

# What Do We Mean When We Say That? Comparing Reading Terminology and Other Key Phrases Among OVAE Training Packages

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The logo for LINCS (Literacy Information and Communication System) features the word "LINCS" in a bold, blue, sans-serif font. A red and orange swoosh underline is positioned beneath the letters.

Literacy Information and Communication System

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## What Do We Mean When We Say That?

### Comparing Reading Terminology and Other Key Phrases Among OVAE Training Packages

This document contains a matrix of key terminology and phrases used in a recent National Research Council (NRC) report and existing OVAE training packages focused on reading and writing instruction for adult learners. The terminology in the matrix has been cross-referenced across the following four resources: *Improving Adult Literacy: Options for Practice and Research* (NRC, 2012),<sup>i</sup> Assessment Strategies and Reading Profiles (ASRP),<sup>ii</sup> Learning to Achieve (L2A),<sup>iii</sup> and Student Achievement in Reading (STAR).<sup>iv</sup> The purpose of this matrix is to provide adult education practitioners, trainers, instructional designers and professional developers with information concerning the alignment of terminology among these OVAE training packages and findings of the NRC report. The full NRC report contains an excellent Executive Summary, and additional short summaries are available for the general public, policymakers, researchers, and practitioners. The NRC report is potentially useful to staff developers and practitioners to initiate discussions about current challenges and future directions for the field. Practitioners may find the matrix useful for making connections among the different OVAE resources and minimizing potential confusion across training applications, which were developed at different times and which may use different terminology for similar concepts.

The research and content for this matrix were developed by the following individuals in their role as subject matter experts (SMEs), under subcontract to Kratos for OVAE:

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The terms are listed in alphabetical order, and have been chosen based on their primary appearance or use in one or more of the resources. In some cases, terms are cross-referenced with a term that is embedded in another definition and/or to a related term as it appears in an individual resource. The descriptions of terms are taken directly from the resource documents; in a few cases, additional explanation has been added and identified in brackets as [Note from SME].

**Alphabetics (also see [Reading Components](#))**

NRC	ASRP	L2A	STAR
Alphabetics consists of phonemic awareness and word analysis.	Alphabetics consists of phonemic awareness, word analysis (or phonics), word recognition, spelling, and fluency. "Alphabetics is the use of letters to represent spoken words. Because spoken words are made up of smaller, more basic sounds (phonemes), alphabetics includes Phonemic Awareness, or knowing how phonemes are combined to make words. It also includes phonics or letter-sound knowledge—knowing the relationship between letters or letter combinations and the sounds they represent and how these are put together to form words. The word <i>cat</i> , for example, is made up of three sounds represented by the letters <i>c</i> , <i>a</i> , and <i>t</i> ." ( <i>Definition is borrowed from Kruidenier, J.R. (2002). Research-based principles for Adult Basic Education reading instruction, Chapter 6. Washington, DC: National Institute for Literacy</i> )	<a href="#">Phonemic awareness</a> and <a href="#">decoding</a> are used in place of alphabetics.	“Alphabetics is the process readers use to translate - or decode - printed words into meaningful, spoken words. Alphabetics includes phonemic awareness, word analysis, and sight word recognition.”

**The Americans with Disabilities Act (ADAAA)**

NRC	ASRP	L2A	STAR
No references.	No references.	The ADA was enacted in 1990 and amended in 2008, which is why it is now called the ADAAA. It is a civil rights act and extends the concepts of the Rehabilitation Act. The purpose of the ADAAA is to make a broad range of American society nondiscriminatory, not just entities that receive federal funds. It encompasses access to most adult life situations, such as education, employment, public services, everyday facilities (banks, hotels, and stores), telecommunications, and transportation. Like the Rehabilitation Act, the ADAAA is applicable to individuals of all ages, requires self-disclosure, and is based on reasonable accommodations. Unlike the Rehabilitation Act, it does not provide funding for services.	No reference in tool kit or training.

**Decoding (also see [Reading Components](#))**

NRC	ASRP	L2A	STAR
<p>“Decoding involves the ability to apply knowledge of letter-sound relationships to correctly pronounce printed words.” (p. 34)</p>	<p>Decoding is subsumed under <b>Word Analysis</b> (also called "phonics"), which is the process of using the relationships between spelling and pronunciation at the letter, syllable, and word levels to figure out unfamiliar words. For more proficient readers, Word Analysis also refers to knowledge of the meanings and spellings of prefixes, root words, and suffixes. Word Analysis instruction can be very effective in helping beginning readers learn to read with understanding.</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Word_Analysis.htm">http://lincs.ed.gov/readingprofiles/MC_Word_Analysis.htm</a></p>	<p>The ability to recognize words in print using letter-sound correspondences and sometimes word parts such as prefixes and suffixes. Using letter-sound correspondences requires a reader to know and say the sound or sounds each letter makes.</p>	<p>Decoding is used synonymously with <a href="#">alphabetics</a>.</p>

**Dysgraphia**

NRC	ASRP	L2A	STAR
<p>No references to dysgraphia or its subtypes (except in title of one article in reference list on page 357).</p>	<p>No reference.</p>	<p>A written expression disability. It is a deficiency in the ability to write, regardless of the ability to read. People with dysgraphia usually can write on some level but experience difficulties in various aspects of writing. The key to working with adults who have dysgraphia is to identify the area or areas of difficulty and then match accommodations and interventions to those areas of need. Generally speaking, there are two types of dysgraphia: transcription and generation.</p>	<p>No reference in tool kit or training.</p>

## Equal Access

NRC	ASRP	L2A	STAR
No references.	No references.	Equal access means that qualified persons with disabilities should have an equal opportunity to participate in or benefit from their education or employment situations. Key to equal access is that the individual be qualified. If there are basic education or experience requirements, an individual must meet them.	No reference in tool kit or training.

## Explicit Instruction

NRC	ASRP	L2A	STAR
<ul style="list-style-type: none"> <li>• “[...] learning to read almost always requires explicit instruction as well as immersion in written language.” (p. 32)</li> <li>• One of the “Principles of Reading Instruction” (Box 2-2, p. 32) is “Use explicit and systematic reading instruction to develop the major components of reading,” though “further research is needed to clarify the forms of explicit instruction that effectively develop component skills for adolescents and adults.”</li> <li>• “The evidence is clear that explicit instruction is necessary for most individuals to develop understanding of written code and its relation to speech.” (pp. 34-35)</li> </ul>	<p>Following is the summary from Chapter 4 of Applying Research in Reading for Adults: Phonics Instruction Tips in a Nutshell</p> <ol style="list-style-type: none"> <li>1. <b>Assess phonics skills</b> of adult beginning and (some) intermediate-level readers (see Chapter 8 for an initial assessment plan).</li> <li>2. <b>Provide explicit, systematic phonics instruction</b> that is matched to the assessed needs of learners.</li> <li>3. <b>Follow a defined sequence of skills</b> or adopt a structured phonics-based program.</li> <li>4. <b>Provide practice in the phonics elements</b> you have taught, possibly including the use of controlled vocabulary texts.</li> <li>5. <b>Do not make decoding skills the entire focus of the reading lesson.</b> In each lesson, address the other needed component skills as well, and provide opportunities for learners to gain access to adult-interest reading materials.</li> </ol> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Word_Analysis.htm">http://lincs.ed.gov/readingprofiles/MC_Word_Analysis.htm</a></p>	<p>Research supports the idea that using the principles of explicit instruction is an effective way to instruct individuals with LD. Explicit instruction is a scaffolded process. At first the teacher controls the learning by explaining and modeling the process. Then the teacher and student work together. Finally, the student practices independently. Throughout, the teacher offered immediate, positive, and corrective feedback.</p>	<p>A substantial body of research supports instruction that proceeds in four phases or steps of explicit instruction for students who struggle with reading.</p> <p>What is explicit instruction?</p> <ul style="list-style-type: none"> <li>• <b>Explanation:</b> The teacher explains the purpose of the instruction and describes the key concepts or procedures. (Concepts refer to knowledge, such as phonics rules or word meanings. Procedures refer to processes, such as using a prefix to help pronounce a word or using questioning while reading.)</li> <li>• <b>Modeling:</b> The teacher gives students examples of the concepts or demonstrates the procedures.</li> <li>• <b>Guided Practice:</b> The students practice using the new concepts or procedures while the teacher gives them feedback and assistance. Teachers give as much support as needed during guided practice activities. Students may need several guided practice activities.</li> <li>• <b>Application:</b> The students use the new concepts or procedures on their own while the teacher monitors their success. No support (or very little) is needed. Students can carry out the task independently at their instructional level.</li> </ul>

**Fluency (also see [Reading Components](#))**

NRC	ASRP	L2A	STAR
<p>“Reading fluency is the ability to read with speed and accuracy... The relation between fluency and comprehension is not fully understood... and it is more complex and bidirectional than previously thought.” (pp. 37-38)</p>	<p><b>Fluency</b> in oral reading refers to the ability to read connected text aloud with <i>accuracy, speed, and appropriate phrasing</i>. Generally speaking, as oral reading skill increases, so does reading comprehension. One reason for this might be that when Word Recognition becomes <u>automatic</u> a reader can dedicate more cognitive resources to understanding what he or she is reading. Conversely, when a reader has to spend time decoding words, that reader is devoting cognitive resources to Word Analysis instead of comprehension. Adult beginning readers' Fluency, as measured by their reading rate (or speed), is frequently poor, and, consequently, their comprehension may suffer. The aim of all reading instruction is to increase the level of Silent Reading Comprehension. In order to be able to devote attention to the meaning of sentences and paragraphs, learners have to be fluent readers. Hesitations caused by a need to decode unfamiliar words interrupt the flow of the author's intended meaning. Fluent reading requires that word reading ability be automatic for the particular reading level being assessed. Researchers have found high correlations between oral reading Fluency and reading comprehension.</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Oral_Reading_Rate.htm">http://lincs.ed.gov/readingprofiles/MC_Oral_Reading_Rate.htm</a></p>	<p>The ability to read smoothly and at a reasonable rate with little effort. Fluent readers also use appropriate phrasing and expression, indicating an understanding of the writer’s message.</p>	<p>“Fluency refers to the ability to read with efficiency and ease. Fluent readers identify words automatically – without conscious attention. Fluent readers can focus all of their effort on getting meaning from what they read, rather than having to spend time figuring out the words on a page.”</p> <p>“Fluency consists of three dimensions:</p> <ul style="list-style-type: none"> <li>• Accuracy - the ability to identify words correctly</li> <li>• Rate - the ability to identify words rapidly</li> <li>• Prosody - the ability to read the words with appropriate phrasing and expression”</li> </ul> <p>“Comprehension affects fluency because it can be difficult to read in phrases if you do not understand what you are reading.”</p>

**Fluency and Automaticity (also see [Fluency](#))**

NRC	ASRP	L2A	STAR
<p>Automaticity is not defined, but is mentioned in reference to writing instruction: “Some foundational writing skills need to be explicitly taught to the point of automaticity.” (p. 51)</p>	<p>Automaticity is mentioned with regard to instruction in phonics: <a href="http://lincs.ed.gov/readingprofiles/MC_Word_Analysis.htm">http://lincs.ed.gov/readingprofiles/MC_Word_Analysis.htm</a></p> <p><b>Blending</b> (aka synthetic phonics) is a key skill to teach beginners because it mimics the process readers go through to sound out a word. Once readers have learned to match letter names with letter sounds, this knowledge is used to pronounce words by blending the separate sounds to arrive at the complete word, as in /p/-/a/-/t/ /pat/. Learners should practice to automaticity blending sounds in written words and writing words when the instructor pronounces the individual sounds.</p> <p>Fluency is mentioned in connection with oral reading fluency: <a href="http://lincs.ed.gov/readingprofiles/MC_Oral_Reading_Rate.htm">http://lincs.ed.gov/readingprofiles/MC_Oral_Reading_Rate.htm</a></p> <p>Generally speaking, as oral reading skill increases, so does reading comprehension. One reason for this might be that when Word Recognition becomes automatic a reader can dedicate more cognitive resources to understanding what he or she is reading. Conversely, when a reader has to spend time decoding words, that reader is devoting cognitive resources to Word Analysis instead of comprehension.</p> <p>Adult beginning readers' Fluency, as measured by their reading rate (or speed), is frequently poor, and, consequently, their comprehension may suffer.</p> <p>The aim of all reading instruction is to increase the level of Silent Reading Comprehension. In order to be able to devote attention to the meaning of sentences and paragraphs, learners have to be fluent readers. Hesitations caused by a need to decode unfamiliar words interrupt the flow of the author's intended meaning. Fluent reading requires that word reading ability be automatic for the particular reading level being assessed. Researchers have found high correlations between oral reading Fluency and reading comprehension.</p>	<p>Refers to problems with fluent and automatic reading. These problems appear when an individual struggles with rapid, efficient, and correct word identification, as well as use of appropriate phrasing and expression. Related to Word Recognition and Spelling Profile because problems reading at the individual word level will negatively affect fluency and automaticity. This profile’s underlying deficit is in naming speed.</p>	<p>“Lack of fluency can be an issue for readers at all levels, causing readers to slow down and making their reading hesitant and painstaking. But fluency is especially important for reading development at the intermediate level, because adult learners at this level need to use reading as a tool for acquiring new vocabulary and content knowledge.”</p>

## Generation

NRC	ASRP	L2A	STAR
No references.	No references.	A type of dysgraphia. This is the translation of ideas into written language. First, ideas must be retrieved from memory and then expressed in a way that others can understand. Involves higher-order processes such as generating ideas, writing for an audience, or using correct grammar.	No reference in tool kit or training.

## Handwriting

NRC	ASRP	L2A	STAR
No references.	No references.	A type of transcription dysgraphia. Individuals who have problems remembering how to form letters, either in print or in script, will have trouble producing automatic and legible handwriting. Handwriting can also be affected by problems remembering word forms. In addition, some individuals are challenged by the motor skills needed to hold a pen or a pencil for handwriting. When an individual experiences a problem with one or more of these processes, writing can become a slow, attention-draining, and physically tiring activity. A handwriting deficit can affect an individual's motivation to write. Without accommodations, it certainly affects the amount of writing an individual produces.	No reference in tool kit or training.

### Individualized Education Program (IEP)

NRC	ASRP	L2A	STAR
No references.	No references.	An IEP identifies the special education and any needed related services (such as speech therapy or counseling) that will be delivered. These services must be delivered at no cost to the family. Thus, individuals identified with one or more disabilities under IDEA are entitled to services. This entitlement is supported by funding to schools for special education and related services. IDEA also provides for a process for students to prepare for transition from high school. IDEA mandates that transition planning be part of the IEP starting at age 16.	No reference in tool kit or training.

### The Individuals with Disabilities Education Act (IDEA) - 2004

NRC	ASRP	L2A	STAR
No references.	No references.	IDEA serves the needs of students with disabilities, starting with early identification, which can occur at birth through exit from high school and must occur by age 21. Some states extend this age beyond 21. Students must be part of a school system to be covered by this law. This means that students who drop out of school or who graduate are not covered. Children who are suspected of having a disability are referred to school personnel for identification and diagnosis. It is the responsibility of the school system to provide diagnostic services. If one or more disabilities are identified, then an intervention plan called an individualized education program (IEP) is developed. Additionally, IDEA takes into account the process of transitioning from secondary education to postsecondary. One relatively new part of the transition planning process is the development of a Summary of Performance (SOP) document.	No reference in tool kit or training.

## Language Comprehension

NRC	ASRP	L2A	STAR
<p>No references, except in the titles of articles in the reference list.</p>	<p>Listening comprehension is mentioned as a way to gauge the comprehension of beginning readers (ASRP Profile 10):  <a href="http://lincs.ed.gov/readingprofiles/FT_Browse10_Suggest.htm">http://lincs.ed.gov/readingprofiles/FT_Browse10_Suggest.htm</a></p> <p><b>How can we determine a learner's reading comprehension potential if their oral reading accuracy is GE 0-2?</b> They can listen. There are listening comprehension tests that will give you a grade level at which your learner is able to understand reading passages. We can say that a listening comprehension test is another measure of verbal ability and one that is directly related to measures of reading comprehension.</p>	<p>This profile will cause an individual to have difficulty constructing meaning from spoken or written language. A reading disability in language comprehension can be either the main problem or, for some individuals, a result of related problems with word recognition and spelling and/or fluency and automaticity. The underlying deficit with this profile is in verbal memory.</p>	<p>For the beginning reader, <b>learning how to read</b> is the primary task. Once a reader decodes the words, he or she usually understands the meaning of a text. At the intermediate level, however, <b>learning from what is read</b> is often the focus. This means that the intermediate reader will encounter new academic content more often than the beginning reader.</p> <p>Intermediate-level texts also present ideas differently than beginning-level texts. The beginning reader is most likely to come across narrative and descriptive texts, while the intermediate-level reader faces text structures such as compare/contrast and cause/effect.</p>

## Learning Difficulty

NRC	ASRP	L2A	STAR
<p>No references.</p>	<p>No references.</p>	<p>Learning difficulties arise when a specific task or circumstance in the learning environment inhibits an individual's ability to learn. Learning difficulties can extend to specific learning tasks.</p>	<p>Tool kit and training use the term "instructional needs."</p>

## Learning Disabilities

NRC	ASRP	L2A	STAR
<p>“Learning disabilities is an umbrella term that encompasses several types of developmental disorders evident as difficulties in learning specific academic or language skills, typically reading, mathematics, oral language communication, writing, and motor performance. Learning disabilities have been historically difficult to define in part because they are not a unitary or homogeneous disorder and in part because they have been defined through exclusionary rather than inclusionary criteria.” (p. 180)</p>	<p>No references.</p>	<p>This designation is applicable to a smaller group of learners. Learning disabilities is a legal term for a neurological condition within the individual that makes one or more of the processes associated with learning extremely difficult. Individuals with LD are protected by laws and have legal rights. According to the National Research Center on Learning Disabilities, 2007, “Strong converging evidence supports the validity of the concept of SLD (specific learning disabilities). This evidence is particularly impressive because it converges across different indicators and methodologies. The central concept of SLD involves disorders of hearing and cognition that are intrinsic to the individual. SLD are specific in the sense that these disorders each significantly affect a relatively narrow range of academic and performance outcomes. SLD may occur in combination with other disabling conditions, but they are not due primarily to other conditions, such as mental retardation (now referred to as intellectual disabilities), behavioral disturbance, lack of opportunities to learn, or primary sensory deficits.”</p>	<p>Tool kit and training follow the principle of universal design:</p> <p>“In education, we apply the principle of universal design when we plan instruction that minimizes barriers to learning from the outset. In this tool kit, and the training sessions that go with it, we applied universal design by describing techniques and materials you can use with all intermediate-level adult basic education readers, including students with learning disabilities and English language learners.”</p>

## Naming Speed

NRC	ASRP	L2A	STAR
<p>Neither defined nor described (mentioned briefly on page 59).</p>	<p>Naming speed is not mentioned on the ASRP. However, Rapid Automatized Naming was assessed for the ARCS and information about the RAN and the ARCS is available via this pop-up <a href="http://lincs.ed.gov/readingprofiles/ARCS_Pop.htm">http://lincs.ed.gov/readingprofiles/ARCS_Pop.htm</a> and the “ARCS Methodology” pdf that appears on it: <a href="http://lincs.ed.gov/readingprofiles/ARCS_methodology.pdf">http://lincs.ed.gov/readingprofiles/ARCS_methodology.pdf</a></p>	<p>The ability to read smoothly is affected by an underlying process called naming speed. This is tested by showing an individual a word or object and testing how long it takes that person to retrieve the name of the object. Individuals with reading disabilities are usually slower at this task, which indicates difficulty in retrieving the spoken word for a visual stimulus. This slow retrieval of words that an individual already knows affects how quickly an individual can read sentences and passages. In addition, individuals with naming speed deficits may have difficulty remembering common letter sequences, such as prefixes, suffixes, or stems. Failing to recognize these often-repeated word chunks slows down the word retrieval process. When an individual is slow at retrieving familiar words and word parts, writing and spelling can be negatively affected.</p>	<p>No reference in tool kit or training.</p>

## Oral Vocabulary

NRC	ASRP	L2A	STAR
<p>Types of vocabulary (i.e., oral versus reading) are not differentiated, though the report does sometimes use “oral language,” usually when talking about phonological awareness.</p>	<p>ASRP uses <i>oral vocabulary</i> to refer to oral (as opposed to written) vocabulary assessments.</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Word_Meaning.htm">http://lincs.ed.gov/readingprofiles/MC_Word_Meaning.htm</a></p> <p>“Spoken language” is discussed as follows:            “Reading material written at the 0-4 GE contains vocabulary and concepts that are familiar—similar to everyday spoken language.”</p>	<p>Words used in listening and speaking comprise one’s oral vocabulary.</p>	<p>“For a true measure of vocabulary, use tests that require no reading. If students are required to read vocabulary items, any weaknesses they have in alphabetics will affect the results.”</p> <p>“A useful framework for thinking about the breadth of a learner’s vocabulary is the notion of word tiers... Word tiers are based on the ideas that words in language have different levels of utility, and that a mature and literate individual’s vocabulary consists of three tiers... Tier 1 consists of basic words – concrete words that should be part of a person’s oral vocabulary...”</p>

## Paraphrasing

NRC	ASRP	L2A	STAR
<p>No references.</p>	<p>No references.</p>	<p>A useful reading strategy. Paraphrasing is a comprehension strategy that asks readers to identify important information and put that information into their own words. The three-step “RAP” (Read-Ask-Put) strategy is good for struggling readers because it asks them to process information at the paragraph level rather than taking on larger chunks of text.</p>	<p>Presented during summarizing and as a fix-up strategy:</p> <ul style="list-style-type: none"> <li>• “Think about what you have read and retell or summarize it in your own words.”</li> </ul>

**Phonemic Awareness (also see [Reading Components](#))**

NRC	ASRP	L2A	STAR
<p>Decoding requires the development of phonological awareness, which consists of phonemic awareness and alphabetic knowledge. Phonemic awareness is defined as “an oral language skill that involves awareness of and ability to manipulate the units of sound, phonemes, in a spoken word.” (p. 34)</p>	<p><b>Phonemic Awareness (PA)</b> is the awareness that speech is made up of a sequence of sounds that can be manipulated — changed, added, or subtracted — to form different words: <i>sick, slick, slim, slam</i>. (Phonics, another term for Word Analysis, refers to the knowledge of letter sounds, syllable patterns, and the rules used to decode words.)</p> <p><b>Phonemic Awareness instruction:</b> Research has found that, "Adult non-readers are unable to consistently perform on their own almost all Phonemic Awareness tasks... very few adult non-readers possess even the most basic Phonemic Awareness ability." In addition, adult poor readers who report having had difficulty learning to read as children show persisting poor Phonemic Awareness.<sup>RR</sup></p> <p>ABE readers who are not progressing in Print Skills can be assessed in Phonemic Awareness. They may profit from instruction in Phonemic Awareness such as isolated practice of a single PA task. When sounds are matched to letters, Phonemic Awareness becomes part of Word Analysis (phonics) instruction.  <a href="http://lincs.ed.gov/readingprofiles/MC_Phonemics.htm">http://lincs.ed.gov/readingprofiles/MC_Phonemics.htm</a></p>	<p>The ability to detect individual sounds within words. Phonemic awareness is related to but separate from the skill of looking at a word and figuring out the letter sounds (decoding).</p>	<p>“Phonemic awareness is the ability to manipulate the basic sounds (or phonemes) of spoken language. For example, knowing that the sounds /s//k//u//l/ combine to form the spoken word <i>school</i> shows phonemic awareness.”</p>

## Reading

NRC	ASRP	L2A	STAR
<p>“Reading is the comprehension of language from a written code that represents concepts and communicates information and ideas.” (p. 31) An earlier page in the report, however, identifies the “foundational components of reading” as “word recognition, fluency, vocabulary, reading comprehension, background knowledge, strategies for deeper analysis, and understanding of texts.” (p. 2)</p>	<p>Not explicitly defined.</p>	<p>Not explicitly defined.</p>	<p>No definition in the tool kit. A handout provided during training states that: “Reading is a complex process where all components may be active at the same time.” (Curtis &amp; Kruidenier, 2005, p. 2)</p>

## Reading Components

NRC	ASRP	L2A	STAR
<p>“The major components of reading are well-documented and include <a href="#">decoding</a>, <a href="#">fluency</a>, <a href="#">vocabulary</a>, and <a href="#">comprehension</a>.” (p. 32)</p>	<p>See chart: <a href="http://lincs.ed.gov/readingprofiles/MC_Reading_Components.htm">http://lincs.ed.gov/readingprofiles/MC_Reading_Components.htm</a></p> <p>The chart divides the components of reading into two groups: Print Skills (<a href="#">phonemic awareness</a>, <a href="#">word analysis</a>, <a href="#">word recognition</a>, <a href="#">spelling</a>, and <a href="#">fluency</a>) and Meaning Skills (word meaning, background knowledge, silent reading comprehension). Print Skills and Meaning Skills are each in a box, with arrows from each pointing downward to a box that contains “Reading Comprehension.”</p> <p>[Note from SME: ASRP refers to Silent Reading Comprehension as both a component (in that it contributes to the component of vocabulary) and the outcome of the acquisition and deployment of the other components. In addition, Spelling is referred to as a component for diagnostic purposes.]</p>	<p>There are five components to reading: phonemic awareness, decoding, fluency, vocabulary, and comprehension.</p>	<p>“Four components are key to reading:</p> <ul style="list-style-type: none"> <li>• Alphabetsics - the process readers use to identify words</li> <li>• Fluency - the ability to read with efficiency and ease</li> <li>• Vocabulary - the body of words whose meanings a person knows and understands</li> <li>• Comprehension - the process and product of understanding text”</li> <li>• “Although we talk about reading in terms of these components, all are interrelated, and the mastery of one component can be related to mastery in another.”</li> </ul>

**Reading Comprehension (also see [Reading Components](#))**

NRC	ASRP	L2A	STAR
<p>Cognitive processes involved: “First, comprehension requires adequate and sustained attention... Second, comprehension requires the reader to interpret and integrate information from various sources (the sentence being read, the prior sentence, prior text, background knowledge, and extraneous information)... Third, each reader has at least an implicit standard of coherence used while reading to determine whether the type and level of comprehension aimed for is being achieved.” (pp. 39-40)</p>	<p><b>Silent Reading Comprehension</b></p> <p>For most of us Silent Reading Comprehension is what we mean when we talk about a person's reading ability. It is the end result of the reading process, when all of the components interact successfully. Silent Reading Comprehension is also what is usually measured by standardized tests, such as the <i>TABE</i>, the <i>ABLE</i>, or <i>CASAS</i>. "Adults [in ABE classes] 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."</p> <p>There are other subskills of reading comprehension that require knowledge of the structure of language (compound and complex sentences, paragraphs, stories, and informational text), and the ability to interact with text (metacognition) by assuming some responsibility for understanding the author's message.</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Text_Comprehension.htm">http://lincs.ed.gov/readingprofiles/MC_Text_Comprehension.htm</a></p>	<p>Understanding what we are reading, and re-reading when something is not clear. To comprehend, a reader constructs meaning by using the text and prior knowledge.</p>	<p>“The process and product of understanding text.”</p> <p>“Success in reading requires accurate and fluent word identification as well as knowledge of word meanings. But proficiency in alphabetics, fluency, and vocabulary is not sufficient. A reader must also connect the words in a text to discover an author's ideas, and then see how those ideas fit with what he or she already knows. And a reader should recognize when he or she has not understood an author's ideas, and know ways to overcome that.”</p>

## Reading Disabilities

NRC	ASRP	L2A	STAR
<p>“The term reading disability is often used interchangeably with the terms dyslexia, reading disorder, and learning disabilities in reading. Adults with reading disabilities experience lower reading achievement than what is expected given their age, intelligence, and education.” (pp. 182-183)</p>	<p>We know that if an adult Native Speaker of English (NSE) born in the U.S. is a beginning reader, he/she is likely to be severely reading or learning disabled. Even though two-thirds report having had trouble with reading by the 4th grade, only half received some form of academic assistance in K-12. The only kind of remediation that could be effective now is a direct, systematic, and sequential phonologically-based curriculum and continued practice toward automatic recognition of letters and sight words.  <a href="http://lincs.ed.gov/readingprofiles/FT_Browse10_Add.htm">http://lincs.ed.gov/readingprofiles/FT_Browse10_Add.htm</a></p> <p>[Note from SME: Direct mention of reading disabilities occurs under additional information for all ASRP Profiles, especially Profile 10. For each profile, self-reports of early reading difficulties and placement in special classes, resource room, etc., is summarized.]</p>	<p>Reading disabilities are commonly defined as a reading proficiency below what would be expected for an individual’s age, intelligence, education, or professional experience. It is a specific kind of learning disability. Reading disabilities are often broadly referred to as “dyslexia.” However, dyslexia is actually a combination of reading problems – in particular, trouble accurately and fluently decoding single words, as well as issues with spelling.</p>	<p>No reference in tool kit or training.</p>

## Reading Profiles

NRC	ASRP	L2A	STAR
<p>Discusses learner profiles (characteristics of the learner) as well as motivational profiles (what motivates learners). “Although some attempts have been made to assess adults’ profiles for instructional purposes, the reliability and validity of any particular approach to assessing profiles of skills and other characteristics for the purpose of planning instruction remains to be established.” (p. 246)</p>	<p>“A reading profile is a picture of a reader’s strength and needs in the component skills.”            Features 11 reading profiles.  <a href="http://lincs.ed.gov/readingprofiles/MC_All_Profiles.htm">http://lincs.ed.gov/readingprofiles/MC_All_Profiles.htm</a></p>	<p>Research on reading disabilities suggests three distinct profiles: Word Recognition and Spelling, Language Comprehension, and Fluency and Automaticity. An individual may have one, two, or all three of these profiles.</p>	<p>“After you collect information about a learner's mastery levels on each reading component, you can construct a profile. The profile is a summary of the relationships among a student's strengths and needs in reading.”            “The profile is central to planning reading instruction. You can use profiles to organize groups of students who share similar strengths and needs. You can also use profiles to determine students' instructional levels in order to select appropriate levels for materials.”            “The ARCS revealed important differences in reading needs among the three levels of learners. For beginning readers, the primary needs are alphabetic and fluency; for advanced readers, vocabulary and comprehension. But the study revealed greater complexity for intermediate-level readers, identifying five different groups. Each group shows a different pattern of strengths and needs among the reading components.”</p>

## Reading Vocabulary

NRC	ASRP	L2A	STAR
Types of vocabulary (i.e., oral versus reading) are not differentiated.	No references.	Words recognized and understood in print comprise one’s reading vocabulary.	“Tier 2 words are more abstract... Tier 2 words begin to appear in reading materials at the intermediate-level... Tier 3 consists of words that are associated with particular content areas...”

## Reasonable Accommodations

NRC	ASRP	L2A	STAR
No references.	No references.	The Rehabilitation Act states that services “are not required to produce the identical result or level of achievement for handicapped (sic) and non-handicapped (sic) persons, but must afford handicapped (sic) persons equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement.” This idea is sometimes called “leveling the playing field.”	No reference in tool kit or training.

**The Rehabilitation Act of 1973**

NRC	ASRP	L2A	STAR
No references.	No references.	Also known as the “Rehab Act,” the Rehabilitation Act of 1973 was enacted to prevent discrimination against individuals with disabilities. It applies to organizations receiving federal funding, including educational organizations and employers. Any employer with more than 15 employees is required to comply with this law. One purpose of this law is to offer individuals with disabilities the same opportunities to succeed as nondisabled individuals. This is called equal access. The Rehab Act also promotes nondiscrimination through reasonable accommodations. Limitations of the Rehab Act include: requires self-disclosure and self-advocacy on the part of the individual, places responsibility on the individual with the disability to provide his or her own documentation of the disability, and provides limited funding to state rehabilitation agencies for direct services for employment-related training, education, and support.	No reference in tool kit or training.

**Response to Intervention (RTI)**

NRC	ASRP	L2A	STAR
Not fully addressed. “Neurocognitive research shows the plasticity (change) of brains in response to interventions for struggling readers extends into young adulthood, but studies are needed with older adults to determine if the same patterns of neuronal reorganization would occur later in life in response to instruction.” (p. 205)	No references.	Reflects the most recent thinking on diagnosing and serving students in K-12; changes the focus of the problem from the students to the teaching process. This reframing calls for all students to receive high-quality instruction using scientifically-based methods. Students are assessed, but not to obtain a diagnosis. Rather, students are assessed to determine progress and inform teaching. This combined instruction-assessment process is now an allowable way to diagnose LD in the most recent federal special education legislation.	This term is not used in either the tool kit or training. However, two basics of RTI – use of assessment results to shape instruction and continuous progress monitoring – are major elements in the tool kit and training.

## Self-determination

NRC	ASRP	L2A	STAR
<p>“Consistent with motivational theories that emphasize self-determination and findings on the role of participation in goal setting, adults who are allowed to participate or control the decision are also more likely to report higher levels of training commitment, to allocate more time and effort to attending classes, and to spend more time engaged in on-task learning activities than adults who are not allowed choice over enrollment.” (p. 161)</p>	<p>No references.</p>	<p>“Self-determination is a combination of skills, knowledge, and beliefs that enables a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one’s strengths and limitations together with a belief in oneself as capable and effective is essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults in our society.” (Field et. al., 1998)            Factors of self-determination include: gaining self-awareness, learning to value yourself, planning, being proactive, reflecting and readjusting, and environment.</p>	<p>This term is not used in the tool kit or training. However, throughout the training, the importance of involving learners in monitoring their progress and providing them with opportunities to reflect on and discuss the utility and value of newly acquired knowledge and/or processes are emphasized.</p>

## Self-disclosure

NRC	ASRP	L2A	STAR
<p>No references.</p>	<p>No references.</p>	<p>In a disability context, “disclosure” means that people with disabilities share information about their disability for the specific purpose of receiving accommodations.</p>	<p>No reference in tool kit or training.</p>

## Strategy, Strategy Instruction

NRC	ASRP	L2A	STAR
<p>“Skilled readers are attuned to the differences between texts and spoken language... and they know the strategies that help them comprehend various kinds of text.” (p. 32)</p>	<p>“There are other subskills of reading comprehension that require knowledge of the structure of language (compound and complex sentences, paragraphs, stories, and informational text), and the ability to interact with text (metacognition) by assuming some responsibility for understanding the author's message. Many ABE learners have to learn "how" to comprehend. Teachers address these issues through instruction in reading comprehension strategies.”</p> <p>"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.”</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Text_Comprehension.htm">http://lincs.ed.gov/readingprofiles/MC_Text_Comprehension.htm</a></p>	<p>A strategy includes an individual’s approach to a task and how he or she thinks and acts while performing the task. The strategy provides a plan for accomplishing a task. This plan is usually in the form of steps to follow.</p>	<p>“Strategies are actions that readers take to accomplish goals.”</p> <p>“Comprehension instruction involves teaching students comprehension strategies they can apply to anything they read, whether or not they have much knowledge or interest in the subject matter.”</p> <p>“A student comprehension interview helps identify the comprehension strategies a student uses while reading.”</p> <p>“Struggling readers don’t always realize that comprehension involves engaging actively with a text. Teaching comprehension strategies can help students understand this.”</p> <p>The tool kit and training for comprehension are organized around strategies that help students to:</p> <ul style="list-style-type: none"> <li>• Connect sentences to form ideas</li> <li>• Relate those ideas to what they already know</li> <li>• Recognize when an idea is missed, and knowing what to do about it</li> </ul> <p>The tool kit and training focus on the following strategies:</p> <ul style="list-style-type: none"> <li>• Summarizing</li> <li>• Questioning</li> <li>• Activating prior knowledge</li> <li>• Using knowledge of text structures</li> <li>• Fix-up strategies</li> <li>• Text marking</li> </ul> <p>“Teaching a small set of strategies well is better than briefly exposing students to a wide variety of strategies.”</p>

## Summarizing

NRC	ASRP	L2A	STAR
<p>The term “summarizing” is used related to writing and text-related skills:</p> <ul style="list-style-type: none"> <li>• One of the “Effective Practices in Writing Instruction” (Box 2-5, p. 51) is “summarizing reading passages in writing.”</li> <li>• “Process approaches to writing, teaching sentence construction skills, and teaching text structure as part of a writing activity had a small-to-moderate impact on reading comprehension. Activities included writing questions and answers about the material read, taking notes about text, summarizing text, and analyzing and interpreting text through writing.” (p. 53)</li> </ul>	<p>No references.</p>	<p>The term “summarizing text” is used in the Professional’s Guide. “The ability to summarize text is essential to successful reading in school and the workplace. It is particularly important for identifying and remembering the main points in employment-related reference material and communications. Developing summarizing skills takes practice because it is challenging to learn how to identify the most important information and to express it succinctly.” (p. 120)  <a href="http://lincs.ed.gov/publications/pdf/L2AProfessionalGuide_final.pdf">http://lincs.ed.gov/publications/pdf/L2AProfessionalGuide_final.pdf</a></p>	<p>“Questioning and summarizing are two key comprehension strategies.”  “Summarizing and questioning are strategies readers use to connect sentences to form ideas.”  “Summarizing is a very complex activity that is best taught in parts over multiple lessons.”  “Summarizing a text makes it easier for learners to identify the important ideas. You can help learners summarize by showing them how to answer two questions for every paragraph in a text:</p> <ul style="list-style-type: none"> <li>• What is the topic of this paragraph?</li> <li>• What is the most important point the author makes about that topic?</li> </ul> <p>Once you have identified the important points for each paragraph, review the points and ask: is every point key to understanding the author's ideas? Eliminate any points that are unnecessary. Then join the remaining points to create a summary of the entire text. Provide students with opportunities to practice summarizing, in small groups and on their own.”  “Again, summarizing takes lots of scaffolding and practice. This kind of activity, where the teacher begins modeling the steps in summarizing and then continues to have students apply those steps, is one way you can teach the summarizing strategy. Summarizing helps readers connect sentences to form ideas, one important goal of strategy instruction.”</p>

## Summary of Performance (SOP) Document

NRC	ASRP	L2A	STAR
No references.	No references.	<p>The purpose of the SOP is to facilitate the student’s successful movement from secondary school to postsecondary environments by developing a school exiting document. The SOP is a summary or synthesis of the students accomplishments, goals, needs (including accommodations), and future plans. For individuals with learning disabilities, this document should provide diagnostic information and list accommodations important in postsecondary education and employment. Since the SOP is a relatively new mandate, it is implemented in a variety of ways. Ideally, the student should play an active part in developing the SOP. A goal is for postsecondary programs to accept the SOP as disability documentation and guide to effective accommodations. However, most postsecondary institutions do not accept the SOP unless a recent diagnostic report (within two to three years) is attached.</p>	No reference in tool kit or training.

## Transcription

NRC	ASRP	L2A	STAR
No references.	No references.	<p>A type of dysgraphia. This is specific to the process or writing (as opposed to reading or speaking). It is the production of letters and spelling required for a written product. Transcription draws on processes involved in retrieving letter forms and familiar word spellings from long-term memory, strategically spelling novel words, and motor planning to produce letters by hand. Involves lower-order processes. There are two types of transcription dysgraphia: spelling and handwriting.</p>	No reference in tool kit or training.

## Verbal Memory

NRC	ASRP	L2A	STAR
No references (except as part of one article title in the reference list on page 348).	No reference, except for short-term and working memory assessments used in ARCS that are mentioned in the “ARCS Methodology” pdf: <a href="http://lincs.ed.gov/readingprofiles/ARCS_methodology.pdf">http://lincs.ed.gov/readingprofiles/ARCS_methodology.pdf</a>	The underlying process supporting language comprehension is verbal memory. Verbal memory is tested by analyzing an individual’s ability to remember and repeat a series of words, phrases, or numbers in order. A verbal memory deficit means that the individual has a poor memory for linguistic information. This can limit comprehension, because readers are challenged remembering what they read and make connections as they move through a passage. This difficulty can affect both literal and inferential comprehension, as well as the ability to solve word problems.	No reference in tool kit or training.

## Vocabulary (also see [Reading Components](#), [Oral Vocabulary](#), [Reading Vocabulary](#))

NRC	ASRP	L2A	STAR
Knowledge about words, including “not only the definition of the words being read but also how the words are used, their different forms, and what they connote in different situations.” (p. 37) “Vocabulary knowledge is a primary predictor of reading success.” (p. 35)	<p><b>Word Meaning (Vocabulary)</b></p> <p>Knowing the meanings of the words used in a text is fundamental to comprehension. The more Word Meanings readers know, the better they will be able to understand text that they can decode.</p> <p>[Note from SME: ASRP uses Word Meaning and Vocabulary interchangeably. The free test on ASRP is called “The Word Meaning Test” because on this oral expressive vocabulary test, the target is the meaning of the word across its related forms (e.g., abundant, abundance, abundantly) rather than the three separate words.]</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Word_Meaning.htm">http://lincs.ed.gov/readingprofiles/MC_Word_Meaning.htm</a></p>	The knowledge of word meanings. An individual’s vocabulary is the words he or she understands. Vocabulary knowledge is the single biggest predictor of comprehension.	“Vocabulary - the words whose meanings a person knows and understands - has long been recognized as the best single predictor of comprehension. When learners are unfamiliar with the meanings of the words in a text, they have trouble comprehending the text. And the more trouble they have with comprehension, the fewer opportunities they have for learning new word meanings. In other words, vocabulary can be both a cause and a consequence of comprehension difficulties.”

## Word Recognition and Spelling

NRC	ASRP	L2A	STAR
<p>The ability to recognize written words and spell them correctly.</p>	<p>Both of these components are discussed. <a href="http://lincs.ed.gov/readingprofiles/MC_Word_Recognition.htm">http://lincs.ed.gov/readingprofiles/MC_Word_Recognition.htm</a></p> <p><b>Word Recognition</b> is the ability of a reader to recognize written words correctly and virtually effortlessly. It is sometimes referred to as "isolated Word Recognition" because it entails a reader's ability to recognize words individually - from a list, for example - without the benefit of surrounding words for contextual help.</p> <p>Rapid and effortless Word Recognition is the main component of fluent reading. Words that beginning readers initially sound out through Word Analysis or phonics come to be recognized as whole units after readers encounter them repeatedly in connected text. This means that beginning readers need to read lots of connected text at an appropriate level to solidify their Word Analysis and Word Recognition abilities — to move from sounding out words to rapid Word Recognition. ABE learners need many encounters with a word in order to develop quick and accurate recognition of it. Practice with flash cards, lists, and word grids is needed to provide these repeated encounters.</p> <p><a href="http://lincs.ed.gov/readingprofiles/MC_Spelling.htm">http://lincs.ed.gov/readingprofiles/MC_Spelling.htm</a></p> <p>Good readers are able to spell at levels close to their word reading ability. This is not surprising because both abilities require the same skills: <a href="#">Phonemic Awareness</a>, <a href="#">Word Analysis</a>, and visual memory.</p>	<p>Described in terms of reading disability profiles; often called dyslexia. Characterized by problems reading individual words and problems with spelling. Common areas of weakness for individuals with this profile are phonemic awareness and decoding.</p>	<p>“Usually, adults at the intermediate level already have basic phonemic awareness, know letter-sound correspondences, how to blend sounds together, and recognize many irregularly spelled words by sight. However, more advanced aspects of phonics/word analysis can still pose a problem...”</p>

## **A note concerning why the term “learning preferences” is not included in the matrix:**

Both STAR and ASRP are based in research and best practices for teaching reading. There is no evidence that reading instruction based on “learning styles” or “learning preferences” is effective for children or adults (Willingham, 2005). Reading in alphabetic languages is task-driven: the reader must recognize a string of letters as a word, apply phonics knowledge to the word, pronounce it, and access its meaning (Adams, 1990; Rayner, 1998; National Reading Panel, 2000). There are no primarily auditory, visual, or kinesthetic routes that can bypass the reading process described above.

Note: Some of the structured language approaches for reading disabled beginning readers make use of multisensory activities (Birsch, 2011). For example, Orton-Gillingham and the Wilson Reading System use whole-arm motion for “sky-writing” to practice the spelling of non-phonetic words. And Lindamood-Bell strives to make learners aware of the parts of the mouth that produce the various speech sounds and how they feel when they are produced. However, in these examples, the goal of the multisensory instruction is to facilitate the instant recognition of letter strings (Orton-Gillingham) or the mastery of speech sounds (Lindamood-Bell) so that these aspects of decoding can be effortlessly employed in the above reading process.

Adams, M. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.

Birsch, J. R. (2011). *Multisensory Teaching of Basic Language Skills / Edition 3*. Baltimore, MD: Paul H. Brookes.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction*. Washington, DC: National Institutes of Child Health and Human Development.

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning Styles: Concepts and Evidence. *Science in the Public Interest, A Journal of the Association for Psychological Science* (9) 3, 105-119. [http://www.psychologicalscience.org/journals/pspi/PSPI\\_9\\_3.pdf](http://www.psychologicalscience.org/journals/pspi/PSPI_9_3.pdf)

Rayner, K. (1998). Eye movements in reading and information processing: Twenty years of research. *Psychological Bulletin*, 1998, 124, 372-422.

Willingham, D. (2005). Ask the Cognitive Scientist: Do Visual, Auditory, and Kinesthetic Learners Need Visual, Auditory, and Kinesthetic Instruction? *American Educator: Summer 2005*. <http://www.aft.org/newspubs/periodicals/ae/summer2005/willingham.cfm>

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<sup>i</sup> National Research Council. *Improving Adult Literacy Instruction: Options for Practice and Research*. Washington, DC: The National Academies Press, 2012. Retrieved from [http://www.nap.edu/catalog.php?record\\_id=13242](http://www.nap.edu/catalog.php?record_id=13242)

<sup>ii</sup> U.S. Department of Education, Office of Vocational and Adult Education. Literacy Information and Communication System (LINCS), Assessment Strategies and Reading Profiles (ASRP) website <http://lincs.ed.gov/readingprofiles/index.htm>

<sup>iii</sup> U.S. Department of Education, Office of Vocational and Adult Education. Literacy Information and Communication System (LINCS), Learning to Achieve (L2A) website <http://lincs.ed.gov/programs/learningtoachieve/materials.html>

<sup>iv</sup> U.S. Department of Education, Office of Vocational and Adult Education. Student Achievement in Reading (STAR) website <http://www.startoolkit.org/>