this task, that is immediate recognition, is what we aim for. In reading passages, the less attention a reader has to devote to figuring out individual words, the more concentration he or she can give to comprehending what is written. After all, that is the main point of reading.

Word Analysis: The reader has poor word recognition ability. Well, ask for which elements of words. Use an inventory of word components like the Sylvia Green's informal word analysis inventory. It's one of the downloadable resources on the Institute's ASRP web site. The lists of words are made up of most of the letter combinations that make up our written language. For example, "strut" and "sprig" are on this list. Note that neither word is very commonly seen in print, certainly not with enough frequency to become a site word. A reader would have to know how to combined "STR" and "SPR" in order to read the words. The letter combinations being assessed by each word on the list are given on the scoring sheet. In this case, it is the ability to read the three letter consonant blends. Taking time to administer this kind of diagnostic measure allows a teacher to find out which combinations to focus on in planning word recognition instruction for that learner.

Another aspect of word analysis is syllabication. Assess the

skill by asking the reader to decode one word of each of the six syllable types. Closed by a consonant. Words like "cot", "plan", that CVC is consonant-vowel-consonant. That's what it stands for.

The next one is open. An open syllable ends in a vowel, as in "go". The vowel is long. Another word is "radar". Then there's final silent "E". The vowel is long, as in "face". Also, give an example of a multi-syllabic word, such as "inflate" or "windowpane". Then there are vowel combinations where two vowels make one sound, as in "peacock" and "trainer".

"R" controlled. Those are closed by a consonant. That's when a vowel is joined to the "R". The sound is changed by the vowel, but it's neither long nor short, as in "doctor", "person", "curd", "partner" or "bird".

Then there's the final consonant plus "LE". The vowel sound is a "schwa", which is the sound like "uh", such as in "bugle" and "people". There are many sources for lists of words to use for assessment and instruction. The most commonly used and comprehensive book is "The Reading Teachers Book of Lists" by Fry. And I think now Susan, we are going to talk about instruction in decoding.

Susan McShane: All right. Sounds good. So, you've done this sort of assessment and Ros has gone through those with you. It's amazing what you can learn and you've got an idea from what she said what you can learn. What then do you do with those assessment results? I think there are probably in general two research-based recommendations. It's nice that there are only two here. It's not really that simple, but at least for the beginners we can say we need to have a structured curriculum. We'll look at what that means in just a minute.

So the real beginners, those very low readers. You do the assessment of the components including the ones that Ros mentioned where you're looking at word identification, sight word reading, word analysis or decoding skills and you discover, wow, a real beginning reader. Maybe you knew that even before. For those very, very beginners then, a structured curriculum.

For that next group of folks, often called intermediate readers, there's no real definite definition of what an intermediate reader might be. I don't know; somewhere third grade to eighth grade, ninth grade, somewhere in there. For those intermediate readers, they still have many gaps quite often when it comes to

their decoding skills. Even they may not be aware of them, but quite often when you do this kind of assessment you'll discover they have gaps. And so what you'll do for them is provide explicit instruction to fill in those gaps. So let's now look at both of those.

First, we'll look at what do we mean by that structured phonics curriculum? The point here, I think, is there are existing programs and therefore you shouldn't try to make it up. There are some good curriculum out there that have been proven to be effective with adults and typically what we're talking about here is very direct, very explicit instruction that is direct teaching that includes teacher modeling, plenty of guided practice where the teacher works with the student, guided practice. So that before you turn it over to the student to work independently you're sure that that student is ready for it. It also means that there's plenty of review built in; so very direct, explicit instruction.

Typically these curriculum, because they're for beginners, you know you're going to begin at the beginning and you're not going to skip anything. You're going to move right through in a very systematic way beginning with the most basic elements and progressing. These are very structured approaches. They're instructional routines, even sometimes scripts. So this is a very structured kind of program we're talking about. Also, often multi-sensory activities where the learner, for instance, is seeing, saying, writing, manipulating letter cards, word cards; that sort of thing. So very multi-sensory usually as well.

These are very structured programs so it shouldn't surprise you to hear that usually training would be required to use one. This is the sort of thing we'll need for our beginning readers. I don't think any of us is underestimating the potential difficulties for programs and accessing those kinds of programs, but that's what the research says we need with the beginners.

Now, for those intermediate and that's where most of our folks are, what are you going to do? This is where you can begin to actually just look at exactly what you learned from those tests. For instance, as an example here on the slide, you see the kinds of gaps you might have discovered in decoding skills if you had given one of those tests that Ros mentioned. For instance, the Sylvia Green word analysis inventory or the Woodcock word attack test, for instance. This is what you learned. Here is where the gaps are for this student. Here's some examples. The ones

that Ros mentioned a minute ago that those three letter initial blends. This student doesn't really know what to do with that "STR", "SPR". Maybe one of those sounds gets dropped off. We're not sure. This student has demonstrated that he doesn't know what to do with those spelling patterns.

Another thing you might learn from the tests is that this person does not know that sometimes the spelling combination "OW" represents the long "O" sound. Maybe he does know that it often sounds like "ow", but he doesn't know that sometimes it sounds like "O". The other possible vowel combinations that might be a problem that "OI". Maybe this is a learner who doesn't know that "OI" sounds like "oy" and that "OO" for instance, sometimes sounds like "oh", as in "hood" and "took". Maybe he knows that it sounds like "oo" in "tool", but doesn't know that sometimes it sounds like "oh". This is person who has demonstrated that these are difficulties he has because you have done this kind of diagnostic testing.

He's also got problems with those "R" controlled vowels. Ros mentioned those as well. When an "R" comes after a vowel, you need to know that "AR" usually sounds like "ar"; "ER" usually sounds like "er". Those are the things once again you might discover from testing that this person did not know.

Also didn't know about the soft "G" sound and the soft "C" sound. We know that "G" can have two sounds. Sometimes it sounds like "G" as in "gorilla" and "grade". Sometimes it sounds like "J", like the sound of the letter "J". Same thing with "C". Sometimes it sounds like a "K"; "cat" and "come", but often it sounds like an "S", as in "civic" and "circle". Okay. But this person doesn't quite know where and when to guess that soft "C" or soft "G". So that's what you've learned from this assessment that you've done.

You've also learned that the person doesn't know what to do with that "PH" sound. Doesn't know what "GH" represents and, boy oh boy, this person really falls apart when it comes to those long words. Those multi-syllabic words and this is a real common thing that you'll discover through both formal and informal assessments with weak graders, poor readers. What they do when they see this long word is they look at the first couple of letters or the first syllable and based on that they make a guess. It may not even make sense, but they make a guess and they move on. So you've discovered that this is a common one for these intermediate readers is the problem with the multi-syllabic words.

So, now that means that you are going to have to provide instruction based on those assessed needs which means you're going to really need to teach words that exemplify those particular spelling sound correspondences. So for instance with your three letter initial blends you can see on the slide there several examples of the "STR" words; lots and lots of those. So you'll work on those because what you're trying to do here is fill in the gaps in their decoding skills and you found out that this is a gap. So maybe the three letter initial blends.

On the next slide there are some examples of the "R" controlled vowels. The interesting thing here is that you have to remember - one of the interesting things is that there are three different ways in English to spell that "R" sound. Sometimes it's "ER"; sometimes it's "IR"; sometimes it's "UR". All "er". When you begin to teach -- work with those "R" controlled vowels, you need to also remember to use plenty of examples that show that syllable or word part wherever it might occur in a word: at the beginning of a word, in the middle of a word, at the end of the word.

So you see there some examples on the slide. The "AR" sound at the beginning of "army" and "argument". In the middle of a word in "part" or "market" and then there's that "ER" sound. There you see it in the middle of the word "allergy" and "dangerous" and at the end of the word "seller". So we're careful to show when we're teaching -- careful to present plenty of examples, lots of practice examples, where that letter sound combination is provided in different places in the word wherever it might occur. The same thing you're seeing there with the "IR" spelling for "ER" in the middle of a word, but with the "UR" spelling you see it at the beginning, in the middle and at the end: "urban", "burst" and "occur". We want to make sure that we show examples of those words in any positions in which they might occur.

Now what about those other things. We talked about the fact that this person needed work with soft "G" and the soft "C". The "G" sound or the "S" sound. How do you know? Well, you teach one of those rules, don't you? You have to teach that most often when a "G" is followed by an "E", an "I", or a "Y", it sounds like "G". So here are some examples of words where you can see how it's working there. We have "gem". We have "giant". We have "vegetable". We have "energy". Once again, some examples of where those sounds and those spelling combinations and syllables would occur at the beginning, middle

and end of words. Same kind of thing there with the soft "C". "C" in front of an "E", in front of an "I", in front of a "Y". Those are some examples.

Now, it gets more complicated when we begin to look at those multi-syllabic words. This is where it gets kind of tough. What do you have to do to decode a multi-syllabic word? First, you have to know how to divide it into syllables and then you have to decode the syllables. So that's more complicated. Before we look at the example on the next slide, I want to do a little bit of definition here. I think we need to define "blend" and "digraph". A consonant blend is an example, for example, would be something like "BR", "ST", "SP", where you do hear the sounds of both consonants, it's just that they're blended quickly together.

A consonant digraph is different. You have two letters: "SH", "CH", "TH". They represent one sound: "shh", "ch". Just two letters, one sound. So those are consonant blends and consonant digraphs. You need to know that in order to make sense of this slide here.

As I said, what we've got to do first is learn how to divide the word into syllables. So rules for dividing words. Here's an example of one rule for dividing a word. You see as it says on the slide, if there are two consonants between vowels, you will usually divide between the consonants -- remember what we're trying to do here is divide the word into syllables. If there are two consonants between vowels, you divide between them unless those consonants form a blend or a digraph. There are some examples there with "mental"; "NT" you can divide between. Right? "Trac-tor"; you can divide between the "C" and the "T".

Then you've got F-R-A-G -- okay -- M-E-N-T. You can divide between the "G" and the "M" there, but look at that next one. F-R-A-G-R-A-N-T. "GR" is one of those consonant blends. We don't want to break that apart, so we're going to divide after the "A" and put the "GR" in the second syllable. Something similar there with the next word. "SH" is a digraph. We can't split a digraph so the syllable is going to end after the "H". Okay. That's how we're going to divide it up.

Now then, we have a rule -- we have to teach the rules for decoding those syllables and one rule, for example, is that if a syllable or word with one vowel ends in a consonant, the vowel often has the short sound. So when you look at those examples, you see some there. T-R-A-C-T-O-R. Okay. That's a syllable

with one vowel that ends in a consonant. So my first guess is going to be short vowel, short "A", "trac". That's the sort of thing you're going to be doing when you are looking at decoding the multi-syllabic words.

Basically, what you're doing is you are providing instruction based on assessed needs and on the next slide you'll see some examples for where you might get resources. I think you can find rules and word lists in any number of good reading teacher materials. You can also use the dictionary. Another very good resource, I think Ros might have mentioned this, if not she's about to; "The Reading Teacher's Book of Lists". There's a new edition now, the fifth edition by Fry & Kress. A wonderful tool. Lots of word lists and lots of rules and principles. Lots of neat collections that you can use to instruct your instruction; that you can use to do what you're trying to do here.

Remember, what we're doing, as you see on the next slide, is we are providing instruction based on assessed needs. We are teaching to fill in the gaps. That's what you're doing with those intermediate readers. You're making a structured plan because you've done the assessment and you know just what the person needs then you're going to make a structured plan to cover the needed skills and knowledge. You're going to teach very explicitly. You're going to demonstrate. You're going to model. You're to provide guided practice before you let the student loose for independent practice. Lots of practice and lots of review.

So that's the quick story on what we are doing for decoding, word analysis instruction and I'm going to turn you over to John now who's going to introduce another of the components.

Dr. John Kruidenier: Thank you, Susan. That was great. Now that we've talked about word analysis assessment and instruction, we'll move on to the second component of reading that we'll be talking about today. It's important to remember that all of the components of reading are important and we're focusing on just two today because we don't have time to cover the others. Today, what we really want to focus on is how useful research can be for instruction and how you can use the components of reading as a framework for assessment and instruction.

Assessment research clearly shows that those who qualify for adult education have difficulty with reading comprehension.

Based on results from two large scale surveys of adult readers that together looked at the reading comprehension of over 50,000 adults in the United States, we can conclude that many of those in adult literacy programs have difficulty reading and understanding information in simple, commonplace documents such as newspaper articles, food labels and bus schedules. Just finding information in these texts can be difficult for some adult literacy students. Virtually all adults in literacy programs have difficulty reading texts that are longer and more dense or complex. Summarizing, making inferences and determining cause and effect while reading are all difficult tasks for the adults we work with.

What does the research say about teaching reading comprehension to adults? Research does suggest that placement in an adult literacy program can lead to improved reading comprehension; however, specific instructional strategies that can be used with adults and that are supported by the research are only beginning to be identified. Most of the comprehension research in adult education has focused on program evaluation where measures of comprehension are used as sort of a yardstick and not on specific teaching strategies.

One emerging principle related to teaching strategies suggest that effective approaches provide direct as opposed to incidental construction in comprehension strategies. It's best to directly teach specific strategies as opposed to simply teaching a strategy as needed in a more haphazard manner. A trend suggests that we should focus on more than one component or aspect of reading during instruction, working on fluency or word analysis, for example, can lead to improved reading comprehension achievement. Research at the K-12 level provides support for and extends the adult findings. Teaching multiple components of reading should be effective.

Alphabetics, fluency and vocabulary instruction can all lead to improved reading comprehension achievement. Also direct instruction and specific strategy is supported by the research with children. This research has identified specific strategies that are effective. The best approach appears to be one that teaches multiple strategies. Ros and Susan will present practical applications from the comprehension research, including more information about these strategies. We'll start with Ros.

Dr. Rosalind Davidson: Thanks, John. I do want to stress one thing that you said, John, that was so important. When we teach

--when we try to strengthen any one component, and there are many of them, it strengthens them all. So that we are talking about two, we need to talk about four, but whichever one you're working on, you're helping them all.

The Standardized National Reporting System are the assessments required by the National Reporting System. Both norm referenced tests and criterion referenced tests have the same basic ways to test comprehension. They use leveled reading passages followed by multiple choice questions or closed type statements that require the reader to fill in the correct word that completes the sentence. Not only do the passages become more difficult with longer sentences and less familiar vocabulary, questions also become increasingly sophisticated.

For example, on the diagnostic assessment of reading the third grade passage titled "Whales" there's this statement: "The largest animal in the world today is the blue whale." One of the four multiple choice questions following the reading is, "What is the biggest animal in the world today?" That's with the following choices: A bow head whale, an elephant, a great white shark, a blue whale. Well, that's pretty clear what that is.

Contrast this level of difficulty to the grade 9/10 about spiders. One of the comprehension questions is, "How does the author feel about spiders?" It's followed by these choices: fascinated, fearful, overwhelmed, emotionless. A few of the sentences in the text are similar to this one. Some spiders are amazingly beautiful. The sentences in the text give evidence to support the correct response, but do not use the same words or explicitly indicate the answer of "fascinated". The reader infers it from the information given.

The TABE, CASAS, ABLE and Woodcock WRMT are widely used standardized norm reference tests of reading comprehension. Beyond the ability to decode words, vocabulary knowledge and background information drive comprehension. An accomplished reader -- as accomplished readers we are often not aware of how much understanding of what we read comes from the information we have absorbed from extensive reading and experiences. We bring all of this information to new text. A skilled, fluent reader who knows a lot about American history, for instance, will have an easier time understanding a passage about the Civil War than a reader who does not bring such background knowledge to the reading.

We usually gain much of our background knowledge when we're children and adolescents in school. How can we get some idea of what our adult readers know about school based subjects? Usually through tests of subject matter vocabulary. The Woodcock Reading Mastery Test, word comprehension test, may be evaluated in four areas: general reading, science and mathematics, social studies and humanities.

The Peabody Picture Vocabulary Test 3 is one of the most respected specialized norm referenced tests. It's a test that gives a measure of the breadth and depth of a person's understanding of words in a range of those words most frequently seen in print to those items that appear infrequently and then most often only in sophisticated materials. The examinee is asked to indicate one of four pictures that best tells about the words spoken by the examiner. It is an individually administered wholly oral test and its norm for ages two through 90. The PPVT-III is often cited in research as a measure of verbal power or the verbal intelligence that is then available to the examinee.

Independent Reading Inventories may ask the reader to summarize a passage in addition to answering written or oral multiple choice questions. Summaries often yield information a reader knows about a subject in addition, and sometimes instead of, to that given in the text. Most word meaning vocabulary tests are a written format and they often require reading beyond the word recognition level of the ABE learners. Therefore, oral word meaning assessments provide a more meaningful evaluation of adult learners as they do also of children who have reading difficulty.

Tests that measure word knowledge by asking what does "X" mean, such as on the diagnostic assessment of reading, allow the learner to explain the meaning of a word however they can, even in a gesture. Marybeth Curtis discusses how teachers can assess how well a learner knows a particular word by evaluating the response according to one of four stages. If the word knowledge is a stage one, the learner cannot identify the real word when it's presented along with suitor words. For example, if you want to know the stage of a word "sorted", that word is sorted for an advance reader, you can present it with these nonsense words: "stolen", "filson", "pointster". Would the learner be able to discriminate between the real word and the suitor words? You can present a mixture of many real and suitor words, perhaps ten real vocabulary words among 30 non-words and have the learners underline the real words. If Stage Two the learner is

not able to say what the word means, even though they may have seen it before.

If Stage Three, the learner give a particularized word meaning so that it is restricted to just one context. For example, for the word "celebration", a Stage Three word meaning might be "my birthday party".

Stage Four words, the learner gives a synonym or defines the word so that its meaning is clear when spoken or written in many particularized contexts. For example, a celebration is sort of a party when it's a special time or when something especially important has happened. Two studies showed that only Stage Three knowledge is needed to correctly identify a word meaning on a multiplication choice test. In isn't necessary to know the word meaning in its broadest Stage Four application. This is the case when someone is reading. If you know a word in the Stage Three aspect, then that's fine. You can go on to understand the passage.

This slide could be called "ask the reader". What do they do when they do not understand a sentence or passage? Do they re-read? What else? What strategies do they know about? Which have they tried? Teachers can proceed with what they think would probably work with a particular learner trying out several strategies to find ones that work. It's important to assess the readability of the passages for comprehension instruction so that you're sure that the passage is at the reader's independent or low instructional reading level. There are several readability formulas on the Web and on the ASRP web site.

Comprehension can be assessed with beginners in a listening format to find out what level passages they could understand if they could read the words. Above beginning levels, comprehension is assessed with passages read silently only. All right. Word comprehension. What now? Have readers re-read a couple of sentences orally to test their ability to read the words. Maybe that's the problem. Are they familiar with the sentence structure? This may be a problem with non-native English speakers, but also with native English poor readers who have not had enough experience with the more complex sentences of higher than conversational level text. Are they applying helpful practices they've learned and found successful in other reading materials? Susan, those are the questions. What kind of strategies do you have in mind now?

Susan McShane: Wow! There are all kinds. We're wealthy, I

think. So, I guess the simplest answer to what do you do at this point when you've got this initial assessment might be to just review as you'll see on the next slide. What you're going to do is first of all, you're going to look at all the components. That's the other components to see what might be contributing to the problem because as we've all said they all work together so nicely and in such a complex interdependent kind of way that you want to find out what might be contributing to this comprehension problem. Then you're going to work on those component skills that are identified by those assessments, but the interesting thing is that even if all of the other components are in place, you think they look good, this person appears to be - you still might need to teach. With many of our students you still might need to teach -- actively teach comprehensive strategies. That's what John was suggesting that the research has shown and that certainly seems to be true.

We need to work on - directly work on comprehension strategies. Once again explicit and direct instruction in comprehension strategies. What I'd like to do here first is once again begin with a definition. Let's look at what is strategy instruction before we go any further. Strategy instruction in general because I think that quite often what we do in adult education classrooms while wonderful and often is not necessarily always strategy instruction. We don't necessarily approach it that way.

What is strategy instruction? It's teaching learning tools. It's giving the reader, the learner, tools that they can use independently to solve their reading comprehension problems. So you teach principles, you teach concepts, you teach rules, you teach processes that people can use when they are having a reading comprehension breakdown of some sort. For example, for instance, there are different kinds of strategies. There are strategies for decoding words. There are strategies for figuring out the meanings of words. You might, for instance, as a decoding strategy, here's an example; you could teach an intermediate reader that there are common syllables that rhyme. So if you see "OP" in the middle of a word somewhere it might very well rhyme with "hop" and "top" and might be "op".

Same thing with "ACK", "END". Those are what we used to call word patterns which are sometimes also called phonograms. Now we hear a lot about onsets in rhymes. And so that's the rhyme part and the onset is the consonant or consonants that come before it. Those are handy little - that's a quick strategy for teaching decoding. So that's one example of a strategy.

Another kind of strategy would be teaching people directly how to recognize context clues that give you an idea about what the meaning of the word might be. So that's a vocabulary strategy. What we're going to look at in particular here, though, this afternoon is strategy instruction related to comprehension. So let's look at what the research says about comprehension strategy instruction. First of all, we absolutely - I think there's plenty of evidence to show that we do need to teach it directly. What's very interesting is that many readers really don't even know when they're not getting it. They're not aware of how much they have missed and that's an interesting thing. There's research with younger students and older students to show that they don't recognize inconsistencies and even contradictions in text. They simply don't notice it, which means that they are not paying attention to meaning.

What they don't know is that good readers actually work and we don't even know it because we've become -- we're unconscious because it's all happening so quickly. But if we could break down what we do, we are very active as we read. We are thinking and when we have a problem we solve it because we expect it to make sense. We read for meaning. We demand meaning. If poor readers do not do that, which often they don't do and they don't know what good readers do, we need to teach them directly some of the things that good readers do. That's what comprehension strategy instruction is all about.

So, we're going to look at what the research says about these. What you see on the slide there are eight different things. Those are really fairly broad categories of comprehension instruction. In other words, there aren't eight strategies. There are many, many strategies. Those are categories. What I'm going to do is very briefly walk through those and show you what each one means and then we're going to look a little more specifically at some of the comprehension monitoring strategies.

So first of all, let's look at comprehension monitoring. Comprehension monitoring strategies are processes, ways, tricks that you can teach to students to keep their attention focused on meaning, focused on understanding. There are a number of those. So that's comprehension monitoring and we'll look at that in more detail a little later.

Graphic organizers: The use of graphic organizers has to do with teaching people how to use diagrams or charts to visually represent the relationships between ideas, events, occurrences,

information in a text. So it's a visual representation and there's plenty of research to show that that has worked. For instance, things like semantic maps. Some of you may have used those. For instance, in vocabulary instruction. You put the term in the middle and then you have this little web with all of these other aspects of the word around it. Some of you might be familiar with the use of timelines for history, for instance. Those are visual representations. That's another kind of graphic organizer.

There's also plenty of research to show that it helps to teach story structure. I think sometimes in adult education we don't do a lot with fiction and much of this research, of course, came from the National Reading Panel and, of course, young children do read lots of stories. The idea behind story structure is that you can teach the reader to recognize that stories have a common structure. There's a setting. There are characters. There's a problem or a plot. That sort of thing. So you teach them about that structure so they recognize those elements and they're following it along and they're getting from the story. They're understanding.

Question answering: That's a whole category of different kinds of strategies that people have that researchers have tested. It basically is about teaching students how to answer questions. Remember those tougher questions that Ros just presented, the difficult ones. It's one thing to answer a question when you have the answer directly in the passage. It's another when you have to think and search a little bit. It's another yet again when you have to bring some of your own background knowledge to bear to make an inference. Those are the kinds of things that you may have to directly teach and there is research to show that teaching students how to answer questions results in better comprehension.

The question generating category has to do with teaching students how to ask themselves questions as they read. We in fact do that. It's just, once again, these are the things that we do automatically. Those can be taught directly to students. Those might be the question that you ask at the beginning and then what's this going to be about and what do I already know. And then in the middle, what's this about? What are the main points? That sort of thing. We're teaching people how to generate questions as they read.

Then we have summarization which is a very, very - that's a tough thing to do. Summarization is all about teaching readers

how to identify the main and central ideas. Most of the research was done with older students. It's typically done with better readers, but even for lots of our intermediate readers they're asked continuously, "What's the main idea?" A main idea, after all, is a mini summary, isn't it? It's a one sentence statement of a short passage. So it does apply in many cases and there are lots of different ways, lots of different specific ways to teach summarization.

And then I think John mentioned that one of the things that there's a lot of research behind is this multiple strategies instruction. In fact, we don't as readers use one or two. We use lots of strategies all at the same time, so there's plenty of research on specific combinations of strategies that have been taught; usually taught through interaction among the teacher and students. One common one which you could find out more about, do yourself a little search, reciprocal teaching. There's lots of research behind reciprocal teaching. That involves question generating, summarizing, clarifying and predicting. So, examples.

Then finally, we have cooperative learning which to most of us looks like an instructional approach rather than a reading strategy, but there is lots of evidence to show that readers at all ability levels benefit from learning and working and reading with each other. So, learning together. So that's the eight.

Now we're going to take a look at specifically the first one I mentioned, the comprehension monitoring strategies and just look quickly at three examples of comprehension monitoring strategies. Let's look at restating as the first one. With restating as you'll see on the next slide, restating is about teaching learner's to get in the habit of stopping periodically. It's an interesting thing. Sometimes it looks as though poor readers might just feel like the goal is just to get to the end of the page. And so rather than do that, let's teach them to stop periodically, maybe after a paragraph or after a section with a subheading, and say, "Can I put it in my own words?" Because if I can't, I don't think I got it and might have to read it again. So restating one of the comprehension strategies that has some research backing. Teaching them to stop periodically and check on their understanding.

The next one we're going to look at is thinking aloud. I've always thought this one has great potential because I think what we are doing here is we're able to -- we're saying to students that it's okay to do what many of us do when we're reading. I

sometimes when I'm reading the paper or something, come across something and stop and say, "What?" I must have missed something there. Wait a minute. Okay. Better go back. Now we do most of that silently, but occasionally we do it aloud and it's okay for learner's to do that and to teach them to do that. It once again keeps them focused on the process and you can demonstrate it as the teacher. You demonstrate it by doing a think aloud. You actually analyze what you do.

It's tough because we do it very quickly, very automatically. You have to break it down and make the inaudible audible. Get it out there so that they can hear what you're doing. That kind of processing may involve any of the things on the slide here. It may involve restating which we already talked about. Noting something that's important or surprising. Stopping and expressing confusion - wait a minute, why would that be? Did I miss something? Or wait a minute, he said "it". What's the "it" now? What does the "it" stand for? Going back and finding out the reference for a pronoun. Looking back to clarify something using context clues; demonstrate for the students out loud. You demonstrate how you do it and you teach them to think aloud as well as they read. So that's another comprehension monitoring strategy.

A third one has to do with marking text. Usually, this one is called coding text because it's about teaching learners some sort of code. Many of us when we were studying developed our own codes. If a student didn't develop it on his own, then you might need to suggest one. Something simple like let's put an exclamation point next to anything we find that we learned that's new or surprising. A question mark when we see something that we're not sure about, perhaps a word we don't understand. It's once again a way to monitor comprehension, to keep focus on meaning. Don't let yourself go on; pay attention to whether you're getting it.

So once again, comprehension strategy instruction, three different approaches. We looked at restating, thinking aloud and coding text. Those are three examples of comprehension monitoring strategies. So we've tried to quickly go through some of the assessment and instructional suggestions that we have and so I think I'm going to turn it back to John who will summarize and wrap things up for us.

Dr. John Kruidenier: Thank you, Susan and Ros. One of the things I want to do now to conclude is to go over some of the main points we wanted to emphasize in today's presentation. We

hope we've convinced you that research provides some very practical and useful approaches to adult reading instruction. Remember, we looked at only two components of reading because of time constraints, but all of the components together, the basic components of reading can provide a framework for assessing and teaching reading to adults. It's important to assess all of the components to understand your student's strengths and weaknesses in reading, use the assessment results to decide which components to emphasize and which research-based practices you will use.

Finally, continue to assess your students as you teach in order to adjust your instruction. On the next slide, you'll see everything that we've talked about today and actually more is contained in three resources that are available on the Institute's website. I believe that you can download these slides right now on the webcast page if you wanted to keep those resources. I'm going to turn it back to Sandra now for questions.

Sandra Baxter: John, Ros, Susan, thank you so much. That was an awful lot of information. You have a lot of years of collective experience, so we're lucky to have you here. I think this is a good time to bring our viewing audience in and let them have an opportunity to ask some questions because as good as your presentations were, I'm sure they have some questions about how to apply what they've heard today.

In fact, we have a question now. Susan, you talked a little bit earlier about rules for dividing words. One of our participants in the web cast today wants to know, "Given that English has so many examples of broken rules, does it make sense to teach the phonics rules at all?"

Susan McShane: We hear that, don't we? There's been all kinds of funny stuff about our crazy English spelling patterns, but I think the answer to that is simply that there really are -- it is worth teaching them because an awful lot of our English spelling does follow rules. Many of us just have good visual memory. Many of us reading came easily to us. So it wasn't a problem. If you have someone who is struggling with decoding, isn't it better to give that person some strategies, some rules then not to? Isn't a rule better than no rule, better than a gas? Ros?

Dr. Rosalind Davidson: I think many of our -- most of our words

we can put in rule kinds of categories. Sure, they'll lap out all over, but there's also the value of knowing prefixes and affixes that tell us the derivation of a word so that we can remember that, that it will be different because perhaps this is a word from Greek or something. We know it has a "sis" or whatever. There are ways of approaching those that are irregular, but we have to teach the rules as they are because they certainly do apply most of the time and certainly my feeling would be that they would apply most of the time to the most frequent kinds of words. So, yes, I think there's great value in teaching it.

Susan McShane: As long as you approach it -- as long as you say, okay, the rule says in most cases this will be a short vowel. Try the short vowel first. Do you come up with a word that you recognize that's a meaningful word? Okay. Now try. Then if not, then try this. It gives you a structured, sensible approach rather than a guess.

Dr. Rosalind Davidson: It is a predictable system for the most part.

Sandra Baxter: We have a viewer today who says that she - this is from Ellen - I'd like to use the reading profile web site, but I want to know, for example, what are the recommended amounts of time I should be spending per lesson on a low/intermediate student who needs vocabulary development, phonics and fluency work? Should I spend more time initially on vocabulary development since that is going to impact comprehension most? Also, do you recommend starting instruction by focusing on one component first or is lesson sequence simply at the teacher discretion?

Dr. Rosalind Davidson: It also depends what amount of time the teacher and learner have together. Is this three times a week for three hours? Is it twice a week for one hour? What is it? As far as what absolutely to focus on, I think first of all vocabulary takes us very far and we should always include that in a lesson. Was there an assessment of the learner?

Sandra Baxter: Apparently, there was. I would say yes because she's identified specific areas here; vocabulary development, phonics and fluency work.

Dr. Rosalind Davidson: Now fluency can have to do with both phonics and vocabulary. So that it looks to me she doesn't talk about comprehension as much. Then I should think that a major focus should be on fluency, which would include finding out what

words they are having trouble with, having effortless -- developing effortless word recognition at higher and higher levels and being able to understand text to read it fluently using the rhythm and the prosody and always feeding in vocabulary; always feeding in vocabulary.

Dr. John Kruidenier: I think not ignoring any of the components.

Dr. Rosalind Davidson: Absolutely not.

Dr. John Kruidenier: If the student has a strength in reading comprehension, it's not something you ignore during construction. In fact, you could probably use that strength as well, but also continue to work on reading comprehension as well as these others. In terms of the question related to how much time to spend on each one, maybe you could spend a little less time than you would normally spend on reading comprehension if they're doing really well and shift some of that time to fluency instruction.

Dr. Rosalind Davidson: I think if you look at the bands of how much word recognition to teach as different from comprehension, that the very beginners that band of word recognition is much longer than that of comprehension and then it shifts as the learner's become more advanced. So that then you're finally dealing more with comprehension than with the word attack.

Sandra Baxter: One of our viewers wants to know whether or not this method applies to adult students with learning disabilities? That we're talking about today.

Dr. John Kruidenier: I think we can say that the overall method would apply to any of the students that are in your classroom. Assessing all components of reading, getting a profile for each of the students that you have to find out what their strengths and weaknesses are and that would include students with a learning disability. In that sense, what we've been saying would apply to students with a learning disability.

A lot of the approaches that you would use with beginning readers who don't have a learning disability, you would also use with those who do. And in particular, and this is something that Susan can address, but in particular direct and explicit instruction in alphabets. It's a very important for a student that has a learning disability in reading. They may have a lot of difficulty making the connection between speech sounds and

letter combinations. So that would be something you'd have to focus on in a really structured way. I think that's something you would agree with.

Susan McShane: That's sort of been the approach that I've been sharing with people is that I think even in situations where on this case, this apparently is a person who knows that we haven't identified specific learning disability in reading. We don't always know that about our adult learners. In this case, this person knows. I think certainly with that kind of information you should assume once you have done enough assessment to discover whether we are looking at a phonological processing, phonemic awareness kind of problem, which often is the case, whatever; you still are going to need to focus on that kind of explicit structured, lots of review. That's probably -- but again, once again your abilities are on a continuum even once you got that sort of definition of a reading disability. How severe? How much prior instruction have you had? Where are you? So, it's not a simple answer, but --

Sandra Baxter: That's actually an interesting segue into another question that's been raised. With so many students in one class who may be at varying levels, what tips can you offer our viewers on how to deal with that and how to make the whole classroom instruction so effective?

Dr. John Kruidenier: You want to start, Ros?

Dr. Rosalind Davidson: I think it depends on the range of students that you have in your group. Supposing they have been grouped according to their comprehension tests, which most often happens in adult literacy centers; if they're grouped at all. You have people reading within a range of let's say four to six grade, let's say. And as John showed us, they can be all over the map. However, within a range you can group together for instruction in word attack and in comprehension strategies in a class as a whole or in particular elements that would be appropriate for each level when they're looking at word attack. So that you're not teaching the total class. You're teaching two particular groups for each one.

It's pretty difficult to manage because you're going to have somebody over there doing this and somebody over there doing that. However, a very seasoned, adept teacher can use different components; people who are strong in one component to help those develop that component and it would benefit both of those. They're sort of bringing peer teaching into the mix. John, you

had other things you wanted to say I could see.

Dr. John Kruidenier: We're assuming, of course, that you go ahead and you do assess all of the components for each of the students in a classroom. I think it takes time and it's something that people avoid because it's a time-consuming process. If you have 15 or 20 or whatever number of students in your class, there are ways to shorten the assessment process. You don't need necessarily to give all of the assessments to all of the students, but once you have that information you can begin to group students. But I think you need to be flexible. You don't want to just -- you may want to group by -- one strategy is to group by component.

You can group those who need instruction of a certain kind and reading comprehension together. So you have a couple groups. When you're working on word analysis, you wouldn't have those same two groups. You would have a different group if you're grouping by level. I think another suggestion that I could make is that you take a look at applying research and reading instruction for adults. One of the resources -- I think there's a chapter in that book that addresses this question correctly and it's one that -- so you may have some concluding remarks.

Susan McShane: When I was working with the group of researchers when we were working on putting that together and I was writing it, I knew that this was a huge issue. I said what in the world can we say to people so there is a chapter about working with multilevel groups. Of course, one of the suggestions was the kind of flexible grouping that John and Ros were talking about. Flexible groups within that multilevel group.

Another point that I was just going to make because I think this is -- I thought this was interesting and I've been sharing this widely, too. Given the fact that as we've said most of our folks could probably use some work in vocabulary and comprehension, especially comprehension strategies. So sometimes you could do some whole group stuff if you introduced a strategy and you chose a passage that was at least mid-range difficult for your group. And you read it aloud so that everybody can follow along. You can introduce it that way and then they can practice individually or in pairs with material that that's at an appropriate level. They could practice that strategy with material that's at an appropriate readability level for them. That was one of the things that one of the researchers suggested and I've been trying to share that one, too.

Don't assume that you can't do anything with the whole group, but you do have to be careful that whatever you use if it's going to be -- if it's too hard for some of the students, you will have to read it aloud and then they can practice at their own level. That's another possibility, I think.

Sandra Baxter: If we could shift our attention from native born speakers for a moment. We're getting a number of questions about English language learners. And to what extent, given what we're talking about today, does the strategies that we've talked about apply to English language learners. Do you have any other advice for them?

Dr. John Kruidenier: Again, I would say -- and this sounds like a broken record, but of course you do the assessment first. You look at all of the components. With English language learners, you'll probably find with many of them if they truly are not fluent speakers in English that their vocabulary won't be as good as it needs to be so that we'll lead to work on language and language skills. You also will find -- and there is some research with children that addresses this, that they may not have a good grasp of the sounds in the language. It depends on how close their native language is to English.

So you may work on -- may need to work on phonetic awareness and some of the basic word analysis skills for that reason. I think that there are probably other strategies that you could use as well, but I think that those would be -

Susan McShane: In the ARCS study, you can get on that ASRP site, some of those profiles were pretty heavily composed of non-native English speakers. There might be some help they could get there in terms of how to work with them, do you think?

Dr. Rosalind Davidson: I think yes. I think there might be. There was one cluster we had where people who should not have been in ABE yet. They had such a low vocabulary, they weren't going to benefit from ABE reading instruction; however, they would benefit from reading instruction within their ESL classes because now we know that people are learning the language by reading it and going through just as we learn a foreign language. I don't know. I really don't know any other --

Dr. John Kruidenier: I think that's probably something that needs to be said and that's that there isn't enough research

with this group of adults. There needs to be a lot more research on how you teach someone who's not a native speaker of English to read in English.

Susan McShane: There are so many teachers out there who are dealing with it, though, that I've discovered they are very interested and they're interested, for instance, in trainings I've done, they're interested in talking with me about how this strategy might be used with these learners. So I think there's a lot of thinking going on.

The other thing is that the teacher group worked with me as I was working on the book. I also had some adult education teachers reviewing the material and a couple of them were working with ESL students and we didn't make any pretense that this was based on research with adult, non-native English speakers, but they immediately went right out and came back and the next time I saw them they said, "I tried that with my students." So, I wouldn't -- I think that it is probably -- for those whose oral skills are pretty good, my guess is and that's what I think some of the researchers in the group suggested, too, is it probably wouldn't do any harm. It might be worth a try in terms of whether these instructional strategies would work with those folks.

Dr. Rosalind Davidson: I would like to see a large scale research out there now because the population has changed so drastically. I'm sure we're up over 50% non-English speakers in our literacy centers and it's time we found out more than we know.

Sandra Baxter: Many adult students come to adult education instruction with specific goals of their own. Sara wants to know how do you integrate student center goals and learning in your research-based approaches?

Dr. John Kruidenier: One of the resources and then throw it over to the person who has the resource that addresses this. You can correct me if I'm wrong, Ros, but you have a question there, I think, that you recommend that people use. Part of the assessment process. We focus really on what we call the essential components of reading. We've said that this isn't all that's involved in reading. There's a context. Reading takes place in a certain context for a certain purpose and these are all things that are important. Some context may be more important for some adults than other contexts. The workplace context, for example, may be important to an adult, a particular

adult and maybe a family context is maybe more important to a different adult. So finding, getting that information is important and I think there's a great questionnaire on the website.

Dr. Rosalind Davidson: When I was speaking awhile ago I spoke about interviews and that they are important to find out about the work place and about the family practices in language and such. That's a great tool to use. Not only that, the learner then speaks about his or her goals and then you come to a meeting of terms; just how much the center can help them with their goals. Which brings me another point that I think we have to be very clear with our learners when they express their goals just what our training and what their involvement in our programs; how that can help them reach their goals and be very honest and such and not try to candy coat anything because they are adults.

Dr. John Kruidenier: Right. And once you get this information there's a lot you can do with it. A good example, I think, would be some of the strategies that were suggested today for vocabulary instruction. One of the things that the research really strongly suggests is that you learn new vocabulary by experiencing the concepts and the new concepts and new words many times in different contexts. And in engaging context and if you know what someone is interested in. If you know they're interested in the family, then you would use that context as part of the teaching process when you're teaching the meanings of various words.

Susan McShane: As Ros was saying, once you've begun this conversation with the interview, the questionnaire, you've begun the conversation, you've asked about goals, then with the additional assessment information you have a sense for where the reading needs are. They don't always know. Very weak readers will tell you I have a reading problem. Intermediate readers quite often are, I guess, not entirely aware and not aware of how difficult it's going to be for them to reach this goal they have unless they build their reading skills. So it may take a little bit of a process working with them, but because they are adults you're going to do the best you can to say, okay, if this is one of your goals let's think about where reading fits into that in the same way that you would say let's think about where math fits into that life goal. Well, where does reading fit into that life goal? What kinds of things will you need to read? And then maybe eventually you're able to get them to the point where -- again, it's about relationship building and

working with an adult, but where does reading fit in and then can you use context-specific materials. Sometimes you can, but even if it's kind of difficult, too difficult, the context that they need, then maybe vocabulary is one way to sort of get at it.

Sandra Baxter: Good point. Well, we've received many more questions today than we can answer right now. We will answer those questions, however, and post the responses on the website, the Institute's website. I also would like to say you've asked whether or not we would do a session like this, a webcast like this on the issue of fluency. I think we can convince our experts to come back and do that, so yes. And yes, as well, this particular webcast will be archived and you can find it on the Institute's website at www.NIFL.gov.

It's been a real pleasure John, Ros, Susan. Thank you for all of your hard work in this area and the expertise that you've shared with our viewers today. And I want to thank you, our viewing audience, for taking time out of your busy schedule to join us for this very important discussion on instruction in reading and reading assessment. Remember, you can view this webcast again at www.NIFL.gov. It will be archived and saved on our website.

For the National Institute for Literacy, I am pleased to have been part of this program. We encourage you to share your questions, your comments and your ideas with us on the Institute's discussion list. Thank you so much for joining us today. From Washington D.C., this is Sandra Baxter.