

# Evidence-Based Facilitator Guide: Improving Intermediate Literacy

---

## **Recommendation 1.** Explicit Vocabulary Instruction

*Updated December 2022*

**CC**NETWORK  
Comprehensive Center Network



**REGION 17**  
Idaho  
Montana



# IMPROVING INTERMEDIATE LITERACY

## Professional Development Facilitator's Guide

### Recommendation 1. Explicit Vocabulary Instruction

Materials checklist and notes	1
State Department of Education/Background	2
Presenter's facilitation script	3
List of handouts	43
References	44

# Materials checklist and notes

Item	Consumable Y or N	Quantity	Notes
Computer			
Projector			
Clicker			
PowerPoint presentation on flash drive or computer			
Handouts			
Chart paper and pens			
Sticky notes			
Agenda			
Sign-in forms			
Evaluation form			
Articles to be read			
Blue and yellow highlighters			
Miscellaneous			



# State Department of Education/Background

## About the guide

Designed to help instructional leaders deliver effective training to teachers, this guide provides nine evidence-based strategies for supporting literacy in grades 4–8. It includes practical application ideas and examples, as well as resources for immediate implementation. This guide is based on *Improving Adolescent Literacy*, a practice guide from the Institute of Education Sciences (IES). More information is available at [www.ies.ed.gov](http://www.ies.ed.gov).

This guide, as well as the accompanying presentation materials, were compiled by the Region 17 Comprehensive Center at Education Northwest for the Idaho State Department of Education. It was updated in 2022 to address the updated standards for English Language Arts/Literacy.

## How to use the guide

This guide is designed to complement the training provided to an instructional leader (e.g., coach, teacher, administrator) who supports teachers in using evidence-based strategies to improve outcomes for students in grades 4–8. The instructional leader will be trained to facilitate and lead learning in a school and/or district. This guide includes a suggested script for each slide in the accompanying PowerPoint presentation. The facilitator can also use the supplemental handouts. For additional information on word recognition, phonological awareness, decoding, sight words recognition, language structure, and more, see <https://courses.lumenlearning.com/suny-hccc-childrenslit> and <https://courses.lumenlearning.com/literacypractice>.

*Note: The presentation slides that correspond to this guide are based on the **first** of four IES recommendations; there are four presentations total, and the first 19 slides are the same in each one. Thus, if you are delivering more than one of these presentations to the same audience during the same professional learning event, after describing the session outcomes (see slide 1), you can skip ahead to slide 20 after your first presentation, and begin with the section. This guide is focused on **Recommendation 1: “Explicit Vocabulary Instruction.”***



The design of this guide provides flexibility to facilitators to respond to school or district needs in a targeted manner. Each evidence-based practice can be provided as a brief training session over the course of a school year. These recommendations can be grouped into common threads and provided as a full- or half-day professional development session. The practices and subsequent activities are not content-specific; they can help improve literacy across content areas in grades 4–8.

## What participants need to bring

Participants should bring their core instructional materials, teacher manuals, textbooks, and/or grade-level standards. Throughout the professional learning session, they will be asked to reference and make connections to the instructional tools (i.e., core instructional materials) they are using.

## Presenter’s facilitation script

### Outcomes (post on chart paper)

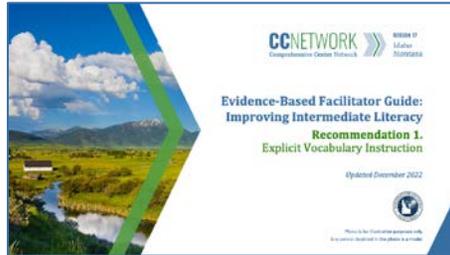
- Describe two to three evidence-based research practices for providing explicit vocabulary instruction in a specific content area.
- Identify and apply those practices to current core instructional materials, teacher manuals, textbooks, and/or grade-level standards.

### Engagement structures

- Structured partners (pairs at table)
- Table groups
- Pairs-to-square (two partner pairs come together to create a group of four)
- Conversation placemat (from Discussion module—will be used as the engagement and discussion structure in this module)
- Talking chips

- Additional engagement strategies (e.g., quick writes, weighty words, inside-outside circle, cold call, whip around)

## Slide



1

## Suggested script

*(Introduce yourself and invite colleagues and participants to introduce themselves. Establish structured partners and have partners identify whether they will be a “1” or a “2” during partner work.)*

Today’s presentation was developed in partnership with the Idaho State Department of Education and the Region 17 Comprehensive Center at Education Northwest, a nonprofit organization.

The goal of this professional development is to share evidence-based recommendations for improving intermediate literacy. It is designed to provide research and practical ideas for meeting the needs of all students, including students with reading difficulties across content areas. We have two outcomes for today *(point to chart paper)*. By the end of this training, you will be able to:

- Describe two to three evidence-based research practices for providing explicit vocabulary instruction in a specific content area.
- Identify and apply those practices to current core instructional materials, teacher manuals, textbooks, and/or grade-level standards.

Our shared goal is to provide support for Idaho educators; together, we must equip students in grades 4–8 with the literacy skills they need to succeed.

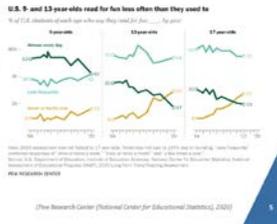
Slide	Suggested script
<p data-bbox="233 367 386 386">An important insight</p> <p data-bbox="233 402 264 427">“</p> <p data-bbox="264 428 583 483">14% of American adults are unable perform functional reading tasks such as reading medicine labels and train schedules. Another 29% are at 'basic' levels ... and do not read or write well enough to perform the literacy requirements of a typical job.”</p> <p data-bbox="516 501 583 513">(Moats, 2020)</p>  <p data-bbox="233 557 264 581">»</p> <p data-bbox="201 618 222 643">2</p>	<p data-bbox="779 350 869 375"><b>Quote</b></p> <p data-bbox="779 410 1419 440">Take a minute to read and reflect on this quote.</p> <p data-bbox="779 472 1125 501"><i>(Allow time for reflection)</i></p> <p data-bbox="779 532 1297 561">What does this make you think about?</p> <p data-bbox="779 594 1356 623"><i>(Allow participants to share their thoughts)</i></p> <p data-bbox="779 654 1598 683">What implications does this have for you and your students?</p> <p data-bbox="779 716 1329 745"><i>(Ask participants to share their thoughts)</i></p> <p data-bbox="779 776 1871 938">Every day and in every classroom in Idaho, teachers and students are using texts to communicate through speaking, listening, writing, and reading. We are preparing our students for a world of informational texts. This presentation has been prepared for ALL of you here today.</p> <p data-bbox="779 971 1850 1089">The one common factor across content areas is the ability to read critically. Whether you teach math, science, social studies, English, or technology, we ALL teach literacy.</p>
<p data-bbox="233 1154 436 1174">The literacy challenge is real</p>  <p data-bbox="233 1341 264 1365">»</p>	<p data-bbox="779 1138 1892 1349">The <b>literacy challenge</b> is real for students, teachers, and families. In 2019, the National Assessment of Educational Progress (NAEP), was administered at schools across the nation. The 2019 report card shows that, in most states, fourth- and eighth-grade students have stalled or declined in reading proficiency over the last decade. Two-thirds of students did not score proficient in reading on the most</p>

Slide	Suggested script
3	<p>recent test. A third of the nation's fourth-graders tested "below basic." (Baumhardt, 2019).</p> <p>In Idaho, 34 percent of fourth graders and 37 percent of eighth graders scored at or above proficient in reading. Both of these scores were above the national average. Further, across the board, Idaho is in the top 15 in the national rankings. However, the eighth grade reading score decreased by four points in 2019—a statistically significant drop.</p> <p>Students considered proficient or advanced by NAEP standards possess the literacy skills necessary for academic success. National statistics show that many students leave middle school unable to read adequately and are, therefore, unprepared to learn from textbooks at the high school level and beyond.</p> <p>According to the stages of reading development (Chall, 1983), in grades 4 and above, students move from “learning to read” to “reading to learn.” During this stage, students read increasingly more demanding academic texts that contain challenging words and complex concepts beyond their oral vocabularies and knowledge base. In the critical transition period from “learning to read” to “reading to learn,” we often see a drop-off in reading scores, particularly among students from socioeconomically disadvantaged backgrounds.</p> <p>Research shows that students who are poor readers at the end of grade 1 almost never acquire average-level reading skills by the end of elementary school (Francis et al., 1996; Shaywitz et al., 1999; Torgesen &amp; Burgess, 1998.) When children fail at early reading and writing, they begin to dislike reading. When</p>

Slide	Suggested script
	<p>readers who struggle do not receive effective intervention, they read less—and learn less from reading—than students who are proficient readers. This delayed development of reading skills affects students’ exposure to texts. As a consequence, they do not gain vocabulary, background knowledge, and information about how reading material is structured. In short, the word-rich get richer, and the word-poor get poorer. (Bend Learning Center, n.d.)</p>
<p>1 in 4 children in America grow up without learning how to read</p>  <p>4</p>	<p>Educators who work with students in grades 4–8 know that, unfortunately, not all children learn to read by the time they leave elementary school.</p> <p>In fact, 1 in 4 children in the United States grows up without learning how to read. How does this affect content area learning? What does it do for their future? Statistically, two-thirds of students who cannot read proficiently by the end of grade 4 end up experiencing incarceration or requiring government support to meet their basic needs (WriteExpress Corporation, n.d.).</p>

## Slide

Overall, 42 percent of fourth-graders read recreationally "almost every day" compared with only 17 percent of eighth-graders.



5

## Suggested script

*(Read slide aloud)*

What is happening from elementary school to junior high? How are you supporting students who have not been provided the tools and supports they need to reach grade level expectations? How might this affect motivation?

*(Structured partner share)*

Here are some schools' ideas:

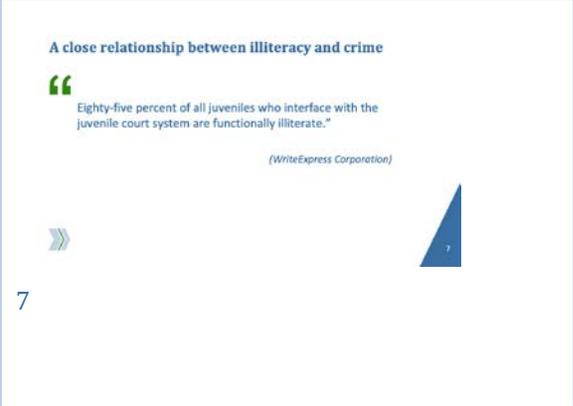
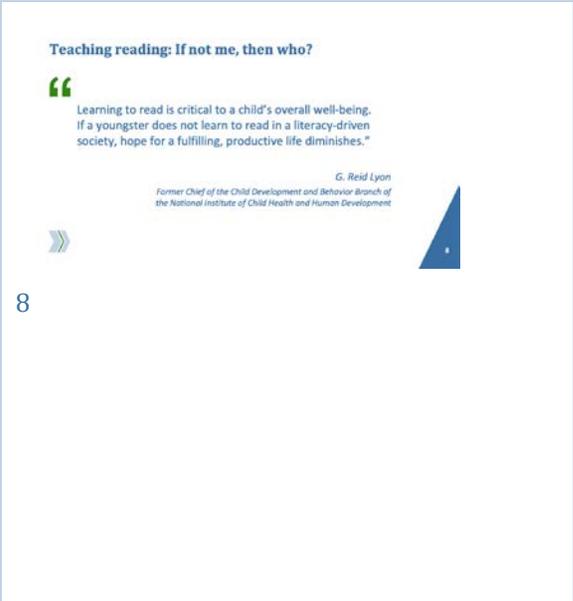
- Librarians who know students' reading level and suggest appropriate books
- Intervention classes targeted to students' core deficits in reading—not simply blanket intervention programs that may or may not address specific student needs
- Reading clubs in which students sign up for books to read
- Grade-level audiobooks for students who need additional support
- Strong Tier 1 instruction that meets the needs of all students, not just those who read at grade level

Students who don't read proficiently by third grade are four times likelier to drop out of school



(From E. Coley Foundation, 2012)

Although students who fall behind rarely catch up without intensive intervention, research has demonstrated that secondary students can make significant gains with proper instruction. Research also suggests that with adequate time for instruction and data-based instructional practices, struggling middle school readers can improve their reading skills.

Slide	Suggested script
<p>6</p> <p><b>A close relationship between illiteracy and crime</b></p> <p>“ Eighty-five percent of all juveniles who interface with the juvenile court system are functionally illiterate.” ”</p> <p><small>(WriteExpress Corporation)</small></p> <p>7</p> 	<p>Did you know there is a close connection between illiteracy (reading on or below the fourth-grade level) and crime? <i>(Read quote on slide)</i></p> <p>Low literacy does not cause criminal behavior, but many of the contributing factors to low literacy also contribute to criminal behavior, which may lead to incarceration. These factors include racial inequality, poverty, and low-quality education, and make individuals more vulnerable to both crime and illiteracy. Estimates of the percentage of incarcerated adults who are low literate range between 29 and 60 percent (Haderlie &amp; Clark, 2017).</p>
<p><b>Teaching reading: If not me, then who?</b></p> <p>“ Learning to read is critical to a child's overall well-being. If a youngster does not learn to read in a literacy-driven society, hope for a fulfilling, productive life diminishes.” ”</p> <p><small>G. Reid Lyon Former Chief of the Child Development and Behavior Branch of the National Institute of Child Health and Human Development</small></p> <p>8</p> 	<p>Let's read this quote in unison. Ready? "Learning to read..."</p> <p>Do you agree or disagree with this quote? <i>(Thumbs -up or thumbs-down)</i></p> <p>Why? <i>(Discuss)</i></p> <p>(Before advancing to the next slide, have participants quickly synthesize the information from slides 3–8 with the activity below)</p> <p>Write the following question on a sticky note: Why focus on improving literacy <b>instruction</b> in ALL content areas? Get out your conversation place mat and turn to your structured partner.</p> <p>Our key question is written on your sticky note. This is what is in the circle of the place mat. We are going to use "Conversation Skills for Supporting Ideas with Examples," located on the top right side of the place mat.</p>

Slide	Suggested script
	<ol style="list-style-type: none"> <li>1. Partner 1 will pose the question from the sticky note but reword it using one of the question prompts in the “Supporting Ideas with Examples, Prompting” section. For example, if I were partner 1, I could say, “Can you give me an example from the information introduced thus far as to why we need to focus on improving literacy instruction in ALL content areas?”</li> <li>2. Partner 2 will respond using one of the sentence starters from the responding section of the place mat, citing a fact from slides 3–8.</li> <li>3. Switch roles.</li> </ol>
<p data-bbox="237 743 548 764"><b>Why focus on improving literacy instruction?</b></p> <p data-bbox="237 777 512 805">The teacher is the most important factor in student learning. If not me, then who?</p>  <p data-bbox="205 995 222 1016">9</p>	<p data-bbox="779 727 1808 805">When we think about improving literacy instruction, nothing will replace an effective teacher. <i>(Tell participants to write “20x” on a sticky note)</i></p> <p data-bbox="779 833 1866 1040">The teacher is the most important factor in student learning, as good instruction is 15-20 times more powerful than any other variable in predicting student progress and growth (U.S Congress House Committee on Education and Labor, 2008). However, there is more variance from classroom to classroom than there is from school to school or district to district.</p>
<p data-bbox="237 1109 352 1144"><b>Good instruction is powerful</b></p> <p data-bbox="237 1154 401 1276">“Good instruction is the most powerful means of developing proficient comprehenders and preventing reading comprehension problems.” <i>(Snow, 2002)</i></p>  <p data-bbox="237 1300 342 1320">CCNETWORK</p> <p data-bbox="205 1357 237 1378">10</p>	<p data-bbox="779 1089 1083 1122"><i>(Read the quote aloud)</i></p> <p data-bbox="779 1149 1881 1317">As we previously discussed, the ability to read critically is the one common factor across all content areas. Whether you teach math, science, social studies, or technology, we ALL must provide good literacy instruction to ensure students have the skills and strategies necessary to be successful in school and beyond.</p>

Slide	Suggested script
	<p>Today, our goal is to provide some tools for improving literacy instruction in grades 4–8. You were asked to bring some teaching materials so that you can apply these new tools during today’s session.</p>
<p>Idaho Content Standards</p>  <p>11</p>	<p>Recognizing the value of consistent, real-world learning goals to ensure all students are graduating from high school prepared for college, career, and life, our state reviews and updates content area standards, including updated standards for English language arts/literacy, math, and science in 2022.</p> <p><i>(Pull up the website for the content standards</i>  <a href="https://www.sde.idaho.gov/academic/standards/">https://www.sde.idaho.gov/academic/standards/</a><i>. Show participants where the literacy standards and their content standards are.)</i></p> <p>These standards inform the curriculum a district adopts. Standards and curriculum work together to guide teachers in understanding what students should know and be able to do. Our goal today is to provide some tools for improving literacy and content instruction for EL students in grades 4–8.</p> <p>The information presented in today’s session addresses Idaho’s Content Standards including English Language Arts (ELA), Social Studies, Science, and all others in which we are asking students to listen, talk, read, or write.</p>

## Slide

### Idaho's 2022 English language arts/literacy standards highlights

Recommendations	New Standards Application
Comprehensive review of the College and Career Readiness Anchor (CCRA) standards	CCRA standards were removed
Remove or move the standards for Literacy in History/Social Studies, Science, and Technical Subjects	Standards for literacy in content areas were removed
Reduce the number of standards, focus complex verbiage, and prioritize the more important concepts	Reduced total number of standards Reorganization of strands (foundational skills, reading comprehension, and vocabulary development)



Idaho State Department of Education | 12

12

## Suggested script

In 2021, Idaho had a process to revise several content area standards, including English language arts/literacy. Review committees, which included classroom teachers, school leaders, university professors and members of the Idaho legislation convened and drafted new standards to meet the recommendations provided through legislative letters. The Idaho Legislators provided recommendations such as a focus on foundational reading standards, and a focus on basic writing and writing skills at lower grades were addressed. For the adolescent leaders, Idaho legislator requested shifts as seen on this slide and available at <https://www.sde.idaho.gov/academic/standards/files/standards-review/ela/ELA-Revised-Standards-Highlights-04-2022.pdf>

Changes to the structure of the standards include removing the College and Career Readiness Anchor (CCRA) standards, removing the standards for literacy in History/Social Studies, Science, and Technical Subjects, as well as reducing the total number of standards students are to master in a grade level. Removing the CCRA standards allowed for a reorganization of the literacy strands into 3 areas of foundational skills, reading comprehension, and vocabulary development. The review committees considered those recommendations and determined actions and shifts for the updated standards and structure of the standards.

## Slide

### Idaho's 2022 English language arts/ Literacy standards highlights

Recommendations	New Standards Application
Review classifications of literature and informational text to give a better balance of genres	Sub strands were re-named literature and non-fiction
Balance fiction and non-fiction reading materials, emphasizing value-rich, historically important, and uplifting literature	Reading lists were removed from standards and all appendices at the direction of the 2021 legislative letter
Reevaluate the categories of reading, writing, speaking, listening. Combine some standards in reading, listening, writing, speaking	New strands and sub strands were developed (research strand combines reading and writing, vocabulary development strand combines reading and language)



Idaho State Department, 2022

13

13

## Suggested script

In addition to structural shifts in Idaho ELA and Literacy standards, the standards review committee members were recommended to address balancing different genres and encourage a variety of appropriate, grade-level texts. They were also recommended to reevaluate the categories of reading, writing, speaking, and listening and to identify areas in which to combine the standards.

The committees responded by clarifying sub strand names into literature and non-fiction. They also removed the recommended and suggested reading list appendices. Committee members updated the Idaho ELA standards, combining through creating new strands and sub strands, such as the research strand combining reading and writing, and the vocabulary development strand combines reading and language.

### Grade band Language standards and strands



Idaho State Department of Education, 2022

14

14

*The asterisk \* indicates that the Foundational Reading Skills Language standard and standard strand of Phonics and Decoding is in earlier grades and highlighted here as part of the focus of intermediate literacy which includes grades 4 and 5.*

These grade band Language strands of Foundational Reading skills, Reading Comprehension, Vocabulary Development, Research, Writing, Oral and Digital Communication, and Grammar and Conventions with their associated standard strands are part of the Idaho ELA standards structure. These Language standards and strands are consistent K through 12 to provide continuity and complexity in developing skills in all these areas as students progress from grade to grade. The exception is Language standard, Foundational Reading Skills. You see it is noted in green with an asterisk. These skills are heavily focused in the K-3 in order to

Slide	Suggested script																																								
	<p>build a strong foundation of early literacy skills of phonics and decoding and continue in complexity into 4th and 5th grades.</p>																																								
<p>15</p>  <p>Vertically aligned grade band Language strands and standard strands</p> <table border="1"> <thead> <tr> <th>Grade 4</th> <th>Grade 5</th> <th>Grade 6</th> <th>Grade 7</th> <th>Grade 8</th> </tr> </thead> <tbody> <tr> <td>Foundational Reading Skills (Phonics and Decoding)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Reading Comprehension (Text Complexity; Volume of Reading to Build Knowledge; Textual Evidence; Reading Fluency; Literature; Nonfiction Text)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vocabulary Development (Word Building; Academic Vocabulary)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Research (Inquiry Process to Build, Present and Use Knowledge; Deep Reading on Texts to Build Knowledge)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Writing (Range of Writing; Handwriting and Keyboarding)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Oral and Digital Communications (Oral Communications; Digital Communications)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Grammar and Conventions (Grammar and Usage; Mechanics)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>(Ohio State Department of Education, 2022)</p>	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Foundational Reading Skills (Phonics and Decoding)					Reading Comprehension (Text Complexity; Volume of Reading to Build Knowledge; Textual Evidence; Reading Fluency; Literature; Nonfiction Text)					Vocabulary Development (Word Building; Academic Vocabulary)					Research (Inquiry Process to Build, Present and Use Knowledge; Deep Reading on Texts to Build Knowledge)					Writing (Range of Writing; Handwriting and Keyboarding)					Oral and Digital Communications (Oral Communications; Digital Communications)					Grammar and Conventions (Grammar and Usage; Mechanics)					<p>Each of the grade bands, language strands, and their supportive standard strands have a vertical progression meaning that skills become increasingly complex while still accounting for student developmental stages. In these intermediate and middle grades of 4 through 8, you will see that the Language strands of Reading comprehension, Vocabulary Development, Research, Writing, Oral and Digital Communications, and Grammar and Conventions span across all the grades.</p> <p>You will also notice that the specific focus of Foundational Reading Skills is identified in grade 4 and grade 5. After grade 5, students are expected to have mastery of phonics and decoding in order to apply those skills in the context of reading fluency, word building, oral communications, and grammar.</p>
Grade 4	Grade 5	Grade 6	Grade 7	Grade 8																																					
Foundational Reading Skills (Phonics and Decoding)																																									
Reading Comprehension (Text Complexity; Volume of Reading to Build Knowledge; Textual Evidence; Reading Fluency; Literature; Nonfiction Text)																																									
Vocabulary Development (Word Building; Academic Vocabulary)																																									
Research (Inquiry Process to Build, Present and Use Knowledge; Deep Reading on Texts to Build Knowledge)																																									
Writing (Range of Writing; Handwriting and Keyboarding)																																									
Oral and Digital Communications (Oral Communications; Digital Communications)																																									
Grammar and Conventions (Grammar and Usage; Mechanics)																																									

## Slide

Sample aligned standards for grades 4-8

Grade 4	4.RC.TC.1.1. Independently and proficiently read and comprehend texts representing a balance of genres, cultures, and perspectives that exhibit complexity at the lower end of the grades 4-5 band.
Grade 5	5.RC.TC.1.2. Independently and proficiently read and comprehend texts representing a balance of genres, cultures, and perspectives that exhibit complexity at the higher end of the grades 4-5 band.
Grade 6	6.RC.TC.1.1. Independently and proficiently read and comprehend texts representing a balance of genres, cultures, and perspectives that exhibit complexity at the lower end of the grades 6-8 band.
Grade 7	7.RC.TC.1.1. Independently and proficiently read and comprehend texts representing a balance of genres, cultures, and perspectives that exhibit complexity at the midrange of the grades 6-8 band.
Grade 8	8.RC.TC.1.1. Independently and proficiently read and comprehend texts representing a balance of genres, cultures, and perspectives that exhibit complexity at the higher end of the grades 6-8 band.

(Make State Department of Education, 2022)

16

## Suggested script

Here is an example of an aligned ELA standard. The RC indicates it is part of the Reading Comprehension Language standard and the TC indicates the standard strand is Text Complexity.

As you notice, this vertically aligned strand expects students to independently and proficiently read and comprehend a variety of texts. The variety includes a balance of genres, culture and perspectives. As students progress through the grades, the expectation of text complexity matches their developmental levels.

Now, let's dive into today's sessions on how **explicit vocabulary instruction** improves intermediate literacy!



17

One of our goals as teachers is to develop skilled readers so that students are fully prepared for the rigor of college or a career.

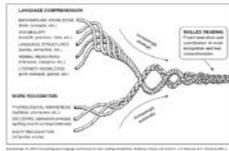
What are some essential components of being a successful/skilled reader?

Think about someone you would consider a skilled reader and describe how they think and what they can do.

*(Have participants turn and talk with a partner. Then ask them to share their thoughts as you generate a mind map to display background schema.)*

## Slide

### Scarborough's reading rope



18

## Suggested script

Let's consider two essential components represented in Scarborough's Reading Rope (2002): language comprehension and word recognition.

In the illustration, the twisting ropes represent the underlying skills and elements that come together to form two necessary braids, which represent the two essential components of skilled reading. For either of the two essential components to develop successfully, children need to be taught the elements necessary for automatic word recognition (i.e., phonological awareness, decoding, sight recognition of frequent/familiar words) and strategic language comprehension (i.e., background knowledge, vocabulary, verbal reasoning, literacy knowledge). Word recognition is developed through intentional, systematic, and explicit instruction in the structure of the English language, such as phonics. Language comprehension is developed in various ways through exposure to ideas, conversation, teacher "read-alouds," student-to-student dialogue, and more.

In other words, to unlock comprehension of text, two keys are required: being able to read the words on the page and understanding what the words and language mean within the texts that children are reading (Davis, 2006).

## Slide

### Simple view of reading (SVR)



19

## Suggested script

The simple view of reading (SVR) (Gough & Tunmer, 1986) characterizes skillful reading comprehension as the combination of the two separate—but equally important—components depicted in Scarborough’s Rope: word recognition and language comprehension.

Gough and Tunmer present SVR in a mathematical algorithm:  $WR \times LC = C$ . WR refers to word-level reading, and LC refers to the ability to understand spoken (oral) language. It is a simple multiplication problem—if one element is low, it affects the final outcome. Just as Scarborough’s Rope illustrates, if any of these pieces are missing, it affects the end result: comprehension. How can this help us get more targeted with our instruction and intervention?

According to SVR, there are four basic profiles of readers.

Look at Box 1. These readers may have adequate word recognition and language comprehension. We hope all our readers are at least adequate in the two components. And wouldn’t it be great if they were really good in both components

Look at Box 2. These readers may have poor word recognition and adequate language comprehension, which results in poor reading comprehension. In other words, when the text is read to them, these learners can make adequate inferences and answer the kinds of questions that demonstrate an understanding of the text.

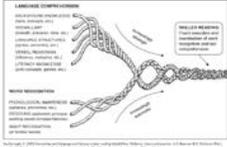
Look at Box 3. These readers may have adequate word recognition and poor language comprehension, which results in poor reading comprehension. Some English learner students fall into this category, especially if their first language

20

Slide	Suggested script
	<p>shares an alphabetic sound system, such as Spanish. Native English speakers who fall into this category are sometimes referred to as “word callers.” They can read every word but cannot understand the text. Another more technical term is hyperlexic. This is similar to when you learn to read another language (such as Italian) and can pronounce the words, but you can’t track the meaning due to poor vocabulary knowledge or not understanding the grammar and syntax.</p> <p>Look at Box 4. These readers may have poor word recognition and poor language comprehension, which results in poor reading comprehension. If a student has poor word recognition, you will need to assess language comprehension using read-alouds (or something similar) to determine if they also struggle with language comprehension.</p> <p>Our task is to find out why a reader is having difficulties. We want to find each reader’s strengths and capitalize on them. We also want to find each reader’s weaknesses and intervene accordingly.</p> <p>Again, Box 1 is the goal because we know children who have success with reading comprehension are skilled in both word recognition and language comprehension.</p> <p>This is a big concept. Let’s take a moment to synthesize the information learned on this slide. Take out your conversation place mat. This time, we will use the box labeled “Synthesize Conversation Points” located on the bottom center of the place mat.</p>

Slide	Suggested script
	<ol style="list-style-type: none"> <li>1. Partner 1 will ask a question listed in the prompting section. For example, if I were Partner 1, I could say, “What key ideas can we take away?”</li> <li>2. Partner 2 will respond using one of the sentence starters from the responding section of the place mat, citing information from slides 3–8.</li> <li>3. Switch roles.</li> </ol> <p>When thinking about Scarborough’s Rope, SVR, and the effects of illiteracy, it becomes clear that all teachers are teachers of literacy skills. Do you agree? Disagree? What things come to mind when you hear this? <i>(Pause and allow teachers to share with table groups)</i></p>
<p>A collection of the best available evidence</p> <p><a href="#">The Institute of Education Sciences (IES) Practice Guide</a></p>  <p>20</p>	<p>This guide is based on <i>Improving Adolescent Literacy</i> (Kamil et al., 2008), a practice guide from the Institute of Education Sciences (IES).</p> <p><b>Facilitator’s Note</b></p> <p>“The Institute of Education Sciences (IES) publishes practice guides to share evidence and expert guidance on addressing education-related challenges not readily solved with a single program, policy, or practice. Each practice guide’s panel of experts develops recommendations for a coherent approach to a multifaceted problem. Each recommendation is explicitly connected to supporting evidence. Using common standards, the supporting evidence is rated to reflect how well the research demonstrates the effectiveness of the recommended practices. Strong evidence means positive findings are demonstrated in multiple well-designed, well-executed studies, leaving little or no doubt that the positive effects are caused by the recommended practice. Moderate evidence means well-designed studies show positive impacts, but</p>

Slide	Suggested script
	<p>there are questions about whether the findings can be generalized beyond the study samples or whether the studies definitively show evidence that the practice is effective. Minimal evidence means that there is not definitive evidence that the recommended practice is effective in improving the outcome of interest, although there may be data to suggest a correlation between the practice and the outcome of interest” (Baker et al., 2014, p. 72).</p>
 <p>21</p>	<p>IES recommends five evidence-based practices for improving literacy.</p> <p>When a practice is recognized as evidence-based:</p> <ul style="list-style-type: none"> <li>• It is shown to have a positive effect on student outcomes.</li> <li>• The research design allows you to infer that the practice led to student improvement.</li> <li>• Multiple high-quality studies have been conducted.</li> </ul> <p>Read the five recommendations. (<i>Wait time</i>)</p> <p>Why do you think IES identified these five things? (<i>Wait time and allow for sharing</i>)</p> <p>Today’s session is focused on <b>Recommendation 1: “Explicit vocabulary instruction.”</b></p> <p>Our goal is to provide some tools for improving student literacy in grades 4–8, specifically through <b>explicit vocabulary instruction in literacy learning</b> for all content areas.</p>

Slide	Suggested script
	<p>At the end of this session, you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe two to three evidence-based research practices</li> <li>• Identify and apply those practices to current core materials</li> </ul> <p>More information on the five recommendations is available at <a href="http://www.ies.ed.gov">www.ies.ed.gov</a>.</p>
<p>Recommendation 1. Explicit vocabulary instruction</p>  <p>The diagram illustrates Scarborough's Rope, a model of reading comprehension. It features a central rope with two main sections: 'Word Recognition' on the left and 'Language Comprehension' on the right. The rope is held by two hands, one at the top and one at the bottom, symbolizing the integration of these two skills. Text boxes provide details: 'Word Recognition' includes phonological awareness, phonics, and fluency; 'Language Comprehension' includes background knowledge, language structures, and vocabulary. A box on the right notes that 'Vocabulary knowledge is a prominent predictor of reading comprehension' and is depicted as a central thread connecting the two sections.</p> <p>22</p>	<p>Before we jump into this topic, let's discuss how <b>explicit vocabulary instruction</b> fits into the larger picture of becoming a skilled reader by connecting today's focus back to Scarborough's Rope. Remember, the rope characterizes skillful reading comprehension as a combination of two separate but equally important components: word recognition and language comprehension. Vocabulary knowledge is a prominent predictor of reading comprehension, and it is depicted as a central thread in the language comprehension component because of its connections to background knowledge and language structures (Scarborough, 2002).</p> <p>A student's vocabulary knowledge level is a strong predictor of reading comprehension (Duncan et al., 2007). Simply put, not knowing the meaning of words in a text makes it quite difficult to comprehend that text.</p> <p><b>Partner activity</b></p> <p>Look for a "new-to-you" partner and introduce yourself. Take turns sharing your understanding of Scarborough's Rope, as well as any questions you have. <i>(If needed, partners can use "Synthesize Conversation Points" from the conversation place mat to structure their discussion)</i></p>

## Slide



23

## Suggested script

What strategies, resources, and activities do you use in your classroom for **teaching and learning vocabulary**? Why?

*(Have participants answer the question above by completing the following activity. As participants share, post a piece of chart paper titled “**Strategies for Teaching Vocabulary**” at the front of the room. This will be used in the last step of the activity.)*

1. Take out a sticky note. Think about strategies you use in your classroom for teaching and learning vocabulary. You will have 60 seconds to write down as many as you can. (Set timer)
2. Now turn to your structured partner. Share what you've written.
3. Taking into account everything you've both written, collaboratively choose your two most successful strategies.
4. Join another set of partners from another table to form a group of four.
5. Each set of partners should share their two ideas.
6. As a group, choose one of the four strategies to share with the whole group.
7. Select one person from your group to write this strategy on the chart paper up front.

Once all groups have written their strategy on the chart paper, share ideas from the list and discuss.

## Slide

### Vocabulary: The key that unlocks the meaning of text



One of the most persistent findings in reading research is the extent to which students' vocabulary knowledge relates to their reading comprehension.\*

(Baumann et al., 2003)



24

## Suggested script

Thank you for sharing the strategies you use in your classroom.

*(Take one minute to complete the activity below)*

Read the quote on the slide. If you had to choose five “weighty words” from the slide—words that carry the most meaning and punch—what would they be? Share with your structured partner.

Remember, knowing the meanings of words in a text is necessary to fully understand the message being conveyed. Integrating explicit vocabulary instruction into content areas, such as science or social studies, enhances students' ability to acquire textbook vocabulary—which leads to a deeper understanding of content information. It is also interesting to note that comprehension and vocabulary have a reciprocal relationship. For example, the stronger a student's vocabulary knowledge, the better they are able to comprehend a text. Accordingly, the more they read and comprehend, the more words they encounter, resulting in greater vocabulary knowledge.

### Successful readers vs. unsuccessful readers

Successful Readers	Unsuccessful Readers
Are exposed to a breadth of vocabulary words in conversations and print at home and at school from a very early age.	Have limited exposure to new words. May not enjoy reading and therefore do not select reading as an independent activity.
Understand most words when they are reading (at least 90 percent) and can make sense of unknown words to build their vocabulary knowledge.	Read texts that are too difficult and, thus, are not able to comprehend what they read or to learn new words from reading.
Learns words incrementally through multiple exposures to new words.	Lack the variety of experiences and exposures necessary to gain deep understanding of new words.
Have content-specific prior knowledge that assists them in understanding how words are used in a particular context.	Often have limited content-specific prior knowledge that is not sufficient to support word learning.



(Baumann et al., 2003)



25

Let's look at this chart. As you read it, think about a student in your classroom who has difficulty reading text related to the content you teach. Consider the following:

- What parts of the simple view of reading (D, LC, or both) might they be lacking and why?
- How does this feed into the outcomes or behaviors for unsuccessful readers we see on the slide?

Slide	Suggested script
	<ul style="list-style-type: none"> <li>Of the strategies you listed on your sticky note and discussed with your partner (<i>Slide 22</i>), which have been most successful in supporting this student?</li> </ul> <p>Please keep this student in mind today as we discuss ways to improve vocabulary instruction for ALL your students.</p>
<p><b>What is explicit vocabulary instruction?</b></p> <p>A family of strategies that can be divided into two major approaches:</p> <ol style="list-style-type: none"> <li>Direct instruction in word meaning</li> <li>Instruction in strategies</li> </ol>  <p>26</p>	<p>Explicit vocabulary instruction is a name for a family of strategies that can be divided into two major approaches:</p> <ol style="list-style-type: none"> <li><i>Direct instruction</i> in word meaning, such as retaining word meanings and using words in productive language (speaking and writing) by using graphic displays (for example, semantic maps) of the relationships among words</li> <li><i>Instruction</i> in strategies to promote independent vocabulary-acquisition skills, including context clues or using word parts (such as prefixes, roots, and suffixes) to derive the meaning of unfamiliar words</li> </ol> <p>Two strategies that have been identified to increase vocabulary and independent word learning are word parts (prefixes, suffixes, and root words) and context clues. Because context clue instruction is often one of the most widely used strategies in classrooms, our “instruction in strategies” discussion will focus on word parts.</p> <p>We will first explore strategies for direct instruction in word meaning, and then we will look at strategies for teaching word parts.</p>

## Slide

### How to provide explicit vocabulary instruction

- Dedicate a portion of the regular classroom lesson to explicit **vocabulary instruction**.
- Use repeated exposure to new words in **multiple oral and written contexts** and allow **sufficient practice sessions**.
- Give sufficient opportunities to use new vocabulary in a **variety of contexts through activities** such as discussion, writing, and extended reading.
- Provide students with **strategies** to make them **independent** vocabulary learners.



(Barnett et al., 2008)

27

27

## Suggested script

The IES guide recommends these strategies for providing explicit vocabulary instruction. Today, we will be exploring, practicing, and connecting these things to your core materials.

*(Use the following activity to deepen understanding of the information on the slide)*

1. Direct participants to take a small piece of paper and tear it into three pieces. Explain that these are their “talking chips.”
2. On a piece of chart paper, write the following three key ideas:
  - Vocabulary and Standards
  - Current Implementation—Looks Like
  - Growth
3. Use the chart paper as a reference point to ask participants the questions listed below. Ask one question at a time and have participants discuss in table groups, using their talking chips to ensure equality in the discussion.

### Questions

- How important is vocabulary to your content and literacy standards?
- Which elements are you implementing? What does this look like in your classroom?
- In which area do you need to grow the most?

## Slide



28

## Suggested script

Shanahan and Shanahan (2018) propose a three-phase model of reading development:

1. **Basic literacy:** Learning to decode words, develop a reading vocabulary, and comprehend text
2. **Intermediate literacy:** Using general strategies for decoding longer words and comprehending narrative and expository text
3. **Disciplinary literacy:** Using specialized strategies for comprehending and responding to texts that reflect the demands of a specific discipline

What is disciplinary literacy, and why is it important to vocabulary instruction?

- Terminology is specific to the fields of study.
- Students require different ways to identify and learn different types of words.
- The study techniques depend on the type of words that are learned.

Disciplinary literacy focuses on teaching students the differences among the various texts used across disciplines and the specialized reading practices required for comprehension and critical analysis of ideas in each one. These differences include specialized vocabulary, types of language used to communicate ideas, text structures and features (e.g., boldface headings and vocabulary, diagrams, charts, photographs, captions), and sources of information in and across disciplines. (Annenberg Learner, n.d.)

## Slide

Identification of word categories will help determine a method of instruction

Level 1 (Common)	Level 2 (Academic Words)	Level 3 (Content- or Domain-Specific)
<ul style="list-style-type: none"><li>• Basic</li><li>• Conversational</li></ul> <p>Examples: Get, smile, table, run</p>	<ul style="list-style-type: none"><li>• High function</li><li>• High utility</li><li>• Frequently occurring in academic settings</li></ul> <p>Examples: Fortunate, equate, provoke, sequence</p>	<ul style="list-style-type: none"><li>• Highly specialized</li><li>• Not frequently encountered</li></ul> <p>Examples: Amoebus, hypotocuous, Jacksonian, pi</p>



29

## Suggested script

Which words should you teach your students, and how should you teach them? Let's look at different word categories to help us answer this question.

Read these examples of word categories. *(Point to screen and wait time)*

Level 1 words are used in everyday speech, and they are usually learned in the early grades or at home, although not at the same rate by all children (Biemiller, 2007). Level 1 words are learned mostly through conversation and are not often considered challenging beyond the early grades. Students who don't know Level 1 words can easily be left behind.

How would you distinguish between Level 2 words and Level 3 words? *(Share with a structured partner)*

Level 2 words are general words that are transferable or portable, that is, words that can be used in writing and speaking across many disciplines. Level 2 words "characterize written and especially academic text—but are not so common in everyday conversation" (Beck, McKeown, & Kucan, 2002). Level 2 words appear in various content areas and text types: academic texts ("relative," "vary," "formulate," "specify," "accumulate"), technical writing ("calibrate," "itemize," "structure"), and literary texts ("misfortune," "dignified," "faltered," "unabashedly"). Level 2 words are far more likely to appear in writing than speech. The standards refer to Level 2 words as **academic vocabulary**.

These words require particular instructional attention. They are often vital to comprehension, will reappear in many texts, and are frequently part of word families or semantic networks. The challenge to teachers is to be alert to the

Slide	Suggested script
	<p>presence of Level 2 words, determine which ones need to be taught, and which ones deserve more time and attention for richer understanding. (Liben, 2013).</p> <p>Level 3 words are domain-specific words, that is, words particular to a content area or subject. They are unique to a domain or field of study (“lava,” “fuel injection,” “legislature,” “circumference,” “aorta”) and key to understanding a new concept in the text. Because of their specificity, Level 3 words are often explicitly defined by the text and repeatedly used. Thus, the author takes care to have the text itself provide much support in the learning of Level 3 words. In addition, since Level 3 words contain the ideas necessary to understanding a new topic, teachers often define and reinforce them before and after students encounter them in a text.</p> <p>When thinking about what set of words to teach, consider both categories. You can also consider any vocabulary words suggested by the authors of your teacher texts and generate a set of academic vocabulary words you will teach across several days using various instructional activities.</p>
 <p>30</p>	<p><i>(Check for understanding)</i></p> <p>Which words would be important to pre-teach? <i>(Wait for responses)</i></p> <p><i>(Add the following to the responses, if needed)</i></p> <ul style="list-style-type: none"> <li>• New words not common to oral language</li> <li>• Mature or more precise labels for concepts already under students’ control (e.g., “ravenous” for “hungry”)</li> </ul>

Slide	Suggested script
	<ul style="list-style-type: none"> <li>• Abstract words not easily pictured (e.g., “sensation,” “predicament”)</li> <li>• Words that require background knowledge for concept development</li> <li>• Multiple-meaning words</li> <li>• Words that carry the meaning in the content being read</li> </ul> <p><b>Examples</b></p> <ul style="list-style-type: none"> <li>• Background knowledge: “Igneous rocks” require knowledge of the process to understand</li> <li>• Multiple-meaning words: “net,” “volume,” and “table” in math</li> </ul>
<p><b>Core curriculum connection</b></p> <p><i>Activity: Identifying Level 2 and 3 words</i></p> <ol style="list-style-type: none"> <li>1. With your partner, determine who will read the informational passage and who will read the literary passage.</li> <li>2. <b>Individually read</b> your assigned passage. As you read, highlight Level 2 words you’d teach for this passage in yellow. Highlight Level 3 words you’d teach for this passage in blue.</li> <li>3. With your partner, meet with another pair to form a group of four. Discuss what Level 2 and Level 3 words you highlighted and compare.</li> <li>4. With your group, place words in the t-chart according to what highlighted words will need more time and attention and less time and attention.</li> </ol>  <p>31</p>	<p>What difficulties do students encounter with vocabulary when reading in your discipline? How do you address them? <i>(Talk with a partner and share with the whole group)</i></p> <p>Identifying and pre-teaching specific words will increase your students’ understanding of the text. Let’s do an activity to help you identify which types of words to pre-teach.</p> <p><b>Activity:</b> Handout 1 (“Which Words Do I Teach? Practice Identifying Tier 2 and 3 Vocabulary for Instruction”)</p> <p><i>(Complete this activity with a structured partner and then meet with a structured group to share and compare findings)</i></p> <p><b>Activity: Identifying Level 2 and 3 words</b></p> <ol style="list-style-type: none"> <li>1. With your partner, determine who will read the informational passage and who will read the literary passage.</li> </ol>

Slide	Suggested script
	<p data-bbox="779 331 1881 448">2. Individually read your assigned passage. As you read, highlight Level 2 words you'd teach for this passage in <b>yellow</b>. Highlight Level 3 words you'd teach for this passage in <b>blue</b>.</p> <p data-bbox="779 469 1864 586">3. With your partner, meet with another pair to form a group of four. Identify the person in your group who read the same passage you read. Discuss what Level 2 and Level 3 words you highlighted and compare.</p> <p data-bbox="779 607 1829 683">4. With your group, place words in the t-chart according to what highlighted words will need more time and attention and less time and attention.</p> <p data-bbox="779 704 1026 740"><b>Facilitator's note</b></p> <p data-bbox="779 761 1698 837">Discuss participant findings from the activity, using the notes below as a reference.</p> <p data-bbox="779 865 1892 1170">Let's look at Passage 1. This excerpt contains 321 words: nine Level 3 words and phrases and 10 Level 2 words. Understanding of all nine Level 3 words is necessary to fully comprehend this passage. As noted in the introduction, these words are often repeated and defined in context. "Segregated" is introduced in the second paragraph, although determining its meaning from this paragraph might be difficult without a clear grasp of "discrimination." However, the next paragraph provides more context, as well as repetition.</p> <p data-bbox="779 1198 1887 1365">The second paragraph contains a high proportion of Level 3 words not repeated later in the text, as well as one Level 2 compound word. With this many words, students might struggle with the words packed together, so determining meaning from context becomes more difficult. These terms may have been described</p>

Slide	Suggested script
	<p>earlier in the book, but that’s not likely since this excerpt was taken from the introduction. In these situations, if students are to have the opportunity to read independently and learn from their reading, some words (especially Level 3 words) might need to be introduced before reading. The remaining Level 3 words, “poll tax” and “registered,” are well supported by the context of the last paragraph and would not likely need any pre-teaching. In general, introductions are more likely to need support before reading, but even here, a third of the Level 3 words could be determined from context.</p> <p>The first Level 2 word, “determined,” is essential to understanding the passage. Here, the power of “determined” lies in the notion that skin color in Montgomery, Alabama, at that time was the causal agent for all that follows. The power of the word and its connection to the topic merit intensive instruction. It is also a word with multiple meanings, it is likely to appear in future texts, and it is part of a word family (determine, determination, determined, terminate, terminal). “Second-class,” “worship,” and “obstacle” are more concrete and supported by the text. Although “literacy” is less concrete, as well as part of a word family (literate, literature), it is not central enough to the meaning of the passage to warrant intensive instruction. “Rigged,” “disqualify,” “harassment,” and “grievances” are more central to the text and the topic in general and are likely to appear in future social science texts. On this basis, they would merit more intensive discussion. (Liben, 2013).</p> <p><i>(Allow time for discussion and check for understanding)</i></p>

## Slide

Do suggested vocabulary words in your core materials align to the suggested criteria?

Words that:

- Are central to understanding the text
- Are frequently used in the text
- Are likely to appear in other content areas
- Have multiple meanings
- Have affixes



32

## Suggested script

Now it's time to apply this to your core instructional materials. To complete the activity, work through the same process you just used.

1. Identify a passage of text from your core instructional materials.
2. Preview your assigned passage.
3. Identify Level 2 and Level 3 words.
4. Complete the t-chart for the words you identify. Which words will need more time/attention, and which words will need less time/attention?
5. Use the questions on the slide to reflect. Of the words you've identified as needing more time/attention, which four would you pre-teach and why? If these words are already identified in your core instructional materials, does this information align with or support your choices? Why or why not?

*(Allow time for participants to discuss with a partner or table group. Tell them to keep the handout with the four words they chose at hand, as we will use it for several activities later in the session.)*

### Facilitator's note

If needed, here are some possible questions and examples:

- What words in the passage would be central to the text? (Possible answers: "environment," "exhibit," "impact," "investigation")
- Were there any frequent words? ("Natural environments," etc.)
- What words were portable or fit under general academic vocabulary?

Slide	Suggested script										
	<ul style="list-style-type: none"> <li>• Were there any words with multiple meanings? (“Environment”—as in an ecosystem or one’s surroundings)</li> <li>• Any words with affixes? (Perhaps “exhibit”—“expose” and “exhibition” morphological variants)</li> </ul>										
<p data-bbox="237 548 512 565">Different disciplines use different words</p> <table border="1" data-bbox="237 581 600 716"> <thead> <tr> <th>Discipline</th> <th>Vocabulary Feature</th> </tr> </thead> <tbody> <tr> <td>History</td> <td>Metaphorical terms with political points of view (War of Northern Aggression/War Between the States vs. Civil War, The Gilded Age, movements vs. uprisings)</td> </tr> <tr> <td>Science</td> <td>Greek and Latin roots (precise, stable, show relationships)</td> </tr> <tr> <td>Math</td> <td>Words that are precise but have different meanings than general use (factor, prime)</td> </tr> <tr> <td>ELA</td> <td>Words describing emotions, states of mind, and the senses (“the insane joy of the hunt,” “as I climbed the rock, my face contorted,” “shouting voluptuously senseless words”)</td> </tr> </tbody> </table> <p data-bbox="205 792 237 816">33</p>	Discipline	Vocabulary Feature	History	Metaphorical terms with political points of view (War of Northern Aggression/War Between the States vs. Civil War, The Gilded Age, movements vs. uprisings)	Science	Greek and Latin roots (precise, stable, show relationships)	Math	Words that are precise but have different meanings than general use (factor, prime)	ELA	Words describing emotions, states of mind, and the senses (“the insane joy of the hunt,” “as I climbed the rock, my face contorted,” “shouting voluptuously senseless words”)	<p data-bbox="779 529 1167 561"><i>(Share examples on the slide)</i></p> <p data-bbox="779 591 1835 667">A fantastic way for teachers to identify words quickly is using <a href="#">Academic Word Finder</a> from Achieve the Core. <i>(Show examples from the website if time allows)</i></p>
Discipline	Vocabulary Feature										
History	Metaphorical terms with political points of view (War of Northern Aggression/War Between the States vs. Civil War, The Gilded Age, movements vs. uprisings)										
Science	Greek and Latin roots (precise, stable, show relationships)										
Math	Words that are precise but have different meanings than general use (factor, prime)										
ELA	Words describing emotions, states of mind, and the senses (“the insane joy of the hunt,” “as I climbed the rock, my face contorted,” “shouting voluptuously senseless words”)										
<p data-bbox="222 943 407 959">Use of prefixes and suffixes</p> <p data-bbox="222 963 386 1029">Of course, different disciplines use different words, but the frequency or value of prefixes, suffixes, and (especially) combining forms also differs by discipline.</p> <p data-bbox="222 1032 323 1045"><i>(Guelohn &amp; Rosenthal, 2014)</i></p> <p data-bbox="222 1065 323 1078">CC NETWORK</p> <p data-bbox="205 1117 237 1141">34</p>	<p data-bbox="779 857 1896 1338">Words are made up of individual sounds (phonemes), as well as word parts that linguists call morphemes. Morphemes are the smallest units of meaning in words (to remember this, consider that “morphemes” and “meaning” both begin with “m”). The root “morph” means “shape or form,” so a morpheme is the smallest thing that forms a particular idea or meaning. In school, we call them prefixes, affixes, suffixes, roots, or base words. While inflectional suffixes lie –s, –ed, and –ing don’t greatly impact word meaning, derivational affixes often affect the meanings and grammatical functions of the base words they are attached to (Bear, Invernizzi, Templeton, &amp; Johnson, 2020). Thus, explicit instruction in common derivational affixes (such as we-, -un, -ly, -less) will support students in making meaning of many new words they’ll likely encounter.</p>										

Slide

Suggested script

There are two basic types of morphemes: free and bound. Free morphemes can stand alone; they do not have to be combined with any other morpheme to make a word. Bound morphemes must be attached to or “bound” to another morpheme to make a word. The majority of morphemes in English come from one of three ancient languages: Greek, Latin, or Anglo-Saxon.

All words contain at least one morpheme, or unit of meaning. However, when it comes to different disciplines, the frequency or value of prefixes, suffixes, and combining forms differs. Let’s look at some examples.

Most frequent prefixes

Prefix	Meaning	Example	ELA	Math	Social Studies	Science
anti-	opposite	antenna				
dis-	not, opposite of	discontinue				
dis-	not, opposite of	disagree				
dis-	away from	disembark				
dis-	apart	disrupt				
dis-	in, in, in	dislike, disagree				
dis-	in, in, in, in	dislike, disagree				
dis-	not	discontinue, disagree				
dis-	between	disagree				
dis-	apart	dislike				
dis-	wrong	dislike				



35

White, Sowell, and Yanagihara (1989) identified 20 prefixes that are frequently found in the texts we use in schools. Teaching students word-learning strategies that include prefix instruction provides access to the meaning of words. These are common meanings, but they are not exhaustive.

How is this important to your content area? *(Discuss the chart and give examples)*

“Dis” means “away from,” not “opposite.”

The prefix “de” often means “down/away,” such as in “descend.”

Think about your subject areas and where you might put an “X” on this chart. *(Wait time and discuss)*

## Slide

### Most frequent prefixes (continued)

Prefix	Meaning	Example	ELA	Math	Social Studies	Science
con-	with	concentric				
con-	together	concrete				
dis-	apart	disorder				
re-	back, again	return, redesign				
semi-	half	semicircle				
sub-	under	submarine				
super-	above	superstar				
un-	not	unhappy				
under-	below	underway				



36

## Suggested script

“Un” is another example of a prefix. Explicit instruction of prefixes is an effective strategy for deriving meaning from words.

I’m going to model this for you. *(Show a colored index card with “un” on it.)* “Un” means “not.” Let’s try some words using our prefix “un.”

*(Show a white index card with “familiar” on it.)* Our base word is “familiar.” Where does the prefix go? *(Pause for participants to answer.)* Yes, the beginning of the word. *(Place the prefix “un” in front of “familiar.”)* Now we have “unfamiliar.” Tell me again, what does “un” mean? (Not) What does “unfamiliar” mean? *(Not familiar)* *(Repeat the process with “happy” and “likely.”)*

Now it’s your turn. *(Ask participants to choose a prefix and try this explicit instruction technique.)*

### Most frequent suffixes

Suffix	Meaning	Example	ELA	Math	Social Studies	Science
-able, -ible	can be done	comprehensible				
-al, -ial	having the characteristics of	personal				
-ed	past tense verb	divided				
-er	maker of	wonderer				
-er	comparative	greater				
-ful, -ous	one who	wonderful, doctor				
-ive	relating to	creative				
-ly	ad of	carefully				
-ly	having the characteristics of	linguistic				
-ing	present participle	learning				
-ion, -sion, -ation, -ition	act, process	subtraction, radiation				



37

Here are the most frequent suffixes.

We define morphemes to provide students with clues to word meanings. And as you may recall, when we discussed how readers come to critical strategic comprehension (Scarborough’s Rope), knowledge at the word level plays a role—and in this case, a student’s knowledge of word structure.



## Slide

## Suggested script

With your structured partner, choose a root word from the list and brainstorm at least five words that have this root and are also related in meaning. If you finish early, choose another root word and try the process again.

**Example:** The Latin root “spect” means “see”: inspect, spectator, spectacle, inspection, perspective

### Explicit vocabulary instructional routine

Step	Instruction	Example
STEP 1	<b>Introduce the Word</b> <ul style="list-style-type: none"><li>Write the word on the board</li><li>Read the word</li><li>Discuss origin</li></ul>	<b>Example</b> <ul style="list-style-type: none"><li>“What does courageous mean?”</li><li>“What’s the word?”</li></ul>
STEP 2	<b>Present a Student-Friendly Definition</b> <ul style="list-style-type: none"><li>Ask students the definition or have students read the definition with you</li><li>Ask when you have finished to see the word when you have finished to see the word</li></ul>	<ul style="list-style-type: none"><li>“Courageous means you are brave or not afraid”</li></ul>
STEP 3	<b>Illustrate the Word with Examples</b> <ul style="list-style-type: none"><li>Give the Examples</li><li>Visual representations</li><li>Verbal Examples</li></ul>	<ul style="list-style-type: none"><li>“When you see a soldier in battle and he’s afraid, you see”</li><li>“If I could, I’d like to see a soldier in battle and he’s afraid”</li></ul>
STEP 4	<b>Check Student Understanding</b> <ul style="list-style-type: none"><li>Check for student understanding</li><li>Engage them with the word</li><li>Ask them to think how students are understanding the word</li></ul>	<ul style="list-style-type: none"><li>“How does it compare to brave and not afraid?”</li><li>“How does it compare to brave and not afraid?”</li></ul>



(Dwyer et al., 2010)

40

40

Anita Archer has established a routine for explicit vocabulary instruction. *(Review the handout with participants)*

Since the slide gives example word “courageous”, you might mention the derivational affix -ous and how it impacts the meaning of the word, to tie-in to the last few slides as well.

### 1. Introduce the word

- Show students the word
- Read the word aloud
- Have students repeat the word aloud

### 2. Present a student-friendly definition

### 3. Illustrate the word with examples

- Provide students with a demonstration, object, action, or picture that represents the word

### 4. Engage in deep processing of the word by ask students to:

- Offer additional examples or nonexamples

Slide	Suggested script
	<ul style="list-style-type: none"> <li>• Provide additional synonyms or antonyms</li> <li>• Compare, contrast, justify, categorize, or create using the word</li> </ul> <p>Demonstrate the four-step routine with the word “incline.”</p> <ol style="list-style-type: none"> <li>1. The word is incline. What word? (<i>Incline</i>)</li> <li>2. An incline is something that slopes. Something that deviates from the straight horizontal or vertical can be called an incline.</li> <li>3. The Latin root of “incline” is “inclinare” (<i>in-clin-ar-ay</i>), which means “to bend or slope (<i>clinare</i>) toward (<i>in</i>).” If you like to walk up and down hills, you enjoy walking on inclines. Think of riding a bike on a ramp to do a jump. The ramp is sloped up—it has an incline.</li> <li>4. Option 1. Thumbs-up/thumbs-down <ul style="list-style-type: none"> <li>• Would you find an incline if you were driving up a steep mountain road? (<i>Thumbs-up</i>)</li> <li>• Does a wheelchair ramp have an incline? (<i>Thumbs-up</i>)</li> <li>• Does a flat road have an incline? (<i>Thumbs-down</i>)</li> <li>• Does a slide on a playground have an incline? (<i>Thumbs-up</i>)</li> </ul> </li> </ol> <p><b>Option 2. Movement</b></p> <ul style="list-style-type: none"> <li>• At your table, discuss this question: What would be a good movement to help us remember “incline”? (<i>After a few minutes, ask participants to demonstrate their movement</i>)</li> </ul>

Slide	Suggested script
	<p>Let's watch Anita Archer as she models this <i>explicit vocabulary routine</i>. <i>(Ctrl+Click graph on slide to follow link)</i> As you watch this video, think about the following questions:</p> <ol style="list-style-type: none"> <li>1. What steps were used in the vocabulary instructional routine to introduce each of the vocabulary words?</li> <li>2. What other procedures were used to extend vocabulary instruction?</li> <li>3. What delivery skills were used?</li> </ol> <p><i>(Discuss video)</i></p> <p>Did you notice that Anita Archer doesn't have students "draw" the word like that common teacher activity? Why might that be? <i>(Ask for responses)</i></p>
<p><b>Fast mapping</b></p> <p>“Even brief explanations of one or two sentences, when presented in the context of a supportive text, can be sufficient for [students] to make initial connections between novel words and their meanings.”</p> <p><small>(Biemiller &amp; Boote, 2006)</small></p>  <p>41</p>	<p><i>(Take one minute to complete the activity below)</i></p> <p>Read the quote on the slide. If you had to choose five “weighty words” from the slide—words that carry the most meaning and punch—what would they be? Share with your structured partner.</p> <p>Fast mapping is another method for addressing unknown words in a text. Instead of pre-teaching these words, they would be addressed during reading. According to Biemiller and Boote (2006), “Even brief explanations of one or two sentences, when presented in the context of a supportive text, can be sufficient for [students] to make initial connections between novel words and their meanings.”</p>

Slide	Suggested script
	<p>This method would be useful for words that are unknown but require less instructional time.</p> <p>When mapping a word for students, do so quickly and efficiently so that you do not interrupt the flow of the text reading. In many ways, it is like apposition within a text—where a quick definition quickly follows the targeted vocabulary word. The goal is to provide a quick definition of the word to foster comprehension of the text.</p>
<p><b>Fast mapping (example)</b></p> <p>The chemical formula behind water is surprisingly simple. First, it starts with two parts hydrogen and one part oxygen. Then, these two parts are combined to form a molecule of water.</p> <p>Oxygen is abundant on Earth and because of this, many scientists theorize that any source of hydrogen could have easily served as the origins of Earth's water.</p>  <p>42</p>	<p><i>(Model fast mapping by using the script below. Tell participants that as you read a science text excerpt, they should watch for when you quickly leave the text to “map” the word—then reenter the text so that you do not interrupt comprehension.)</i></p> <p>“The chemical formula behind water is surprisingly simple. First, it starts with two parts hydrogen and one part oxygen. Then, these two parts are combined to form a molecule of water.</p> <p>“Oxygen is abundant on earth ... when something is abundant, there is plenty of it—it is overflowing. The earth is overflowing with oxygen—it is abundant ... and because of this, many scientists theorize that any source of hydrogen could have easily served as the origins ... or beginnings ... of Earth’s water.”</p> <p>Which words were fast mapped? How might this technique be used with words that need to be taught but need less instructional time? <i>(Connect back to the t-chart activity in which participants listed words that needed the most and the least instructional time)</i></p>

## Slide

## Suggested script

### Your turn

Discipline	Word
Social Studies	Ancestor
Science	Friction
Math	Inequality
ELA	Possess

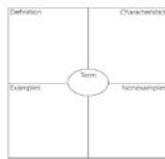


43

*(Point to the slide)* Choose one of these words and practice fast mapping with a partner. How would you quickly map the word?

Can you find words in your content materials that you could fast map?

### Instructional routine (example)



(Piper et al., 1985)



44

Graphic organizers are another strategy for vocabulary instruction. This one is often called a four-square or Frayer Model. Here's an example.

### Frayer Model



(Fast mapping: Compton & Barber's study and the relation to extended mapping, 2014. Adapted from Piper et al., 1985)



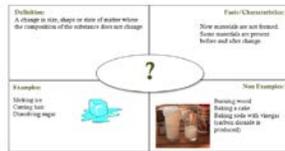
45

*(Discuss the example on the slide)*

## Slide

## Suggested script

### Guess the word



(Mishkin, 2017)

46

46

Take a minute to see if you can figure out the word or concept that needs to go in the middle of this graphic organizer. *(Wait and discuss)*

The word is \_\_\_\_\_.

### Student-friendly definitions of "memoir" (example)

Student-Friendly Definition	Traditional Definition
A writer retelling events that occurred during their life	A historical account or biography written from personal knowledge or special sources



47

47

### Activity: Handout 4 ("Vocabulary Graphic Organizer")

*(Following the slides, complete the activity as a group)*

For another example, we are going to use the word "memoir." Remember, the Frayer Model is not appropriate for all words—planning ahead is essential. Let's read the traditional definition of "memoir" together. Ready? A historical account or ...

Now, talk with a partner and then write a student-friendly definition on your handout.

### Memoir characteristics

- Does not always tell about a person's entire life
- Includes at least one life-changing event
- Usually told in the first person
- Nonfiction
- A type of autobiography



48

48

In the next box, write some characteristics of a memoir.

*(Continue model; read slide)*

Slide	Suggested script
<p>48</p> <p><b>Examples and nonexamples</b></p> <ul style="list-style-type: none"> <li>➤ Provide multiple examples/synonyms</li> <li>➤ Use caution with nonexamples</li> <li>➤ Useful examples and nonexamples <ul style="list-style-type: none"> <li>➤ Closely related to topic and characteristics</li> <li>➤ Concrete and personally or culturally relevant</li> </ul> </li> </ul> <p>»</p> <p>49</p>	<p><i>(Continue model)</i></p> <p>Nonexamples can cause confusion if a student’s understanding of a word is poor. Nonexamples can also cause greater confusion for English learner students.</p> <p>Explain to students that the difference between examples and nonexamples may not always be clear. Always allow students to explain their reasoning behind their choices.</p>
<p><b>Memoir examples</b></p> <ul style="list-style-type: none"> <li>➤ A short story about the day I broke my arm</li> <li>➤ A diary kept by a child who grew up in a war zone</li> <li>➤ A book by Michael Jordan about his experience playing baseball</li> </ul> <p>»</p> <p>50</p>	<p><i>(Continue model; discuss why each bullet point is an example)</i></p> <p><b>Facilitator’s note</b></p> <p>Michael Jordan retired from basketball and played minor league baseball for one season in 1994.</p>
<p><b>Memoir nonexamples</b></p> <ul style="list-style-type: none"> <li>➤ A short story about turning into a superhero</li> <li>➤ A fictional diary of a teenager who is having trouble at school</li> <li>➤ A book an author writes about Michael Jordan’s time playing baseball</li> </ul> <p>»</p> <p>51</p>	<p><i>(Continue model; discuss why each one is a nonexample)</i></p> <p><i>(If there is time, have participants refer to their identified list of Level 2 and Level 3 words from their core content [Slide 31.] Then have them identify one of the four words they had determined needed more instructional time. Explain that using the</i></p>

Slide	Suggested script
51	<p><i>Frayer Model would be another way to provide instruction for that word. Have participants plan instruction for that word using the Frayer Model.)</i></p>
<p data-bbox="237 472 499 492">Visual and kinesthetic representations</p> <div data-bbox="237 505 583 597"> <p data-bbox="237 505 317 524">Demonstrations</p> <ul data-bbox="237 524 317 544" style="list-style-type: none"> <li>» "Maneuver"</li> </ul> <p data-bbox="373 505 554 524">Pictures of examples and nonexamples</p> <ul data-bbox="373 524 432 544" style="list-style-type: none"> <li>» "Boat"</li> </ul> </div>  <p data-bbox="237 659 260 683">»</p>  <p data-bbox="205 716 237 740">52</p>	<p data-bbox="779 456 1482 488"><i>(Demonstrate "maneuver" by moving around objects)</i></p> <p data-bbox="779 516 1877 816">Remember that we also added movement earlier when we were teaching the definition of "incline." Integrating movement into vocabulary work helps words stick. Adding a kinesthetic connection can help students create a mental image of abstract concepts and strengthen the way they think about or understand those concepts (Block, Parris, &amp; Whiteley, 2008). In addition, Medina (2008) notes that "when touch is combined with visual information, recognition learning leaps forward by almost 30 percent" (p. 208).</p> <p data-bbox="779 846 1814 967"><i>(If time allows, show the video "A Math Lesson in Algebra Vocabulary" (NewJerseyMathTeacher, 2011) and discuss how the teacher used visuals and kinesthetic representations)</i></p>
<p data-bbox="237 1032 478 1052">Reflections: Think, write, and share</p> <ul data-bbox="237 1065 548 1138" style="list-style-type: none"> <li>» What information was new? What was a good reminder?</li> <li>» What implications does this information have for your classroom?</li> <li>» What is one thing you would like to try with your students?</li> <li>» How might you use this information when planning a lesson?</li> </ul> <p data-bbox="237 1219 260 1243">»</p>  <p data-bbox="205 1276 237 1300">53</p>	<p data-bbox="779 1016 1297 1049"><b>Reflections: Think, write, and share</b></p> <p data-bbox="779 1073 1759 1195">Our final activity is a think, write, and share reflection. Think about your responses to the questions, jot down your answers, and share your ideas with a partner.</p> <p data-bbox="779 1227 1793 1300"><i>(If short on time, have participants simply share their reflections with their structured partner. If time allows, complete the inside-outside circle activity.)</i></p> <ol data-bbox="800 1333 1283 1365" style="list-style-type: none"> <li>1. Remember your number: 1 or 2.</li> </ol>

Slide	Suggested script
	<p>2. All 1s should stand up and make a large circle. After that, turn to face outward.</p> <p>3. All 2s should stand up and make an outside circle around the 1s. After that, turn to face the 1s.</p> <p>4. Discuss question 1 from the slide with the person in front of you. The 1s will share first.</p> <p>5. When both people have shared, the outside circle should move clockwise two spaces.</p> <p>6. Discuss question 2 from the slide with the new person in front of you. This time, the 2s will share first.</p> <p>7. Continue in this manner until all the questions have been discussed.</p> <p><i>(Close by reviewing today's outcomes [reference the outcomes on the chart paper])</i></p> <ul style="list-style-type: none"> <li>• Describe two to three evidence-based research practices for providing explicit vocabulary instruction in a specific content area.</li> <li>• Identify and apply those practices to current core instructional materials, teacher manuals, textbooks, and/or grade-level standards.</li> </ul> <p>We've met our outcomes for the day!</p> <p><i>(Thank participants for their time and focus)</i></p>





# Handouts

1. “Which Words Do I Teach? Practice Identifying Tier 2 and 3 Vocabulary for Instruction”
  - 1a. Key for Handout 1
2. “14 Valuable Word Roots”
3. “Instructional Routine”
4. “Vocabulary Graphic Organizer”
5. “Academic Conversation Placemat”

# References

- Annie E Casey Foundation. (2011, April 8). Students who don't read well in third grade are more likely to drop out or fail to finish high school [News release]. <https://www.aecf.org/blog/poverty-puts-struggling-readers-in-double-jeopardy-minorities-most-at-risk/>
- Annenberg Learner. (n.d.). *What is Disciplinary Literacy?* <https://www.learner.org/series/reading-writing-in-the-disciplines/what-is-disciplinary-literacy/>
- Archer, A. (n.d.). *Vocabulary instruction – sixth grade language arts*. Explicitinstruction.org. <https://explicitinstruction.org/video-secondary-main/secondary-video-3/>
- Baker, S. et al. (2014). Teaching academic content and literacy to English learners in elementary and middle school. Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. [https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/english\\_learners\\_pg\\_040114.pdf](https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/english_learners_pg_040114.pdf)
- Baumhardt, A. (2019). National assessment shows more K–12 students struggling to read. American Public Media. <https://www.apmreports.org/episode/2019/11/01/naep-hanford>
- Baumann, J. F., Kame'enui, E. J., & Ash, G. E. (2003). Research on vocabulary instruction: Voltaire redux. In J. Flood, D. Lapp, J. R. Squire, & J. M. Jensen (Eds.), *Handbook on research on teaching the English language arts* (2nd ed., pp. 752–785). Erlbaum.
- Beck, I.L., McKeown, M.G., and Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford.
- Bend Learning Center. (n.d.). *Preschool literacy*. <https://www.bendlearningcenter.com/Preschool-Literacy.htm?m=5&s=635>
- Biemiller, A. (2007). *The Influence of Vocabulary on Reading Acquisition*. [https://www.researchgate.net/publication/251801757\\_The\\_Influence\\_of\\_Vocabulary\\_on\\_Reading\\_Acquisition/citation/download](https://www.researchgate.net/publication/251801757_The_Influence_of_Vocabulary_on_Reading_Acquisition/citation/download)
- Biemiller, A. and Boote, C. (2006). An Effective Method for Building Meaning Vocabulary in Primary Grades. *Journal of Educational Psychology*. 98. 44-62.

- Block, C. C., Parris, S. R., and Whiteley, C. S. (2008). CPMs: A kinesthetic comprehension strategy. *The Reading Teacher* 61(6), 460–470. doi: 10.1598/RT.61.6.3
- Boardman, A. G., Roberts, G., Vaughn, S., Wexler, J., Murray, C. S., & Kosanovich, M. (2008). Effective instruction for adolescent struggling readers: A practice brief. RMC Research Corporation, Center on Instruction. <https://eric.ed.gov/?id=ED521836>
- Chall, J. (1983). *Stages of reading development*. New York: McGraw-Hill.
- Davis, M. (2006). *Reading instruction: The two keys*. Charlottesville, VA: Core Knowledge Foundation.
- Duncan, G. et al. (2007). School Readiness and later achievement. *Developmental psychology*. 43. 1428-46.
- Fast mapping: Carey's & Bartlett's study and the relation to extended mapping [Video]. (2014, February 14). In DSST lifespan developmental psychology: Study guide & test prep (Chapter 9, Lesson 10). Study.com. <https://study.com/academy/lesson/fast-mapping.html>.
- Francis, D.J., Shaywitz, K., Steubing, B., Shaywitz, J. and Fletcher, F. (1996). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis. *Journal of Educational Psychology*, 88(1), 3-17.
- Frey, D., Frederick, W. C., & Klausmeier, H. J. (1969). A schema for testing the level of cognitive mastery: Report from the project on situational variables and efficiency of concept learning. Wisconsin Center for Education Research.
- Gough, P., and Tunmer, W. (1986). Decoding, Reading, and Reading Disability. *Remedial and Special Education*, 7(1), 6-10.
- Gutlohn, L., & Bessellieu, F. (2014). Word ID: Assessment across the content areas (1st ed.). Arena Press.
- Haderlie, C., & Clark, A. (2017). Illiteracy Among Adults in the US. *Ballard Brief*, 2017(3), 2.
- Idaho Department of Education (SDE). (2022a). Idaho content standards. English language arts/literacy. <https://www.sde.idaho.gov/topics/admin-rules/files/negotiated-rulemaking/Idaho-K-12-State-Standards-for-ELA-Literacy.pdf>
- Idaho Department of Education (SDE). (2022b). Idaho content standards. Social Studies. <https://www.sde.idaho.gov/academic/shared/social-studies/ICS-Social-Studies.pdf>

Idaho Department of Education (SDE). (2022c). 2022 English language arts/ literacy standards highlights.

<https://www.sde.idaho.gov/academic/standards/files/standards-review/ela/ELA-Revised-Standards-Highlights-04-2022.pdf>

Idaho State Department of Education (2018). *K-6 handwriting evaluation*.

<https://www.sde.idaho.gov/academic/curricular/files/evaluation-forms/ela/K-6-Handwriting.pdf>

- Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A practice guide (NCEE #2008-4027)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education  
[https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/adlit\\_pg\\_082608.pdf](https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/adlit_pg_082608.pdf)
- Liben, D. (2013). *Vocabulary and the Common Core*. Student Achievement Partners. <https://achievethecore.org/>
- Matheny, K. (2009). Addressing literacy in the science and mathematics classrooms. *Adolescent Literacy in Perspective*. 19.
- Medina, J. (2008). *Brain rules*. Seattle, WA: Pear Press.
- Moats, L. C., & Brady, S. (2020). *Speech to print: Language essentials for teachers*. Paul H. Brookes Pub. (Original work published 2000.)
- National Governors Association (NGA) Center for Best Practices & Council of Chief State School Officers (CCSSO). (2010). *Common Core State Standards*. Washington D.C.
- NewJerseyMathTutor. Youtube (2011, March 9). A Math Lesson in Algebra Vocabulary. [Video].  
[https://www.youtube.com/watch?time\\_continue=574&v=4P308Elhuks](https://www.youtube.com/watch?time_continue=574&v=4P308Elhuks).
- Planty, M., Hussar, W., Snyder, T., Kena, G., KewalRamani, A., Kemp, J., Bianco, K., & Dinkes, R. (2009). *The condition of education, 2009 (NCES 2009-81)*. U.S. Department of Education, Institute of Education Sciences, National Center for Educational Statistics.  
<https://eric.ed.gov/?id=ED505415>
- Scarborough, H. S. (2002). The Simple View of Reading and the Strands of Early Literacy Development. In S. B. Newman & D. K. Dickinson (Eds.), *Handbook of Early Literacy Research* (p. 98). Lumen Learning. <https://courses.lumenlearning.com/suny-hccc-childrenslit/chapter/the-simple-view-of-reading/>
- Shanahan, C. & Shanahan, T. (2018). Teaching disciplinary literacy [PowerPoint Slides]. Shanahan on Literacy.  
<https://shanahanonliteracy.com/publications/disciplinary-literacy-montana>
- Shaywitz, S., Fletcher, J., Holahan, J., Shneider, A., Marchione, K., Stuebing, K., Francis, D., Pugh, K., and Shaywitz, B. (1999). Persistence of dyslexia: The Connecticut longitudinal study at adolescence. *Pediatrics*, 104(6), 1351-1359.

Snow, C. (2002). Reading for understanding: Toward a research and development program in reading comprehension.

RAND, Science & Technology Policy Institute. [https://www.rand.org/pubs/monograph\\_reports/MR1465.html](https://www.rand.org/pubs/monograph_reports/MR1465.html)

Torgesen, J.K. and Burgess, S.R. (1998). Consistency of reading-related phonological processes throughout early childhood: Evidence from longitudinal, correlational, and instructional studies. In J. Metsala & L. Ehri (Eds.), *Word recognition in beginning reading* (pp. 161-188). Hillsdale, N.J.: Erlbaum.

United States Congress House Committee on Education and Labor. Subcommittee on Early Childhood. (2008). Examining local perspectives on the No Child Left Behind Act: Field hearing before the Subcommittee on Early Childhood, Elementary and Secondary Education, Committee on Education and Labor, U.S. House of Representatives, One Hundred Tenth Congress, first session, hearing held in King of Prussia, PA. <https://www.loc.gov/item/2008377188/>

Vocabulary 101 – OnCourse Systems [presentation slides]. <https://studyslide.com/doc/567053/vocabulary-101---oncourse-systems>

White, T.G., Sowell, J., and Yanagihara, A. (1989). Teaching elementary students to use word-part clues. *The Reading Teacher*, 42, 302-308.

Williamson, G. L. (2008). A text readability continuum for postsecondary readiness. *Journal of Advanced Academics* 19(4), 602–632. <https://files.eric.ed.gov/fulltext/EJ822324.pdf>

WriteExpress Corporation. (n.d.). *Literacy Statistics*. Begintoread.com. <https://www.begintoread.com/research/literacystatistics.html>