



*Language Essentials for Teachers of
Reading and Spelling*

Professional Development

Ever get the feeling your PD is **missing** something?





Champion Change with *LETRS* in your district



COMPREHENSIVE



FLEXIBLE



RESEARCH BASED



RELEVANT

Your Professional Development is Missing Five Essential Components

Teachers Matter

When educators at Hilldale Elementary School in Oklahoma began the professional development program **LETRS**[®] (*Language Essentials for Teachers of Reading and Spelling*), Principal Price Brown immediately realized, “This

by every reader. Teaching reading should be based on scientific research applied to the classroom, and tailored to individuals. Without a deep understanding of the science behind how we learn to read, why we spell the way we do, or how phoneme awareness and phonics lead to



You’re Right.

is something that our teachers are missing, and I don’t mean just our teachers. I’m talking teachers everywhere.”

Teachers matter more to student success than any other aspect of schooling. They, not programs, teach students how to read. Yet a study of most teaching institutions found only 29 percent actually prepare teachers with all five essential components of literacy instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension.* Additionally, another national study found **63 percent of U.S. fourth grade students are not proficient readers.****

Learning to Read Is Complex

Reading requires multiple parts of the brain learning to work together. Visual symbols must be connected with language. For example, the letter b represents the sound /b/, which, in turn, distinguishes *bat* from *pat*. Brain pathways connecting speech with print must be built

comprehension, teachers are left feeling ill-prepared—like riding a bike without wheels.

LETRS Closes the Gap in Teacher Training

“Going through **LETRS**, you sit there, moment-by-moment, thinking, ‘I should have known this,’” said Ebony Lee, Ph.D., director of curriculum, instruction, and assessment, Clayton County Public Schools, Georgia. “It’s the tool to change lives and change communities.”

In Ohio, where Niles City Schools implemented **LETRS**, K–3 students reading at or above average increased from 56 percent to 87 percent within one school year.†

With **LETRS**, decades of research translates best practice into everyday classroom success, including a systematic approach to building oral and written language to improve reading instruction overall.

*National Council on Teacher Quality (NCTQ), 2013

**2017 National Assessment of Educational Progress (NAEP) report

†go.voyagersopris.com/leters-niles-oh

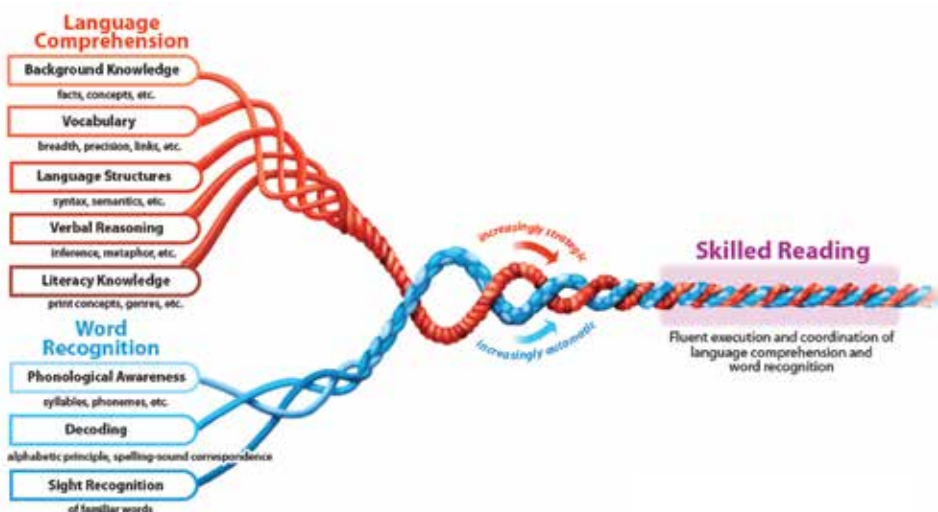
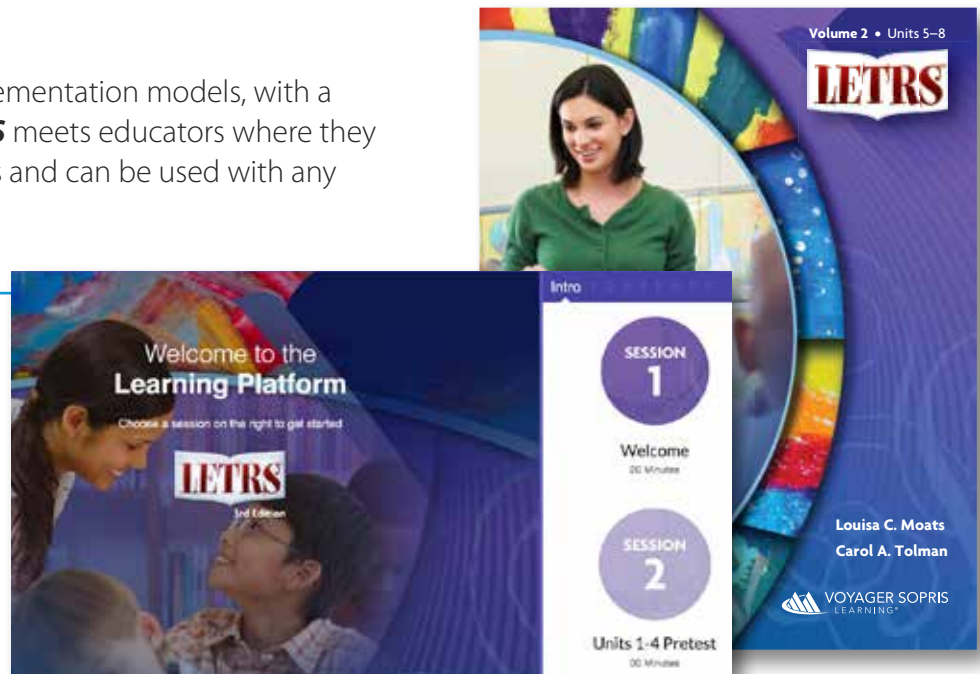
What Makes **LETRS** Unique

LETRS® is a professional development course that bridges deep, meaningful research into practical classroom success.

LETRS provides educators with the background, depth of knowledge, and tools to teach language and literacy skills to every student. **LETRS** can be used regardless of the literacy program in use.

Flexible

Flexible purchase, delivery, and implementation models, with a self-paced online component. **LETRS** meets educators where they are in terms of resources and options and can be used with any quality literacy program.



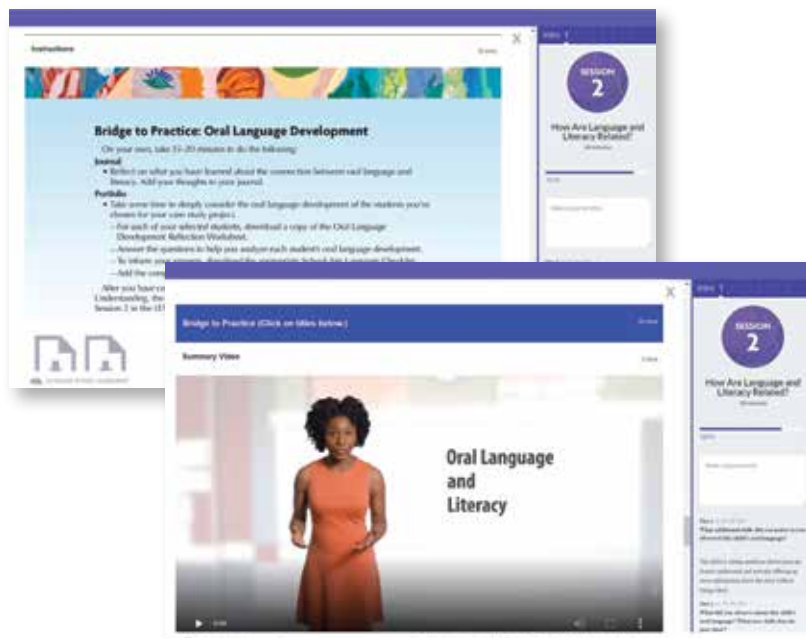
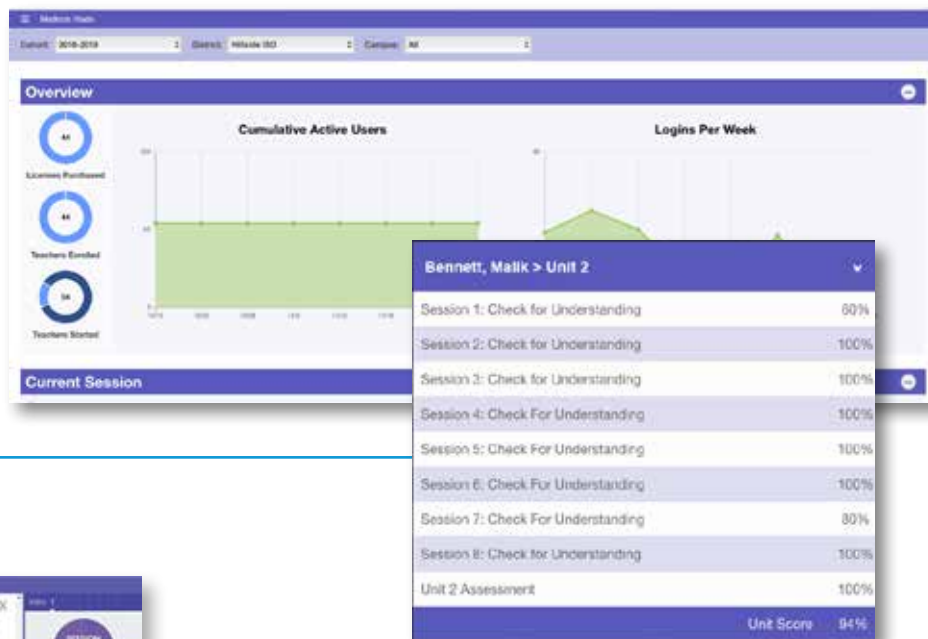
Based on Strong Research with a Focus on Language

LETRS has more than a decade of demonstrated success in schools and districts across the U.S., and fills the gaps in language structure and language development that were not taught in teacher preparation courses.

Scarborough's "Rope" Model from *Handbook of Early Literacy Research*, ©2001. Reprinted with permission of Guilford Press.

Detailed Reporting for Accountability**

LETRS gives participants and administrators the ability to measure participation and knowledge gains.

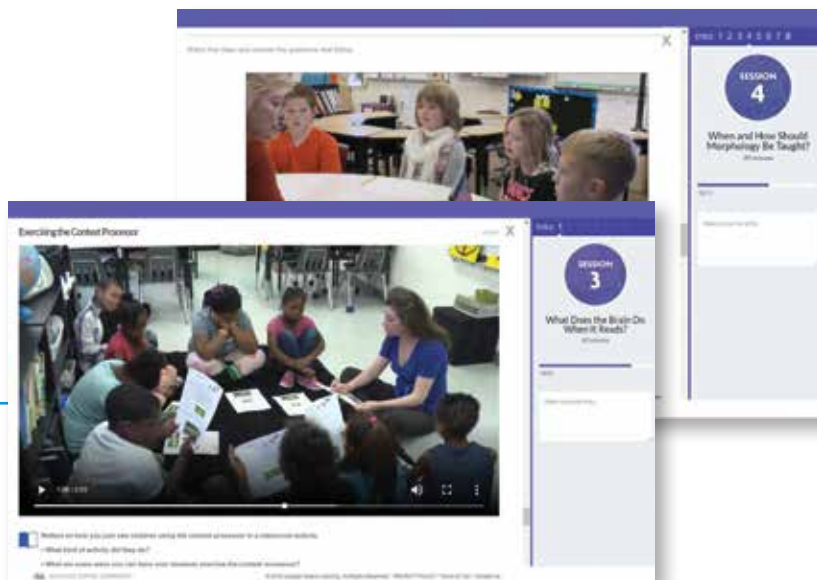


Integrated Bridge to Practice Exercises**

The exercises within **LETRS** are designed to bolster transference of knowledge to classroom practice.

Embedded Video Modeling of Instruction**

Embedded video demonstrates how to deliver effective instruction that teachers understand and how to apply concepts to classroom practice.



**Only available through the online platform.

LETRS Fills in the Gaps in Teacher Preparation

Professional learning that comes from **LETRS** is relevant and applicable regardless of the literacy programs already in use within your state/district/school. **LETRS** is designed to be the cornerstone of a multiyear, systemic literacy improvement initiative and is backed by more than 30 years of research and more than a decade of proven success.



COMPREHENSIVE

Provides a depth and richness of content that is beyond any other literacy PD solution on the market—covering all essential components of reading, language, spelling, and writing.



FLEXIBLE

Presents comprehensive and consistent content in flexible implementation and delivery models to best meet the needs of your schedule and staff.



RESEARCH BASED

Leverages decades of research including the latest neuroscience that reveals how we learn and teach reading. Educators learn to identify the source of reading difficulties and how to teach more effectively based on science.



RELEVANT

Translates decades of scientific research and best practice into everyday classroom success in a way that is most relevant and empowering to educators.

Results

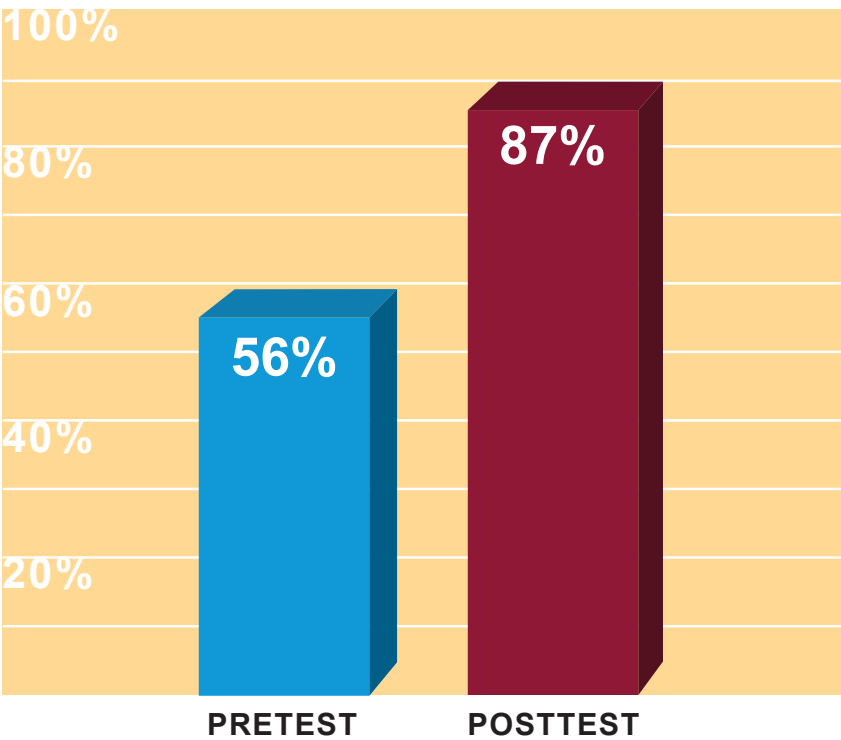
When regular education and intervention teachers learn and apply the information contained in **LETRS**, such substantive professional development has been shown to have powerful beneficial effects on student learning, including:

- An increase in overall achievement levels and fewer students experiencing reading difficulties
- Effective teachers who are more content and whose sense of efficacy and empowerment will replace burnout and low expectations

In Ohio

In Ohio, where Niles City Schools (NCS) implemented **LETRS**, the district's K–3 students reading at or above average increased from 56 percent to 87 percent within one school year.

In just one year, student literacy success at NCS improved dramatically, according to the district's universal screening measure, **DIBELS® Next (Dynamic Indicators of Basic Early Literacy Skills Next)**, also a Voyager Sopris Learning® product.



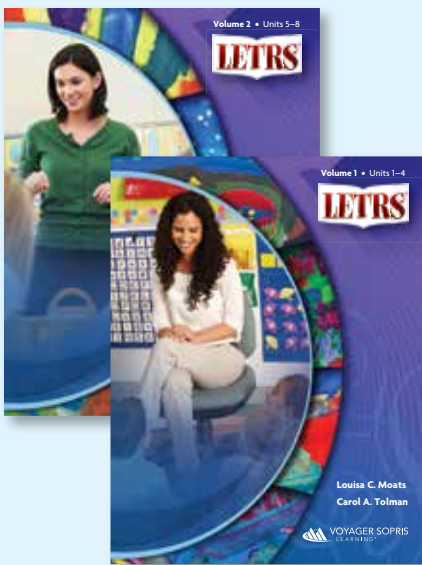
*“Going through **LETRS**, you sit there, moment-by-moment, thinking, ‘I should have known this.’ It’s the tool to change lives and change communities.”*

—Ebony Lee, Ph.D.
Director of Curriculum, Instruction, and Assessment
Clayton County Public Schools, Georgia

Teachers matter more to student achievement than any other aspect of schooling

Teachers need professional development that provides deeper knowledge, skills, and practice to successfully address reading difficulties. Educators benefit from:

- Understanding the content and methodology of research-based, explicit, structured literacy instruction
- Deep knowledge of the cognitive and language factors that shape student learning, and of pedagogical detail
- Information about how to differentiate instruction to meet the needs of all students



UNITS

LETRS units address each essential component of reading instruction and the foundational concepts that link each component.

Units 1–4

Theoretical models from reading science; phonology, basic and advanced phonics; screening and educational diagnostic assessment

Units 5–8

Teaching vocabulary, language and reading comprehension, and writing

Unit 1 The Challenge of Learning to Read

- Why reading is difficult
- The connection between language and literacy
- What the brain does when a person is reading
- The skills that support proficient reading
- How children learn to read and spell
- Major types of reading difficulties
- How to use assessment for prevention and early intervention
- Using assessment to differentiate instruction

Unit 2 The Speech Sounds of English

- Phonology related to reading and spelling
- How phonological skills develop
- The importance of phonemic awareness
- The consonant and vowel phonemes of the English language
- Recognize and respond to errors of English Learners and dialect speakers
- Recognize how allophonic variation in speech affects students' spelling
- How phonological skills should be taught, and which ones should be assessed

Unit 3 Teaching Beginning Phonics, Word Recognition, and Spelling

- The role of the strands of the Reading Rope in word recognition
- The role of phonics in reading instruction
- Compare code-emphasis instruction with meaning-emphasis instruction
- Explore phoneme-grapheme correspondence system of English
- Classify phonics elements
- Understand some basic patterns of position-based spelling in English
- Instruction sequence: letter names and letter formation; key word for sound-symbol associations; teach correspondences explicitly; use sound-blending routines
- Word practice and word meaning routines
- How to teach spelling using dictation
- Decodable text and when it is important to use
- Using data to further student success

Unit 4 Advanced Decoding, Spelling, and Word Recognition

- Advanced word study
- Position-based spelling correspondences and other orthographic conventions
- Phoneme-grapheme mapping
- The six syllable types and how they should be taught
- Distinguish syllables from morphemes
- Suffix rules
- Spelling screeners and how to interpret the results
- Best practices for teaching spelling
- Relationship between reading fluency and reading comprehension
- Building word, sentence, and passage reading fluency
- Interpret phonological, phonics, spelling, and fluency data
- Aligning practices with scientific evidence

Unit 5 The Mighty Word: Oral Language and Vocabulary

- The relationship among vocabulary knowledge, background knowledge, oral language proficiency, and reading comprehension
- Mental map of a well-known word
- Words that should be taught directly
- Introducing new words
- Effective practice of new words
- Creating a language-rich classroom

Unit 6 Digging for Meaning: Understanding Reading Comprehension

- The language and cognitive skills that support reading comprehension
- Distinguish comprehension products from comprehension processes
- The goal of comprehension instruction is to create a coherent mental model of the text
- Characteristics of students who struggle with language and reading comprehension
- The connection among vocabulary, background knowledge, and reading comprehension
- Process for teaching texts
- The importance of syntax and how to teach it
- The importance of text coherence and its relationship to mental coherence
- How text structure affects comprehension

Unit 7 Text-Driven Comprehension Instruction

- The balance of foundational skills with language comprehension
- Which comprehension strategies are supported by research
- Effective strategies during and after reading
- Student-generated questions before, during, and after reading
- The importance of generating questions that deepen understanding of text
- Reread and revisit text for various purposes
- The process for planning an entire reading comprehension lesson for narrative and informational text
- Adapting instruction or special populations

Unit 8 The Reading-Writing Connection

- Writing is important because it benefits reading
- Understand the foundational and language skills necessary for writing
- The phases of the writing process
- Letter formation and handwriting fluency
- Explicit instruction for spelling
- How students gain competence in building sentences
- Narrative writing development
- Informational and opinion writing development
- Methods for assessing student progress in writing



Respected Authorship

Dr. Louisa C. Moats

Louisa C. Moats, Ed.D., is a nationally recognized authority on literacy education and is acclaimed as a researcher, speaker, consultant, and trainer. Dr. Moats received her doctorate in reading and human development at the Harvard Graduate School of Education and is widely published on reading instruction, the professional development of teachers, and the relationship between language, reading, and spelling. Dr. Moats' awards include the prestigious Samuel Torrey Orton Award and June L. Orton Award from the International Dyslexia Association for outstanding contributions to the field and the Eminent Researcher Award from Learning Difficulties Australia. Dr. Moats also received the Benita A. Blachman Award from the Reading League.



Dr. Carol A. Tolman

Carol A. Tolman, Ed.D., has presented **LETRS** hundreds of times, in all states and districts, as Voyager Sopris Learning's lead trainer of trainers. With unparalleled talent as a teacher of teachers and enabler of school change, Dr. Tolman also has more than 25 years of experience in public schools and the juvenile justice system. In addition to spearheading many successful, long-term literacy initiatives, Dr. Tolman organized and delivered curriculum for the Massachusetts Licensure Program and conducted a four-year project for the Maryland Department of Education supporting literacy knowledge for professors.

"Informed teachers are our best insurance against reading failure. While programs are very helpful tools, programs don't teach, teachers do."

—Dr. Louisa C. Moats



Full biographies of all **LETRS authors can be viewed online:**
voyagersopris.com/professional-development/leters/leters-new

LETRS empowers teachers to understand the science behind why students struggle

LETRS empowers teachers to understand the *what, why, and how* of scientifically based reading instruction.

- **What** must be taught during reading and spelling lessons to obtain the best results for students
- **Why** reading instruction has several key components and how they are related to one another, based on current scientific research
- **How** to explain spoken and written English language structures to students
- **How** to interpret individual differences in student achievement, based on valid and reliable assessments and theoretical models for differentiation
- **How** to implement instructional routines, activities, and approaches and differentiate instruction to meet the needs of all students



Delivery Options

LETRS is offered in flexible delivery options to meet the specific needs of customers. We work with you early in the process to identify the delivery models and supports that produce the most impactful results.



Online Course



Print Participant Book



Online Course



Print Participant Book



Face-to-Face Workshops



Print Participant Book

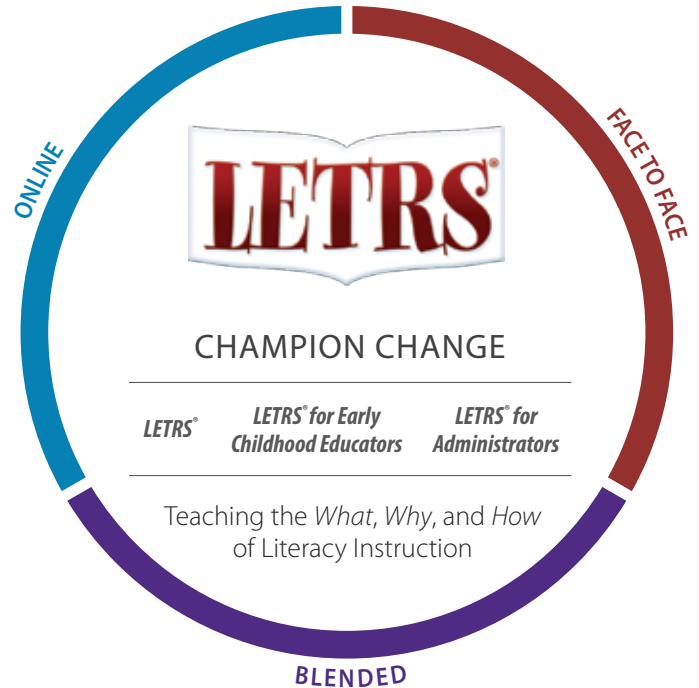


Face-to-Face Workshops

The **LETRS** Suite of Professional Learning

The **LETRS** Suite of products helps literacy educators:

- Distinguish between the research base for best practices and other competing ideas not supported by scientific evidence
- Understand how language, reading, and writing are related to one another
- Make instructional decisions and program choices with reference to scientific research evidence, strategic use of assessments, and observations of students
- Deliver comprehensive, integrated, language, and literacy instruction as defined by standards and by research for a given grade, age, or ability level
- Facilitate early identification and intervention with reading problems, including dyslexia



"Thank you for providing the most valuable training I've received in my entire educational career. I now have the knowledge, backed by research, to support my teachers as they create reading success for all students."

—Gary Robinson, Principal, Indiana





for Early Childhood Educators



for Administrators

First Steps to Early Literacy

The more children know about language and literacy before they begin formal schooling, the better equipped they are to succeed in reading.

LETRS® for Early Childhood Educators provides vital, applicable information about the foundational skills young children need before learning to read and write.

LETRS professional development for early childhood teachers:

- Empowers teachers to understand the *what, why, and how* of early literacy instruction
- Aligns with the recommendations of the 2008 National Early Literacy Panel on Developing Early Literacy
- Helps educators build deep understanding of oral language, phonological processing, and print knowledge
- Includes targeted practices



For additional details, visit:

voyagersopris.com/professional-development/early-childhood-leters/overview

Champion Change

Administrators can be the catalyst for facilitating change and implementing strong literacy instruction.

LETRS® for Administrators is a professional development experience that helps literacy leaders learn how to:

- Create highly efficient methods of analyzing student data
- Establish highly effective instructional blocks in literacy
- Examine resources for all tiers of instruction

Administrators are provided specific steps for facilitating change, developing a comprehensive assessment plan, managing resources, assembling a school leadership team, and making data-based decisions.



For additional details, visit:

voyagersopris.com/professional-development/leters/overview

What Educators Say About **LETRS**

According to Dr. Moats, research shows 95 percent of first grade students can be taught to read, and much failure can be prevented if instruction builds the critical underlying language skills on which reading depends. “Teaching reading is complex and challenging, and most teachers benefit enormously from learning what we teach in **LETRS**,” Dr. Moats said. District administrators who have trained teachers using **LETRS** say they exit the professional development experience with the background and depth of knowledge to teach language and literacy skills to every student.



*“Overwhelmingly our fourth grade teachers are telling us how the kids are coming out of third grade knowing so much more now than before we had **LETRS**. On a professional development level, things are clicking, and the results have been incredible.”*

—Alana Cohen
District Curriculum Specialist
Rapides Parish, Louisiana

*“**LETRS** allowed us to use a common curriculum, and that allowed for the use of common practices. We were able to see gaps in teaching and resources, evaluate what to keep and what to get rid of, and re-evaluate the use of pull-out vs. push-in for Title I services. It gave us the springboard to change our instructional practices.”*

—Ann Marie Thigpen
Superintendent of Niles City Schools, Ohio

*“Going through the process, the one question we had to answer was, ‘Do our teachers really understand the reading process?’ For us, **LETRS** was the missing piece, especially with the shift in education where so many teachers are coming from nontraditional backgrounds to teach. It’s imperative to us—teachers need to know how students learn to read to be able to effectively teach reading.”*

—Kimberly Bennett
Executive Assistant Superintendent
Rapides Parish, Louisiana

*“The **LETRS** course is equipping Alabama’s preK–third grade teachers with background knowledge about the science of reading, in order to fully support literacy instruction and provide individualized support for students who struggle with learning to read. The initial feedback has been extremely positive from **LETRS** participants and we hope to expand this opportunity.”*

—Barbara Cooper, Ph.D.
Director of Strategic Initiatives
and Family Engagement
Alabama Department of Early Childhood Education



LITERACY SYMPOSIUM

WHO SHOULD PARTICIPATE?

Literacy educators from preK to higher education interested in improving student success in reading and writing.

- Teachers
- Instructional Coaches
- Administrators
- Curriculum Directors
- Professional Development



LEARN MORE:
[voyagersopris.com/
literacy-symposium](http://voyagersopris.com/literacy-symposium)

A dynamic learning event for you and your staff

Annual Literacy Symposium

LETRS principles and concepts presented by renowned experts

ON DEMAND

Improve literacy instruction with our two-day online professional development event.

Literacy Symposium is a premier professional development event, linking practitioners with the most current research in the science of literacy. Through recordings from the **Literacy Symposium**, educators can explore the relationships among language, reading, and writing and connect theory to practice in sessions conducted by leading experts in the field of literacy education. Inspired teachers lead to inspired learners.

Led by Dr. Moats and Dr. Tolman.

A host of dynamic literacy experts present on timely topics. Past presenters have included Jack Fletcher, Mark Seidenberg, David Kilpatrick, Hugh Catts, David Share, Kate Cain, Julie Washington, Pat Vadasy, and Jan Hasbrouck.





Are you ready to Champion Change?

LETRS is the most comprehensive and effective professional development to address the five essential components of effective reading instruction in a flexible delivery model, allowing educators to bridge research-based professional development into classroom success.

**Learn more and contact us
for a demonstration today.**

**800.547.6747 or visit
voyagersopris.com/letrs.**



voyagersopris.com





LETRS[®]

SAMPLE

Louisa C. Moats

Carol A. Tolman



VOYAGER SOPRIS
LEARNING[®]

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Welcome to LETRS®

Language Essentials for Teachers of Reading and Spelling

What Is LETRS?

LETRS is an empowering professional development course of study for instructors of reading, spelling, and related language skills. LETRS is *not* a literacy curriculum. Instead, it provides knowledge and tools that teachers can use with any good reading program. This new edition of LETRS contains:

- In-depth knowledge based on the most current research regarding what, when, and how language skills need to be taught
- Ways to assess student language development for prevention and intervention
- Guidance on how to plan and balance word recognition and comprehension instruction
- Information on how to differentiate instruction to meet the needs of all students

LETRS offers dynamic online learning by providing activities to reinforce concepts, videos of expert teaching, and practical ways to apply learning to the classroom every day.



Who Is LETRS For?

LETRS is for all educators who teach reading, from beginning teachers to teachers with years of experience. This professional development course translates current research into practical guidance that enables all teachers to instruct with genuine confidence.

Becoming a skilled instructor, whether in an intervention or classroom setting, can take years of practice and study—and trial and error. LETRS accelerates teacher knowledge, which directly benefits the students they teach. Teachers learn how to deliver effective instruction to meet *all* their students' needs.

What Topics Are Covered in LETRS?

LETRS answers the important question of *how* to teach the skills required for proficient reading and writing. The course methodically addresses the systems of language underlying literacy, including phonology, orthography, semantics, syntax, discourse, and pragmatics. Foundational models represent key concepts and provide guidance on how word recognition and language comprehension must be developed.

Volume 1: Focus on Word Recognition

The main focus in Volume 1 of LETRS is word recognition. This first volume contains four units of eight sessions each.

Unit 1: The Challenge of Learning to Read

- Why learning to read is difficult
- What the mind does when it reads
- How children learn to read and spell
- Using assessments for prevention and differentiation

The Simple View of Reading

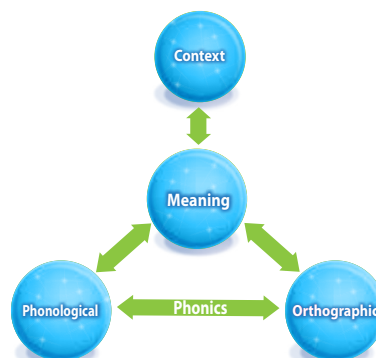


Reading comprehension is the product of word recognition and language comprehension.

Unit 2: The Speech Sounds of English

- How phonological skills develop
- What phonological skills should be taught
- How phonological skills can be assessed

Four-Part Processing Model for Word Recognition



(Based on Seidenberg & McClelland, 1989
from *Psychological Review*, 96(4), 523–568.)

Fluent reading is a complex mental activity dependent on specific circuits in the language and visual areas of the brain.

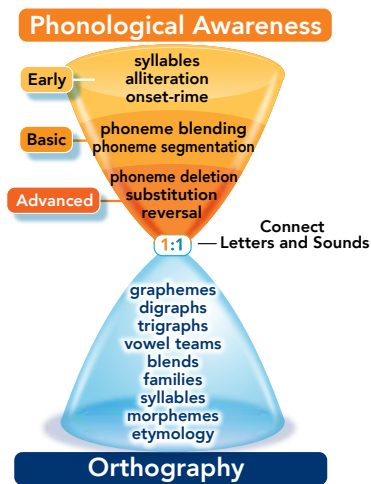
Unit 3: Teaching Beginning Phonics, Word Recognition, and Spelling

- The role of phonics in early reading instruction
- The predictability of English orthography
- How to assess phonics and word recognition

Unit 4: Advanced Decoding, Spelling, and Word Recognition

- When and how to teach morphology
- How to teach spelling
- How to build fluency

The Hourglass Figure



(Courtesy of Carol A. Tolman)

Recognizing words by sight depends on developing an understanding of how letters and sounds are connected.



Volume 2: Focus on Language Comprehension

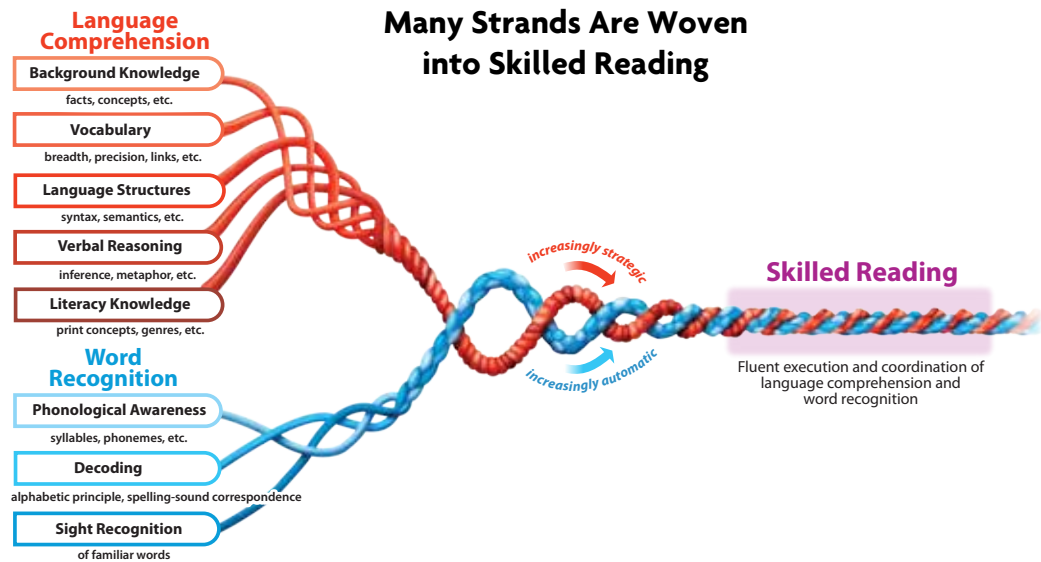
The second volume of LETRS contains four units of six sessions each. The main focus in Volume 2 is language comprehension.

Unit 5: The Mighty Word: Oral Language and Vocabulary

- Why vocabulary is important
- What words are worth teaching
- How to create a language-rich classroom

The Reading Rope

Many Strands Are Woven into Skilled Reading



Scarborough's "Reading Rope" from *Handbook of Early Literacy Research*,
© 2001. Reprinted with permission of Guilford Press.

Both language comprehension and word recognition contain specific skills that are definable, measurable, and somewhat independent—yet influence one another in the development of proficient readers.

Unit 6: Digging for Meaning: Understanding Reading Comprehension

- What causes poor comprehension
- How to identify challenging language
- How to plan effective comprehension instruction

Unit 7: Text-Driven Comprehension Instruction

- What comprehension strategies work
- How to guide comprehension with questioning
- Which after-reading activities support comprehension
- How to adapt instruction for special populations

The Mental Model



Construction of a coherent, complete mental model is the desired end result of proficient reading.

Unit 8: The Reading-Writing Connection

- What foundational writing skills need to be developed
- Why sentence building is important
- How to teach different types of writing
- How writing can be assessed

The Simple View of Writing



Skilled written expression is the product of foundational writing and composition skills.

Objectives for Unit 1

After completing each session, you should have met the following objectives.

Sessions	Unit 1 Objectives
1. Why Is Reading Difficult? (p. 3)	1.1 Review evidence that reading problems are common and persistent. 1.2 Recognize sources for information about science-based instruction. 1.3 Explain the unique challenge and advantage of alphabetic writing. 1.4 Explain the Simple View of Reading and its implications.
2. How Are Language and Literacy Related? (p. 19)	2.1 Understand that reading and writing depend on language abilities. 2.2 Use appropriate terms for the language foundations on which reading depends.
3. What Does the Brain Do When It Reads? (p. 25)	3.1 Understand how eye-movement research confirms that fluent readers process every letter of printed words and match them to speech sounds. 3.2 Identify the job of each major processing system in the reading brain.
4. What Skills Support Proficient Reading? (p. 35)	4.1 Understand the subskills of word recognition and language comprehension as described in Scarborough's Reading Rope. 4.2 Explain how the reading brain achieves automaticity.
5. How Do Children Learn to Read and Spell? (p. 41)	5.1 Recognize characteristics of the developmental phases of early word recognition and what they indicate about students' instructional needs.
6. What Are the Major Types of Reading Difficulties? (p. 53)	6.1 Describe and recognize broad subtypes of reading difficulty. 6.2 Prepare to differentiate instruction for students with word recognition, language comprehension, and/or combined difficulties in reading.
7. How Can Assessment Be Used for Prevention and Early Intervention? (p. 63)	7.1 Review evidence that most reading failure can be prevented or ameliorated through early, appropriate instruction. 7.2 Understand how to select and use screening tests, progress-monitoring tests, and diagnostic surveys to identify students at risk and provide effective instruction.
8. How Can Assessments Be Used to Differentiate Instruction? (p. 75)	8.1 Survey assessments in use in your setting; categorize as screening, diagnostic, progress-monitoring, or outcome tests. 8.2 Use a series of questions to guide selection and use of assessments.

Preview Questions

Think about the answers to these questions before studying this unit.

1. Approximately how many students in your school, district, or state are viewed as poor readers at the end of grade 3?
2. By what criteria are those students identified (e.g., state end-of-grade tests, benchmarks on screening measures, NAEP scores)?
3. Are your local school statistics better than, the same as, or worse than state averages?
4. Are you satisfied with your class's achievement in reading, spelling, writing, and/or language?
5. What improvements in student achievement do you think are possible if conditions of schooling are optimal?

Session

Why Is Reading Difficult?

Preview Questions

Think about the answers to these questions before studying this session.

1. How challenging was it for you when you were learning to read?
2. Did you encounter any specific difficulties in learning to read and were you helped in overcoming them?

Reading Problems Are Common

Objective 1.1: Review evidence that reading problems are common and persistent.

National concern about the quality of our schools and the achievement of all students has been expressed in many quarters for several decades. Prior to the publication of the *Report of the National Reading Panel* (National Reading Panel, 2000), the National Institute of Child Health and Human Development (NICHD) characterized reading difficulty as a major public health concern that deserved high priority on the national research agenda (Sweet, 2004). The inability to read well is associated with lower levels of adult educational attainment and lower income levels (McLaughlin, Speirs, & Shenassa, 2014), which in turn are associated with social ills such as dropping out of school, reduced access to health care, and unwanted teen pregnancy.



The inability to read well is associated with lower levels of adult educational attainment and lower income levels, which in turn are associated with social ills such as dropping out of school, reduced access to health care, and unwanted teen pregnancy.

The National Assessment of Adult Literacy (Greenberg & Jin, 2007) showed that a sizable proportion of adults in the United States have not learned to read. Between 21 and 23 percent were at the lowest levels of literacy, unable to read with the fluency, accuracy, and comprehension necessary to decipher newspapers, health guidelines, schedules, or manuals.

According to the 2015 National Assessment of Educational Progress (U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2015), 31 percent of all fourth-graders have scored “below basic” in reading, and an additional 33 percent have only achieved “basic” competence. Only 36 percent of all fourth-graders are “proficient” or “advanced.” Furthermore, racial and economic gaps persist: While 46 percent of white students are “proficient” or “advanced,” only 18 percent of African American students and 21 percent of Hispanic students fall into these categories. Wide differences exist among the 50 states, however, in both reading and math achievement, which suggest that low levels of literacy are treatable and preventable.

Reading as Key to Academic and Life Success

Unless students learn to read by the end of first grade, they are highly likely to remain poor readers and suffer academic difficulties across all subjects (Juel, Griffith, & Gough, 1986; Olson, Keenan, Byrne, & Samuelsson, 2014; Sparks, Patton, & Murdoch, 2014). If they do not learn to read at “proficient” or “advanced” levels, they



A series of scientific reports have yielded consistent findings on the importance of learning to read *in the early stages*, where the chance of making a difference is greatest. All assert the value of powerful reading instruction that prevents and ameliorates weaknesses in component language skills.

will be disadvantaged in twenty-first-century society. More and more jobs require not only a high school diploma, but also postsecondary job and career preparation. Reading, writing, and technical skills are necessary for those jobs. Concern about the qualifications of our workforce and the seemingly intractable educational deficits that characterize a large segment of the population has prompted the United States Congress to fund several scientific reviews of the evidence on learning to read and teaching reading. A series of scientific reports, not only in the United States but also in Australia, Great Britain, and Canada, have yielded remarkably consistent findings on the

importance of learning to read *in the early stages*, where the chance of making a difference is greatest. All assert the value of powerful reading instruction that prevents and ameliorates weaknesses in component language skills.

Together, these widely cited reports represent 50 years of research on how students learn to read, what goes wrong if they struggle, and what can be done to help students of all abilities improve their reading skills. They are listed alphabetically by author in *Resource List 1.1*.

Resource List 1.1: Consensus Reports and Comprehensive Reviews of the Science of Learning to Read

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: The MIT Press.
- Anderson, R. C., Heibert, E. H., Scott, J. A., & Wilkinson, I. A. G. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: National Academy of Education.
- Armbruster, B., Osborn, J., & Lehr, F. (2001). *Put reading first*. Washington, DC: National Institute for Literacy.
- Bond, G. L., & Dykstra, R. (1967). The cooperative research program in first-grade reading instruction. *Reading Research Quarterly*, 2(4), 5–142.
- McCardle, P., & Chhabra, V. (Eds.). (2004). *The voice of evidence in reading research*. Baltimore, MD: Paul H. Brookes.
- National Early Literacy Panel (NELP). (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy.
- National Reading Panel. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Bethesda, MD: National Institute of Child and Human Development.
- Rayner, K., Foorman, B. R., Perfetti, C. A., Pesetsky, D., & Seidenberg, M. S. (2001). How psychological science informs the teaching of reading. *Psychological Science in the Public Interest*, 2(2), 31–74.
- Resnick, L. B., & Weaver, P. A. (Eds.). (1979). *Theory and practice of early reading: Vol. 3*. New York, NY: Routledge.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Preventing or Reducing Reading Problems

The good news from all of these reports is that the devastating educational and social consequences of reading failure can be prevented or reduced through education (Fletcher, Lyon, Fuchs, & Barnes, 2007; Foorman, 2003; Torgesen, 2004a). Studies that emphasize both classroom instruction and supplemental intervention programs have found that all but 2–5 percent of students can learn basic reading skills in first grade, even in populations where the incidence of poor reading is very high (Mathes et al., 2005). In addition, when students achieve basic reading skills early in their school careers, the benefits can be measured years later (Cunningham & Stanovich, 1998). Remediation in grades 2 and 3 can have lasting positive effects on basic reading skills over the next 10 years (Blachman et al., 2014). Older students, in grades 3–5, can also improve to the average range and sustain those improvements if their remediation is sufficiently intensive, expert, and long term (Torgesen et al., 2001). Those students, however, tend to remain slow readers.

Student success, nevertheless, depends on whether teachers use comprehensive, proven, and effective programs and practices, and whether those practices are implemented with sufficient skill, intensity, and duration. For teachers to do this on a wide and consistent scale, they must know the content of language structure so that they can explain sounds, spellings, word meanings, grammar and usage, and text organization to students. Furthermore, they must understand current, scientifically derived ideas about how students learn to read and what takes place in the mind as the written word is processed. Finally, they need to be familiar with the findings of scientific studies that describe and report the most effective teaching practices. Best practices are those most likely to help the most students achieve at higher levels.



Informed teachers are our best assurance against reading failure. While programs are very helpful tools, programs don't teach; teachers do.

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Evidence-Based Research on Reading

Objective 1.2: Recognize sources for information about science-based instruction.

If research-based practices are so important, and research exists that shows how to ensure that most students learn to read, why don't more educators know about it? If reading is one of the most studied aspects of human psychology, and thousands of scientifically based journal articles, books, book chapters, and policy directives have been written about it, why haven't these practices been applied to that knowledge base on a wide scale? If so much is known about reading, why do so many people read poorly?

The Gulf between Science and Practice

At times, the world of education and the world of research seem to inhabit two different planets. It's important to keep perspective on why this might be the case and then to consider why educators might not be exposed to this information in their daily lives.

Recent surveys by the National Council on Teacher Quality (NCTQ), a research and policy group focused on improving teacher preparation, have revealed that



Recent surveys have revealed that scientifically grounded concepts about learning to read and information about language structure are not taught in a majority of teacher preparation institutions.

scientifically grounded concepts about learning to read and information about language structure are not taught in the majority of teacher preparation institutions. In the NCTQ's review of over 1,000 teacher-training institutions that offer courses in reading instruction (Greenberg, McKee, & Walsh, 2013), only 29 percent of the institutions required coursework pertaining to four or five of the five essential components of instruction (phonemic awareness, phonics, fluency, vocabulary,

comprehension) identified by the National Reading Panel (2000). The majority of schools (59 percent) addressed two or fewer of those essential components—taking into consideration all relevant courses offered by the institution. Even more disappointing, 78 percent of the schools were deemed inadequate in providing preparation for teaching “struggling readers”—a nonspecific term that includes students with learning disabilities and learning difficulties.

There are many reasons why coursework for teachers has remained impervious to scientific evidence regarding the process of learning to read. Seidenberg (2013), in examining the gulf between science and the educational philosophies held by many in schools of education, describes profound differences between the cultures of reading science and reading education. He portrays the education profession as biased against science and biased toward untested or unproven ideas that have intuitive appeal. He cites the prevalence of textbooks and guidelines that encourage teachers to base their practices on intuition, self-reflection, personal experience, and anecdotal evidence—and to be suspicious of scientific research.

A recent study by Binks-Cantrell, Washburn, Joshi, and Hougen (2012) also shows that many professors in education schools, who themselves were educated without a grounding in research or scientific methods, are not well prepared to teach current ideas about the psychology of reading or the content of language structure. The study authors compared university faculty members' responses to those of their students on a multiple-choice survey of language and reading knowledge. Overall rates of correct responses were startlingly low among the university faculty who were responsible for teaching teachers how to teach reading. For example, more than half of the professors confused **phonics** and **phonemic awareness** and were unable to identify accurately the linguistic structures that should be the “meat and potatoes” of a decoding, spelling, or vocabulary lesson. On every item of the survey, student teachers scored less well than their own professors, as might be expected. The authors labeled this phenomenon as the “Peter Effect”—which states that one cannot give to others what one does not have oneself.



phonics

The study of the relationships between letters and the sounds they represent; also used as a descriptor for code-based instruction.



phonemic awareness

The conscious awareness of the individual speech sounds (consonants and vowels) in spoken syllables and the ability to consciously manipulate those sounds.

If the information that is going to help educators do the best job is neglected in education schools, then where is it?

Finding Valid Information on Reading Science

Each subdiscipline of education—childhood, special education, literacy education, speech-language, and so forth—has its own journals and conferences. Likewise, each subdiscipline in psychology, linguistics, and the neurosciences has its own journals and conferences. Thus, reports from the “harder” sciences such as experimental psychology, cognitive psychology, neuropsychology, developmental psychology, or developmental linguistics tend to be written just for other specialists in those fields. Teachers rarely read them or even know they exist. If they do try to read them, teachers justifiably may find those academic sources to be irrelevant or incomprehensible. Books that accurately review scientific research for educators and that, at the same time, are readable and practical, are surprisingly scarce.

Two resource lists are provided here. *Resource List 1.2* includes journals that publish studies that have been peer-reviewed and that meet accepted criteria for scientific methodology. For example, they review existing evidence regarding the problem under investigation, set up a study to test a stated hypothesis, employ objective and appropriate statistical methods, define their subjects carefully, use control groups or control conditions to make comparisons, and define what was done in enough detail that other researchers could replicate the study.

Resource List 1.2: Examples of Journals That Report Empirical Research on Reading

<i>American Educational Research Journal</i>	<i>Language, Speech, and Hearing Services in the Schools</i>
<i>Annals of Dyslexia</i>	<i>Reading and Writing: An Interdisciplinary Journal</i>
<i>Journal of Educational Psychology</i>	<i>Reading Research Quarterly</i>
<i>Journal of Learning Disabilities</i>	<i>School Psychology Review</i>
<i>Journal of Literacy Research</i>	<i>Scientific Studies of Reading</i>

Objectives for Unit 2

After completing each session, you should have met the following objectives.

Sessions	Unit 2 Objectives
1. How Is Phonology Related to Reading and Spelling? (p. 85)	1.1 Explain the role of the phonological processing system and the meanings of the <i>phon</i> words. 1.2 Define and distinguish aspects of the phonological processing system.
2. How Does Phonological Skill Develop? (p. 97)	2.1 Identify examples of early, basic, and advanced phonemic awareness activities.
3. Why Is Phonemic Awareness Important? (p. 101)	3.1 Summarize the evidence that phonemic awareness is a critical component of effective instruction. 3.2 Explain the alphabetic principle as depicted in the Hourglass figure.
4. What Are the Consonant Phonemes of English? (p. 107)	4.1 Explain the organization of the consonant chart. 4.2 Articulate each phoneme; contrast the features of confusable consonant phonemes (e.g., voicing, nasality, continuancy, placement in the mouth).
5. What Are the Vowel Phonemes of English? (p. 119)	5.1 Explain the organization of the vowel chart. 5.2 Identify and produce the vowel phonemes of English.
6. What about Dialects, Language Differences, and Allophonic Variation? (p. 125)	6.1 Recognize and respond constructively to errors of English Learners and dialect speakers. 6.2 Recognize how allophonic variation in speech affects students' spelling.
7. How Should Phonological Skills Be Taught? (p. 139)	7.1 Understand which students benefit from phonological and phonemic awareness instruction. 7.2 Learn a variety of appropriate multisensory phonemic awareness activities including blending, segmentation, substitution, deletion, and reversal.
8. What Phonological Skills Should Be Assessed? (p. 149)	8.1 Screen students for early, basic, and advanced phonological skills, and use test results to identify appropriate goals for instruction.

Preview Questions

Think about the answers to these questions before studying this unit.

1. What does phonemic awareness have to do with word reading, spelling, and vocabulary development?
2. How many phonemes are there in the English language? Has anyone ever taught you these phonemes? Can you name them from memory?
3. What roles do phonemic awareness and phonological awareness have in your classroom instruction?

Session

What about Dialects, Language Differences, and Allophonic Variation?

Preview Questions

Think about the answers to these questions before studying this session.

1. What has been your experience teaching EL students and students with regional dialects?
2. How do you instruct students whose dialects differ substantially from Standard English?

Dialect and Language Differences

Objective 6.1: Recognize and respond constructively to errors of English Learners and dialect speakers.

Think of someone who comes from a country, a region of this country, or from a family that has a distinct nonstandard dialect or way of speaking English. How would that dialect or accent be characterized? It is not unusual for speakers of English to have trouble understanding another speaker of English whose pronunciation is very different from their own.

What Is Dialect?

A **dialect** is a version of a language. It is spoken by a group of people who are separated socially or geographically from other groups. The speakers of different dialects understand each other because they share the same basic language system, but their speech varies systematically or predictably in phonology, word use, and often, grammar. Dialect interference in a school setting occurs if the phonology or usage of a student's dialect differs substantially from the dialect spoken by the teacher. Dialect interference can also occur if the student's dialect is substantially different from the Standard English forms in written text. Consider these differences between British English and American English terms for the same thing:

- lift, elevator
- petrol, gasoline
- public school, private school
- trousers, pants
- pint, mug of beer



dialect

An intelligible version of a language with systematic differences in phonology, word use, and/or grammatical rules.

Ways of pronouncing words differ in various regions of the United States. In specific regions, words are confusable because they are pronounced the same way, as follows:

- Boston: *farther*, *father* (drop the /r/)
- Tennessee: *oil*, *all*
- Texas: *pin*, *pen*
- Southern California: *cot*, *caught*

Young students whose dialect differs substantially from Standard English benefit from systematic comparisons between the formal language system they will be reading and writing in school and their oral language, especially during writing



code switching

The conscious effort to write and/or speak in a certain way, depending on the social context and/or whether the language is spoken or written.

instruction. The goal of such comparisons is not to change the way students speak, but to help them become conscious of words, to check spelling and writing, and to choose words according to what the situational context calls for. When choosing to speak or write a certain way that is appropriate for a specific social context, people engage in **code switching**. For example, people usually modify their speech to a more

formal style when in the presence of authorities, but change to a nurturing style when in the presence of little children. In addition, writing demands certain forms, such as complete sentences and paragraphs, that speaking does not.

The next sections outline two of the most common dialects encountered in schools today: English influenced by the Spanish language, and African American English (AAE).

Spanish Phonology

With 17 consonants and five vowels, Spanish has only half the number of English phonemes. Even this number (22), however, is not consistent across different forms of Spanish, as the dialects of European Spanish differ somewhat from those in Latin America. Nevertheless, the 27 symbols (26 English alphabet letters plus letter ñ) used to represent those sounds in Spanish writing have a much more consistent or regular correspondence pattern than English does. As with English



Spanish-speaking students will benefit from practice in identifying, segmenting, and blending phonemes.

speakers, Spanish-speaking students will benefit from practice in identifying, segmenting, and blending phonemes; the patterns to be practiced, however, are usually open syllables that end with a vowel. Phonemic awareness and sound-symbol correspondences for decoding in Spanish are generally easier to learn than English.

To anticipate phonological substitutions and confusions that Spanish-speaking ELs might present in the classroom, it is helpful to begin with a comparison of the Spanish and English phonological systems. If a speech sound of a second language is not in a speaker's first language, that phoneme may be difficult for him or her to identify, pronounce, and manipulate in phonological awareness exercises. This is especially true when children do not hear the English language in their environments before they are one year old. Spanish-speaking ELs benefit from direct teaching of speech sounds in each language (August, Carlo, Calderón, & Proctor, 2005; Cárdenas-Hagan, Carlson, & Pollard-Durodola, 2007; Leafstedt & Gerber, 2005). Teaching both the sound and the feel of the sound helps students to “hardwire” these missing English phonemes in the phonological processing system.



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Spanish Vowels

In Spanish, there are fewer phonemes (22) than in English (40+). The greatest difference between these language systems is the number of vowels. Spanish has five, while English has 18 vowel phonemes plus schwa. The five Spanish vowels (Figure 2.7) are easy to distinguish from one another and are represented with consistent spellings. In Spanish reading instruction, students are usually taught the vowel correspondences first.

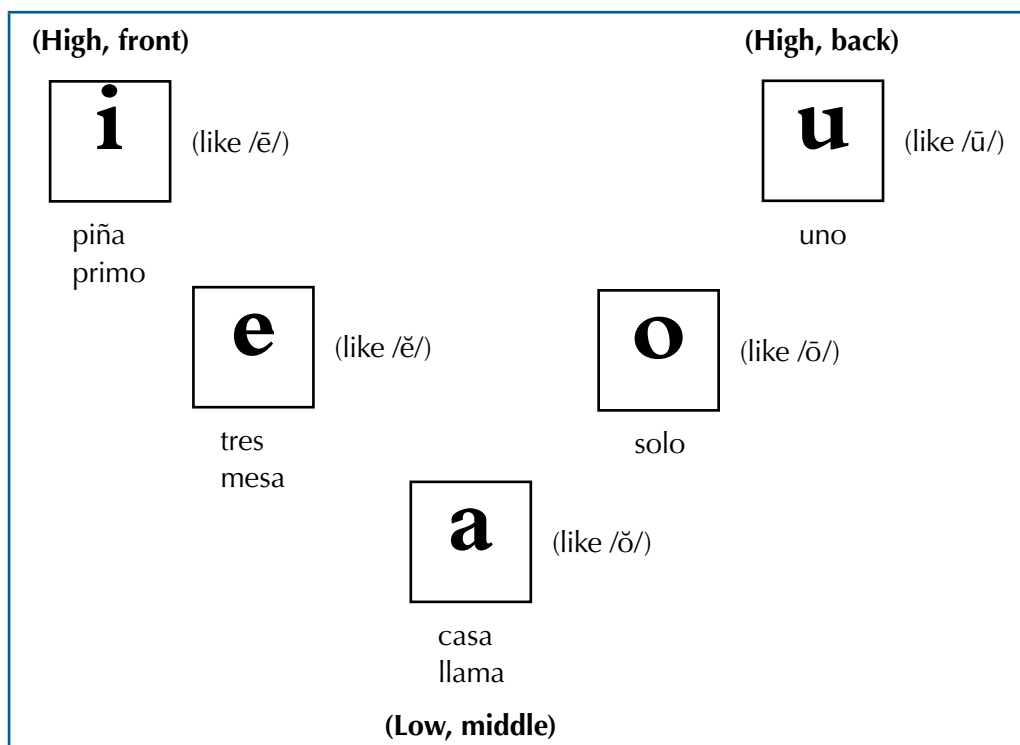


Figure 2.7 Spanish Vowel Phonemes by Order of Articulation

Spanish words often have two or three vowels in a sequence. Each retains its identity. In some words, two adjacent vowels belong to different syllables: *fiesta*, *diablo*, *lea*. In some words, the adjacent vowels occur within the same syllable and are glided into one vowel sound: *cielo*, *muy*, *voy*, *puede*.



If all but five of the vowels in English are not part of a Spanish speaker's existing phonological system, then explicit and direct instruction in the English vowels and how they are articulated should be very helpful to the EL.

If only five English vowels are part of a Spanish speaker's existing phonological system, then explicit and direct instruction in the other English vowels and how they are articulated should be very helpful to the EL. For example, the short vowel /ɪ/ in English is pronounced with the jaw more open and relaxed than /ē/. In addition, vowel pronunciation is slightly different even when vowels are shared between the languages; the Spanish /ō/, for example, does not glide like the long /ō/ in English.

Table 2.6: Spanish Consonant Phonemes by Place and Manner of Articulation

	Lips Together	Teeth on Lip	Tongue between Teeth	Tongue on Ridge behind Teeth	Tongue Pulled Back on Roof of Mouth	Back of Throat	Glottis
Stops							
Unvoiced	/p/ <i>pera</i>			/t/ <i>taza</i>		/k/ <i>que</i>	
Voiced	/b/ <i>bueno</i> <i>baca</i>					/g/ <i>gato</i>	
Nasals	/m/ <i>mano</i>			/n/ <i>nido</i>	/ɲ/ <i>año</i>		
Fricatives							
Unvoiced		/f/ <i>fiesta</i>		/s/ <i>silla</i> <i>zapato</i>			/x/ <i>Mexico</i> (pronounced like hard /h/, as in <i>jicama</i>)
Voiced			/θ/ <i>pescado</i>				
Affricates							
Unvoiced					/ch/ <i>chile</i>		
Glides							
Unvoiced							
Voiced	/w/ <i>hueso</i>				/y/ <i>llama</i> <i>yo</i>		
Liquids				/l/ <i>limon</i>	/r/ <i>'rio</i> <i>barro</i>		

Spanish Consonants

Compare the Spanish consonants (Table 2.6) with the English consonant system. Spanish does not have the following consonants: /d/, /v/, /th/, /z/, /sh/, /zh/, and /j/*. Consonant /w/ exists but is represented by letters *hu* as in *hueso* (bone).

Moreover, Spanish has a few phonemes that do not exist in English: /ñ/, hard /x/, and the rolled /r/. To complicate matters, Spanish orthography uses letters differently from English in some cases. The letters *x* and *j* stand for the consonant /h/; the letter *d* is pronounced like /th/, and the letter *z* is pronounced /s/. Double *l* and *y* stand for /y/.

Phonological Patterns of Spanish-Speaking English Learners

To summarize, Spanish speakers learning English are likely to make rule-based changes to the pronunciation of English words, especially if they are first learning English at age six or above (when mastery of a new phonological system is usually more challenging than it is at age five or younger). The EL student's spellings may also reflect pronunciation patterns that are characteristic of Spanish.

These are the phonological substitutions most common for Spanish-speaking learners of English:

- /ch/ for /sh/
- /s/ for /z/
- /t/ or /d/ for /th/
- /ěs/ for /s/ when /s/ is the first phoneme in a blend (The vowel pulls /s/ away from /k/, /t/, or /p/ in a blend, as in *Español*. Spanish-speaking students do not hear or pronounce blending with /s/ before they learn English because /s/ cannot blend with its neighboring consonant in Spanish.)
- Reduction of word-final consonant clusters (such as reducing *test* to “tes”)



Spanish-speaking ELs benefit from direct teaching of the sounds in each language, including how the sounds look and feel in the mouth and how to pronounce the phonemes that do not exist in Spanish.

Spanish-speaking ELs benefit from direct teaching of the sounds in each language, including how the sounds look and feel in the mouth and how to pronounce the phonemes that are not in Spanish. They also benefit from direct and systematic instruction of phoneme segmentation, blending, and manipulation.

*Consonant /j/ does appear in European Spanish.

Objectives for Unit 3

After completing each session, you should have met the following objectives.

Sessions	Unit 3 Objectives
1. Why Is Code-Emphasis Instruction Important? (p. 159)	1.1 Understand the role each strand of the Reading Rope plays in word recognition. 1.2 Define <i>phonics</i> and its role in reading instruction. 1.3 Compare code-emphasis instruction with meaning-emphasis instruction. 1.4 Survey the General Phonics Lesson Plan.
2. How Predictable Is English Orthography? (p. 169)	2.1 Explore the phoneme-grapheme correspondence system of English. 2.2 Classify basic phonic elements: digraphs, blends, vowel teams, VCe syllables, vowel-r combinations, and others. 2.3 Understand some basic patterns of position-based spelling in English.
3. How Can Ehri's Phases Guide Instruction? (p. 181)	3.1 Differentiate instructional goals with reference to Ehri's phases. 3.2 Administer a phonics and word-reading survey to students.
4. How Should Instruction Begin? (p. 189)	4.1 Teach letter names and letter formation. 4.2 Use appropriate key words for sound-symbol associations. 4.3 Teach new correspondences explicitly. 4.4 Use sound-blending routines.
5. What Kind of Practice Is Necessary? (p. 201)	5.1 Use a variety of word practice routines (e.g., word lists, word sorts, word building, word chaining, word families). 5.2 Include word meaning in practice routines (e.g., multiple meanings, words in context, word classification).
6. How Can Spelling Be Taught Using Dictation? (p. 209)	6.1 Understand how reading and spelling are related. 6.2 Employ a routine for word, phrase, and sentence dictation. 6.3 Teach high-frequency words using multisensory techniques.
7. When Is It Important to Use Decodable Text? (p. 215)	7.1 Use decodable text for appropriate purposes. 7.2 Structure text reading for student success.
8. What Is the Best Way to Further Student Success? (p. 223)	8.1 Obtain and use data to evaluate instruction. 8.2 Select and evaluate instructional materials that support systematic, explicit, code-based instruction.

Preview Questions

Think about the answers to these questions before studying this unit.

1. What methods or activities do you currently use to teach students how to decode words? How do these reflect your own understanding of decoding skills?
2. In what ways do you already include phonics in your daily instruction?

Session

How Should Instruction Begin?

Preview Questions

Think about the answers to these questions before studying this session.

1. How do you teach letter names and letter formation to your students?
How frequently do you teach it?
2. What techniques do you use to help students learn to blend sounds?

Phonemic Awareness and the Code

Objective 4.1: Teach letter names and letter formation.

While teaching the code and ensuring that students can associate symbols with sound, teachers should include various phonological awareness activities as part of daily instruction. The progression of development outlined in Unit 2, and the principles of phonological awareness instruction reviewed in that unit, emphasize that instruction should be brief but frequent and distributed. As students become more competent, the phonological awareness component of group phonics instruction may take only five minutes, with the remainder of the lesson focused on learning orthography.

Phonological awareness practice prepares students for the print-based activities in the rest of the lesson. Students can listen for the presence of specific vowel sounds in words and then identify which sound-spelling cards represent those sounds, isolate and pronounce a target sound in spoken words, or participate in any of the activities appropriate for their level, as described in Unit 2.

Letter Naming, Uppercase and Lowercase

For the first 6–8 weeks of kindergarten—and depending on the incoming students' skills—the names of all the letters, uppercase and lowercase, should be directly taught. The old “letter of the week” approach is much too slow and fails to prepare students for the sound-symbol associations they will need to learn for reading and spelling. Rather, students can and should be introduced to approximately one new letter name every one or two days (Adams, 2013; Jones, Clark, & Reutzel, 2012; Piasta, Petscher, & Justice, 2012; Piasta & Wagner, 2010). A combination of direct teaching and play-based experimentation with manipulatives will provide adequate practice.

Component of Lesson	Instructional Routines and Techniques	Approx. Time
State Goal and Purpose	State concept focus and expectations for outcomes (“Today we will study . . .”)	1 min.
Practice Phonological Awareness	Warm-up exercises, listening to and manipulating sounds in spoken words	3 min.
Review Previous Lesson	Fluency drills; rereading familiar text; checking retention of learned words or concepts	3 min.
Introduce New Concept	Explicit, direct teaching of new phoneme-grapheme correspondence or letter pattern	3–5 min.
Provide Guided Practice	Teacher-led practice blending words, reading pattern-based words, phoneme-grapheme mapping, reading phrases and sentences	5 min.
Provide Extended Practice	Word sorts, word chains, word families, cloze tasks; timed reading of learned words	5 min.
Practice Dictation	Dictation of sounds, words, sentences	8 min.
Connect to Word Meaning	With phonics vocabulary, construct multiple-meaning web; locate words that have similar meanings or that go together; find the odd one out in a set of words; use two vocabulary words in a sentence, etc.	5 min.
Read Text	Read decodable text with a high proportion of words that have been taught	8 min.

(Full-size table appears on p. 166)



Students can and should be introduced to approximately one new letter name every one or two days.

What is the urgency regarding letter-name knowledge? Knowledge of letter names and fluency of letter naming in kindergarten are among the best predictors of later reading success (Catts, Nielsen, Bridges, Liu, & Bontempo, 2015). Reasons why this is true may include the following:

- Orthographic processing begins with accurate identification and discrimination of individual letters.
- Discrimination of confusable letters is facilitated by having a name for each of them.
- Many letter names contain the speech sounds they represent, and they provide clues for phoneme-grapheme mapping.
- Spelling—whether oral or silent—requires memory for letter names.

Early kindergarten students need daily experiences with hands-on manipulatives such as alphabet puzzles; shapes for letter building; materials for tracing in trays of sand, in whipped cream, or on sandpaper; or templates for matching wooden or plastic letter shapes.

Alphabet arc activities are excellent for matching uppercase and lowercase letters, and for locating letters by name.



If the 26 alphabet letters are sorted by the relationships between their names and sounds, it can be readily seen that some will be more challenging for students than others.

- Name the same as the sound: *a, e, i, o*
- Name begins with the sound: *b, d, j, k, p, q, t, v, z*
- Name ends with the sound: *f, l, m, n, r, s, x*
- Name overlaps with another: *c (s), g (j)*
- Name does not have the sound: *h, w, y*
- Name is confused with a sound: *u (/y/), y (/w/), w*
- Sounds in no letter name: */g/, /th/, /ng/, /sh/, /wh/, /zh/, /h/, and most vowels*

Many students demonstrate enduring confusions of letters *u*, *y*, and *w* because the name does not help with the sound. Students need more practice with those letters than with some others. Learning to write the letters to dictation will help reinforce the connection between letter name, sound, and form.

Letter Formation

Before asking young children to hold a writing implement and control its manipulation in a small space, teachers should have them practice prewriting motor skills. At the board, students can practice controlling the direction of their arm and hand movements—left to right, counterclockwise and clockwise, top to bottom—before gripping a pencil. Students can also prepare for writing by “writing” large with their arms extended, making large circles and lines on the carpet, or tracing and drawing geometric shapes.

Awareness of spatial relationships and directionality underlie perception of and memory for letter forms and the ability to reproduce them manually. Therefore, young learners need spatial guidelines so that they can learn the differences between tall letters, short letters, and letters below the baseline. Naming the guidelines on writing paper allows the teacher to talk about them. For example, the top line can be the “hat line,” the middle line the “belt line,” and the bottom line the “foot line.” A green line or arrow on the left can signal “go” and a red line on the right can signal “stop.”

Writing Letters

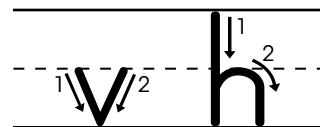
When children learn to write individual letters, they are developing both graphomotor (hand movement) and orthographic (letter recognition) skill. To write a letter, the learner must discern the direction of line production—up, down, clockwise, counterclockwise, diagonal. For example, to learn the difference between *u*, *v*, and *w*, the student must notice that *u* has a curve and a straight line on the right, that *v* has two diagonal lines that meet in an angle, and that *w* looks like two *v*-forms joined together. Each letter is formed in space between the bottom line and the middle line of the handwriting paper.



When children learn to write individual letters, they are developing both graphomotor (hand movement) and orthographic (letter recognition) skill. Effective teaching involves (a) verbal descriptions and verbal coaching and (b) showing model letters with numbered arrows indicating the sequence of strokes.

The student must also remember a precise motor sequence for forming each letter that can be automatized or recalled without conscious effort. The *u* requires starting on the left middle line, going down, around, up again, and finishing with a downward straight line. The *v* requires starting at the middle line, making a downward diagonal toward the right, and then making a second diagonal downward toward the left. These ordered component strokes involve recognition of letter size, directionality of movement, and position of lines in relation to one another. These component strokes—although kinesthetic and tactile—are learned and stored as linguistic symbols. That is, as students learn that letters represent speech sounds, syllables, and words, their images are stored in the brain’s language centers (Berninger & Wolf, 2015).

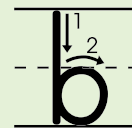
As letters are learned, students benefit from explicit teaching of letter features, spatial relationships, and sequences of strokes. Effective teaching involves (a) verbal descriptions and verbal coaching as students rehearse the strokes, and (b) showing model letters with numbered arrows indicating the sequence of strokes to be practiced.



Teaching a New Letter

This routine has three steps that follow an I DO, WE DO, YOU DO structure. First, the teacher explicitly describes and models the sequence of strokes in the letter. Then, he or she provides guided practice with immediate feedback before having students practice independently. Note that easily confusable letters such as *b*, *d*, *p*, and *q* may be contrasted.

- 1 Say, "Let's write the lowercase letter *b*." Draw *b* on a large piece of lined paper. "This is lowercase *b*. Watch me first. (a) Start at the hat line and go down to touch the shoe line. Stop at the shoe line and don't go any further. (b) Without picking up your pencil, go back up to the belt line and make a circle to come back down to the shoe line."
- 2 Say, "Let's do one together." Have students follow along as you describe and model the sequence of strokes again.
- 3 Say, "Now it's your turn. Make five more lowercase *b*'s." Pause for students to write. "Which one looks the most like mine? Circle the one that is your best one."



Grouping Letters for Teaching Letter Formation

Letters can be grouped together for instruction according to their shapes and first strokes. For example:

- Counterclockwise circle letters: *a*, *c*, *o*, *d*, *g*, *q*
- Letters with downward first line: *b*, *f*, *h*, *i*, *j*, *k*, *l*, *m*, *n*, *p*, *r*, *t*, *u*
- Letters with horizontal lines and diagonals: *e*, *s*, *v*, *w*, *x*, *y*, *z*



Letter formation takes longer to learn than letter recognition, letter-sound association, and sound blending because so many spatial and visual-motor memory skills are involved.

When teaching handwriting, focus primarily on lowercase letters first because the majority of words students write will be lowercase. Letter formation takes longer to learn than letter recognition, letter-sound association, and sound blending, because so many spatial and visual-motor memory skills are involved. It is counterproductive to ask students to write lengthy compositions by hand before they have automatized good letter-formation habits.



Phonemes and Key Words

Objective 4.2: Use appropriate key words for sound-symbol associations.

In the next phase of instruction, approximately 6–8 weeks into kindergarten, students begin to learn that letters represent phonemes. The order of instruction can vary, but in general, confusable letter-sound correspondences should be spaced apart in the instructional sequence. A few consonants and one vowel provide enough to start blending sounds into words. Units of instruction should follow a sequence for introducing sound-symbol correspondences such as the following:

1. /m/, /s/, /f/, /ă/, /t/
2. /p/, /n/, /î/, /h/, /k/ spelled c
3. /l/, /b/, /j/ spelled j, initial /r/, /ö/
4. /k/ spelled k, /d/, /g/ spelled g, /ě/, /y/ spelled y
5. /z/, /ks/ spelled x, /û/, /kw/ spelled qu, /v/, /w/
6. /th/, /sh/, /ng/, /ch/ spelled ch, /wh/, /k/ spelled -ck
7. /aw/ spelled aw; /ö/ as in book; /er/ spelled er

Component of Lesson	Instructional Routines and Techniques	Approx. Time
State Goal and Purpose	State concept focus and expectations for outcomes ("Today we will study...")	1 min.
Practice Phonological Awareness	Warm-up exercises, listening to and manipulating sounds in spoken words	3 min.
Review Previous Lesson	Fluency drills; rereading familiar text; checking retention of learned words or concepts	3 min.
Introduce New Concept	Explicit, direct teaching of new phoneme-grapheme correspondence or letter pattern	3–5 min.
Provide Guided Practice	Teacher-led practice blending words, reading pattern-based words, phoneme-grapheme mapping, reading phrases and sentences	5 min.
Provide Extended Practice	Word sorts, word chains, word families, cloze tasks; timed reading of learned words	5 min.
Practice Dictation	Dictation of sounds, words, sentences	8 min.
Connect to Word Meaning	With phonics vocabulary, construct multiple-meaning web; locate words that have similar meanings or that go together; find the odd one out in a set of words; use two vocabulary words in a sentence, etc.	5 min.
Read Text	Read decodable text with a high proportion of words that have been taught	8 min.

(Full-size table appears on p. 166)


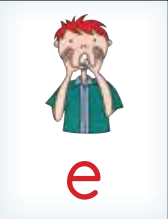



Identifying Good Key Words

A well-designed, systematic, explicit program will contain a set of sound-spelling cards, or charts of sound-spelling correspondences. It is important that the *key words* or *guide words* for sounds be as undistorted as possible. A clear model of the speech sound will help students distinguish it from others and store it in memory. Vowels have many allophones, or variations in pronunciation, that should be avoided on sound-spelling cards (Table 3.10).



(Photo courtesy of Tools 4 Reading)

Table 3.10: Recommended Key Words for Short Vowels
 Sound-spelling cards from *Spelling by Pattern, Level 1* (Javernick & Moats, 2007)

Short Vowel Sound	Recommended Key Word	Words to Avoid
/ă/	 apple	<i>ant</i> (nasalized) <i>alone</i> (a schwa)
/ĕ/	 echo Ed exit	<i>egg</i> (sounds like /ā/) <i>elephant</i> (letter name /) <i>engine</i> (nasalized) <i>eye</i> (long <i>i</i> sound) <i>hen</i> (nasalized)
/ĭ/	 itch icky	<i>Indian</i> (nasalized) <i>igloo</i> (sounds like /ē/)
/ŏ/	 octopus	<i>on, off</i> (sounds like /aw/) <i>dog</i> (sounds like /aw/)
/ŭ/	 up	<i>umbrella</i> (nasalized)

Consonants can also be problematic because of coarticulation and allophonic variation. Table 3.11 describes some of the more problematic consonants.

Table 3.11: Recommended Key Words for Selected Consonants

Consonant Phonemes	Recommended Key Word	Words to Avoid
/d/	dog	<i>dress</i> (affricated /d/)
/t/	tent, ten	<i>train</i> (affricated /t/)
x (/ks/)	box (Most of the time, x represents /ks/ after a vowel.)	<i>xylophone</i> (sounds like /z/)
/g/	goat	<i>grape</i> (consonant blend)
/r/	rabbit, rope	<i>bird</i> (a vowel sound here)
/wh/	whale	(This phoneme is not distinctive for American speakers as it is for British.)
/th/	thimble	(Avoid voiced /th/, as in <i>the, them, those</i> .)

Review and Evaluate Continuously

Systematic, explicit, and cumulative approaches enable the teacher to know the objective of the lesson or series of lessons, and to evaluate students' progress toward learning the skills and applying them. The goal of every instructional sequence is accurate, automatic word recognition, and/or recall of specific words for writing.

Continuous evaluation occurs during daily instruction, when the teacher watches the student to see if the taught skill is applied independently and accurately. Once students are accurate, instruction can emphasize fluency. Timed curriculum-based measurements can then be used for progress monitoring.



The goal of every instructional sequence is accurate, automatic word recognition, and/or recall of specific words for writing.



Objectives for Unit 4

After completing each session, you should have met the following objectives.

Sessions	Unit 4 Objectives
1. What Is Advanced Word Study? (p. 233)	1.1 Understand why advanced word study is important. 1.2 Identify five ways to explain any word. 1.3 Recognize historical influences on English orthography.
2. Is There More to Learn about Phoneme-Grapheme Correspondences? (p. 241)	2.1 Explore position-based spelling correspondences and other orthographic conventions. 2.2 Learn the technique of phoneme-grapheme mapping.
3. Why and How Should Syllable Types Be Taught? (p. 253)	3.1 Understand the reasons for teaching syllable patterns. 3.2 Identify and manipulate six syllable types and exceptions. 3.3 Teach a multisyllabic word-reading strategy to students.
4. When and How Should Morphology Be Taught? (p. 267)	4.1 Understand the historical origins and types of English morphemes. 4.2 Distinguish syllables from morphemes. 4.3 Examine suffix addition rules—consonant doubling, drop silent <i>e</i> , change <i>y</i> to <i>i</i> —and final odd syllables and suffixes.
5. How Can Spelling Be Taught and Assessed? (p. 279)	5.1 Review the structure and purpose of a diagnostic spelling screener. 5.2 Interpret spelling screener results. 5.3 Understand some best practices for teaching spelling.
6. How Can Reading Fluency Be Built? (p. 289)	6.1 Understand the relationship between oral reading fluency and reading comprehension. 6.2 Identify thresholds for oral reading fluency. 6.3 Learn techniques for building word, sentence, and passage reading fluency.
7. Why Is Working with Data Important? (p. 309)	7.1 Interpret phonological, phonics, spelling, and fluency data. 7.2 Base instructional choices on data.
8. How Can Foundational Reading Skills Be Put into Perspective? (p. 323)	8.1 Align practices with scientific evidence. 8.2 Revisit the concept of “balance” in instruction.

Preview Questions

Think about the answers to these questions before studying this unit.

1. In your school, is there a vertically aligned program of word study (word recognition and word analysis)?
2. Is spelling taught as a distinct subject? If so, how is it taught?
3. Do the outcome data of your class or school suggest that the word study component can be strengthened? If so, in which ways?
4. Do you feel confident that you can explain *why* words are spelled the way they are? Why or why not?

Session

How Can Spelling Be Taught and Assessed?

Preview Questions

Think about the answers to these questions before studying this session.

1. Why is it important to teach and assess student spelling?
2. What is the purpose of giving a qualitative spelling screener and to whom should it be given?

Why and How to Assess Spelling

Objective 5.1: Review the structure and purpose of a diagnostic spelling screener.

Students with reading difficulties will also struggle with one or more aspects of writing and spelling. Some students have specific spelling and writing difficulties even though their reading is progressing satisfactorily (Berninger & Wolf, 2015). Why is this the case?

Spelling depends on recall of complete and accurate word images in the orthographic memory system. Most people can read more words than they can spell because recognition is less demanding than recall. Reading is a recognition task while spelling is a production task. For example, one can read words like *accommodate* and *commitment* without explicitly learning whether they have doubled *m*'s.

To spell a word, however, one must map—either implicitly or explicitly—all of its sound-symbol correspondences, its syllable structure, its morphological structure, and any oddities that defy patterns or that are borrowings from a particular language of origin. On occasion, the grammatical role of a word also affects its spelling (e.g., *allowed*, *aloud*; *passed*, *past*). Knowledge of language at these levels affects spelling development as much as reading development. Very few words are learned purely by rote or by some kind of nonlinguistic visual imprinting process (Berninger & Wolf, 2015; Joshi, Treiman, Carreker, & Moats, 2008–2009).

The act of writing, furthermore, requires graphomotor coordination—the ability to control the hand as it forms letters with a pencil. A breakdown in the communication pathways between the mind's image of a letter and the hand's ability to produce it is called **dysgraphia**.



dysgraphia

A breakdown in the communication pathways between the mind's image of a letter and the hand's ability to produce that letter in written form.

Phonics or word study lessons in K–1 that include an encoding or spelling component are more effective than beginning reading lessons that omit that step (Weiser & Mathes, 2011). In addition, knowing the meanings of words that are being learned increases the likelihood of remembering them (Kilpatrick, 2015). This is because consolidated word images are best constructed via a three-way,



If students are taught to be phonemically aware (especially at advanced levels), to map phoneme-grapheme correspondences, to understand morphology, and to think about word origin and word meaning, they have more “handles” by which to code those orthographic images in memory.

multidirectional exchange between the phonological, orthographic, and meaning processing systems. The more a student knows about a word, the stronger the memory trace tends to be.

From second grade onward, lessons that organize the spelling word list by linguistic patterns and regularities in the orthography, and that teach only a few irregular words at a time, are more effective for poor spellers. If students are taught to be phonemically aware (especially at advanced levels), to map phoneme-grapheme correspondences, to understand morphology, and to think about word origin and word meaning, they have more “handles” by which to code

those orthographic images in memory. A poor speller may still not remember every letter of every word, but their approximations will be closer to the target and they will have a strategy for thinking through how a word might be spelled.

So, in short, written spelling provides insight into what students know about sound, print, and meaning. That information can then be used to focus instruction on exactly what the student needs to learn.

Ways to Assess Spelling

Spelling can be assessed in several ways:

- A standardized test with normative data, such as the *Test of Written Spelling* (TWS-5; Larsen, Hammill, & Moats, 2013)
- A comprehensive assessment of writing skills that includes a spelling subtest, such as the *Test of Written Language* (TOWL-4; Hammill & Larsen, 2009)
- Error analysis in various writing samples
- A **qualitative spelling screener**



qualitative spelling screener

A list of words with a variety of orthographic patterns, specifically designed to assess students’ spelling levels and knowledge of those patterns.

One advantage of a qualitative spelling screener is its ability to directly inform instruction. Following the progression of concepts and patterns that typically characterizes student learning, the teacher can easily see where a student needs to begin within a scope and sequence of spelling development.

Qualitative Spelling Screeners

English contains a large number of orthographic conventions, patterns that need to be taught in a scope and sequence from simple syllables to more complex, from consistent to variable patterns, and from phonology to orthography and morphology. With so many spelling conventions to teach, how can teachers identify what students know and what they continue to confuse? A qualitative spelling screener is an invaluable tool to identify known and confused spelling conventions. From there, a point of instruction can more easily be identified.

LETRS includes two qualitative spelling screeners: the Basic Spelling Screener for grades K–2 (Appendix E, p. B8) and the Advanced Spelling Screener for grades 3–5 (Appendix G, p. B10). The directions for the spelling screeners are in Appendix D (p. B5). The top-to-bottom progression of skills on the score sheets reflect the general sequence in which spelling correspondences are learned. Each element or grapheme correspondence of interest is listed, along with test words containing the elements.

As students progress, more whole words and features will be correct. The words and elements correct should reflect small or large steps as students improve.

Using the Spelling Screener

Use the LETRS Basic Spelling Screener for grades K–2 or with any older students with weak spelling. Use the LETRS Advanced Spelling Screener for grades 3–5, or until students show that they can spell these words. The same list of words can be administered three times—fall, winter, and spring—to measure all students' progress.

The words on the screeners are ordered from easy to difficult. Limit testing to words with orthographic elements that students are likely to master in their particular grade level. (Use the following chart for reference.) However, it is important to dictate enough words to get a sense of the range of ability in a given class. Dictate additional words for any students who spell most of the words correctly at the kindergarten or first-grade level.

Grade Level	Spelling Screener	Dictate Which Words?
K	Basic	First 5–8 words
1	Basic	At least first 15 words
2, 3 (weak spellers)	Basic	All words given
3 (strong spellers who can spell more than 20 words on the Basic Spelling Screener)	Advanced	All words given
4–5	Advanced	All words given

Don't have students study the words on the screener beforehand. Studying invalidates its purpose, which is to find out what students have internalized about word structures.

Before beginning the screener, seat students to minimize copying or test them in small groups (recommended for kindergarten and early first grade). Provide pens or pencils without erasers, since the idea is to capture their first attempts at spelling the words. Assure students that this is not for a grade but to better help plan for their needs.

Objectives for Unit 5

After completing each session, you should have met the following objectives.

Sessions	Unit 5 Objectives
1. Why Is Vocabulary So Important? (p. 3)	1.1 Understand the relationships among vocabulary knowledge, background knowledge, oral language proficiency, and reading comprehension. 1.2 Review the evidence that early language stimulation is critical for vocabulary growth and literacy development.
2. What Does Knowing a Word Involve? (p. 13)	2.1 Recognize that both breadth and depth of word knowledge are important for reading comprehension. 2.2 Understand how deep knowledge of a word is established through experience and instruction. 2.3 Assess students' vocabulary informally and formally.
3. What Words Should Be Taught Directly? (p. 27)	3.1 Understand the uses as well as the limitations of dictionaries as vocabulary resources. 3.2 Select words based on the three-tier model for choosing vocabulary words. 3.3 Adapt vocabulary instruction for English Learners. 3.4 Use word lists as resources if appropriate.
4. How Should New Words Be Introduced? (p. 37)	4.1 Follow an effective routine for introducing target vocabulary to students. 4.2 Adapt vocabulary instruction for English Learners.
5. What Kinds of Practice Are Effective? (p. 43)	5.1 Use a variety of techniques to explore word relationships. 5.2 Teach new words in relation to other words.
6. How Is a Language-Rich Classroom Created? (p. 57)	6.1 Model and encourage the use of advanced vocabulary in the classroom. 6.2 Extend vocabulary practice after reading. 6.3 Teach students to use context and word structure to reinforce word meanings and uses.

Preview Questions

Think about the answers to these questions before studying this unit.

1. What methods or activities do you currently use to teach students new vocabulary? How do these reflect your own understanding of the relationship between oral language and vocabulary instruction?
2. How do you work word relationships into your vocabulary instruction?
3. In what ways do you create a language-rich classroom?

Session

What Does Knowing a Word Involve?

Preview Questions

Think about the answers to these questions before studying this session.

1. Does your vocabulary instruction tend to emphasize in-depth learning of specific words, general exposure to a lot of words, or a combination of both?
2. Do you have a tool or strategy for estimating your students' levels of vocabulary development?

Dimensions of Word Knowledge

Objective 2.1: Recognize that both breadth and depth of word knowledge are important for reading comprehension.

Assessment of a student's vocabulary, or even discussion of instructional goals in this area, requires some choices to be made. What exactly is to be assessed? Is it broad and shallow acquaintance with a lot of words, or is it thorough and deep knowledge of important words for academic learning or writing? Is it both? The difference may be especially important for teaching ELs who can name printed words after they learn to decode but who do not understand the words' meanings well enough to "own" them.

Printed word recognition requires associating print with speech at the grapheme, syllable, and morpheme levels of language organization. Automatic word recognition during reading, however, requires association with meaning as well, as depicted in the Four-Part Processing Model (*Figure 5.3*). The meaning processing system in the brain's reading network makes sense of the word parts (morphemes), whole words, and phrases that have been decoded. It also facilitates reading fluency, because a reader spends less time and mental effort recognizing a word whose meaning is known than one that is unfamiliar.

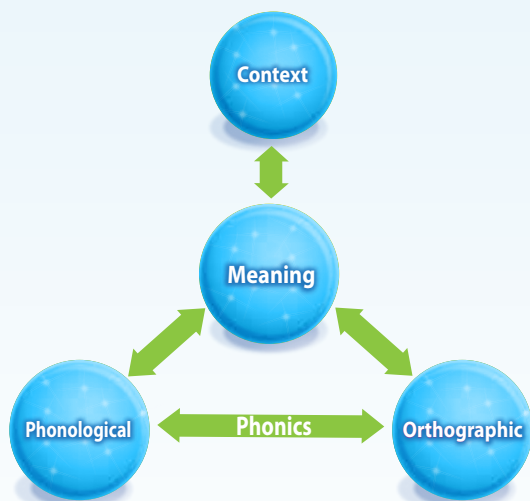


Figure 5.3 The Four-Part Processing Model for Word Recognition
(Based on Seidenberg & McClelland, 1989 from
Psychological Review, 96(4), p. 526.)



The best instruction in phonics and decoding includes activities that explore word meaning. As the focus of text reading shifts toward vocabulary and comprehension, the instruction should call attention to a new word's pronunciation and spelling.

This is why the best instruction in phonics and decoding includes activities that explore word meaning. As the focus of text reading shifts toward vocabulary and comprehension, the instruction should call attention to a new word's pronunciation and spelling. Throughout this unit, it will be reiterated that *sound*, *symbol*, and *sense* are connected. Knowledge of word form supports knowledge of word meaning, and knowledge of word meaning enables recognition of word form (Adlof & Perfetti, 2014).

Thought and words are so connected that people seldom stop to ask: What is a word? What is meaning? Henry Ward Beecher offered a good answer to these questions when

he said, "All words are pegs to hang ideas on" (Drysdale, 1887). Well-known words trigger images, concepts, spatial and motor associations, and emotions. New evidence from neuroscience (Fernandino, Humphries, Conant, Seidenberg, & Binder, 2016) shows that the brain encodes or stores word meanings with information about the different sensory-motor attributes of the concepts those words represent. Therefore, when students build a rich semantic or meaningful network of associations around the words they must learn, those words will be secured more deeply in memory and will be retrieved more readily.

Figure 5.4 represents some of the many dimensions of word knowledge that may characterize a word that is known well.

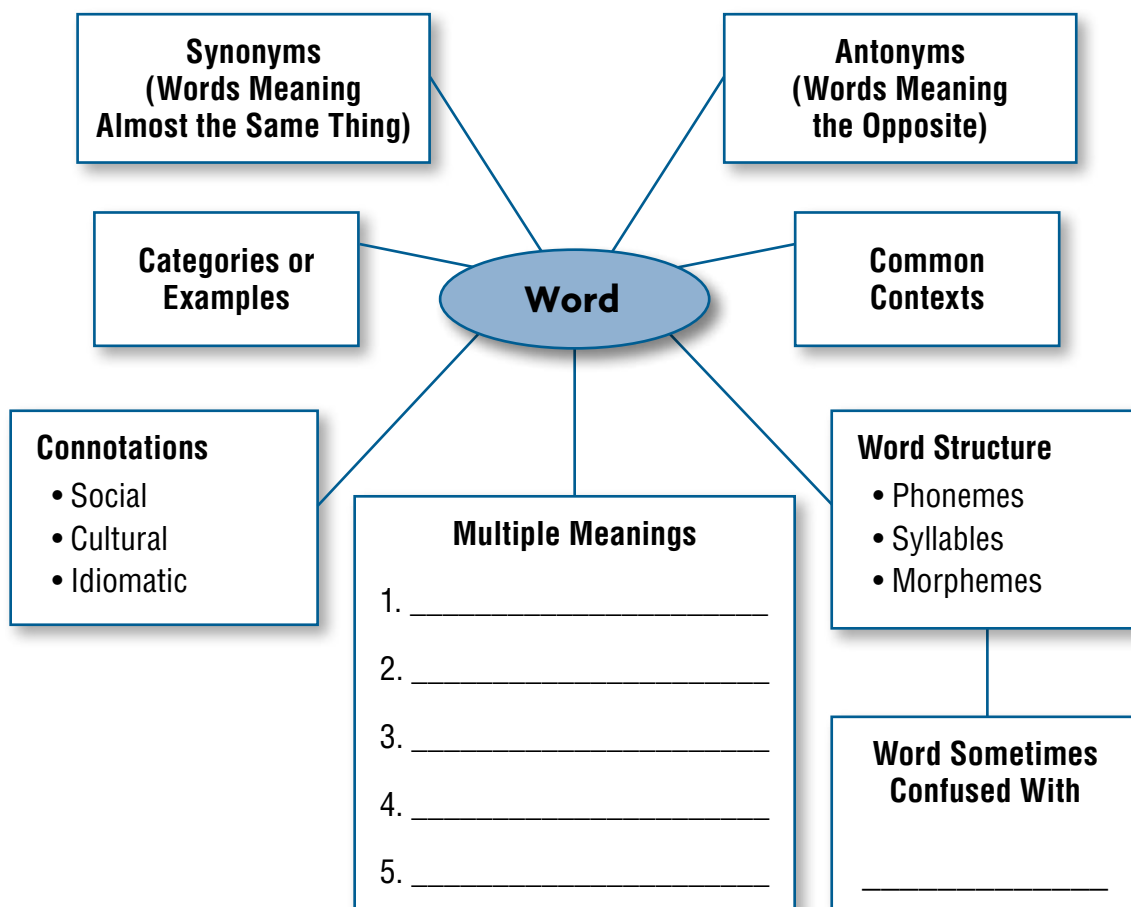


Figure 5.4 Dimensions of Word Knowledge

If knowing a word very well entails knowing all or most of these dimensions of meaning, then good instruction can explore words from a number of perspectives: How does one say the word? Use the word? Does it have synonyms? Does it have antonyms? Multiple meanings? Connections to other words? Word learning is not just about learning a definition.

Shallow and Deep Knowledge of Word Meanings

Based on the continuum of word knowledge outlined in Session 1 (p. 5), evaluate your knowledge of these words.

3 = I “own” the word and use it with confidence in writing and/or speaking.

2 = I know it well enough that I would get its meaning while reading in context.

1 = I have heard it somewhere or have some notion what it means.

0 = I do not know what this word means.

- | | |
|----------------|----------------|
| ___ Phoneme | ___ Dichotomy |
| ___ Lexicon | ___ Parse |
| ___ Semantic | ___ Lugubrious |
| ___ Grapheme | ___ Obeisance |
| ___ Comprehend | ___ Sedulous |

Answers will vary. Definitions for words that you may not know: *Dichotomy*—The divide between two contradictory things; *Parse*—To analyze the components of a sentence; *Lugubrious*—Doleful or depressing; *Obeisance*—A gesture expressing respect, as in a bow or curtsy; *Sedulous*—Zealous, diligent

In all likelihood, some of the words in this exercise were highly familiar, some were partially known, and others were totally unfamiliar. Such gradations of understanding characterize all of the items in teachers’ mental dictionaries—and in those of the students they teach.

Imagine what is in the mind of a student who is just beginning to know the word *railroad*. The word associations in his mental dictionary might look something like Figure 5.5.

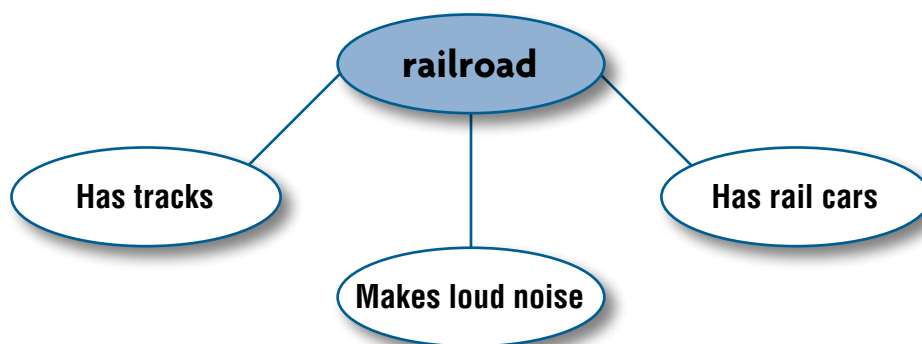


Figure 5.5 Semantic Map of Partially Known, or “Shallow,” Word Meaning in the Mental Lexicon

When asked to define the word *railroad*, the student might say, “It’s loud. It goes on tracks.” He would have trouble explaining *what* a railroad is, although he can describe things about it. He might think that *train* and *railroad* have the same meaning. He probably would know only one context for the use of the word, such as the song, “I’ve Been Working on the Railroad,” and would not understand the figurative use of the term in, “I was *railroaded* into joining the team, although I didn’t want to.”

Now imagine the internal **semantic map** of a person whose knowledge of *railroad* is broad and deep (Figure 5.6). She would have constructed many



semantic map

The association of meanings and context for a given word, including structure, origin, images, personal associations, synonyms, antonyms, and historical or cultural connotations.

associations in her mental dictionary. An entire network of meanings would be activated if she heard or read the word, including its multiple meanings, examples of its use in context, recognition of its structure (compound) and/or origin (Anglo-Saxon), images and personal associations triggered by the word, synonyms and antonyms, and historical or cultural connotations, including the meaning of *Underground Railroad*.

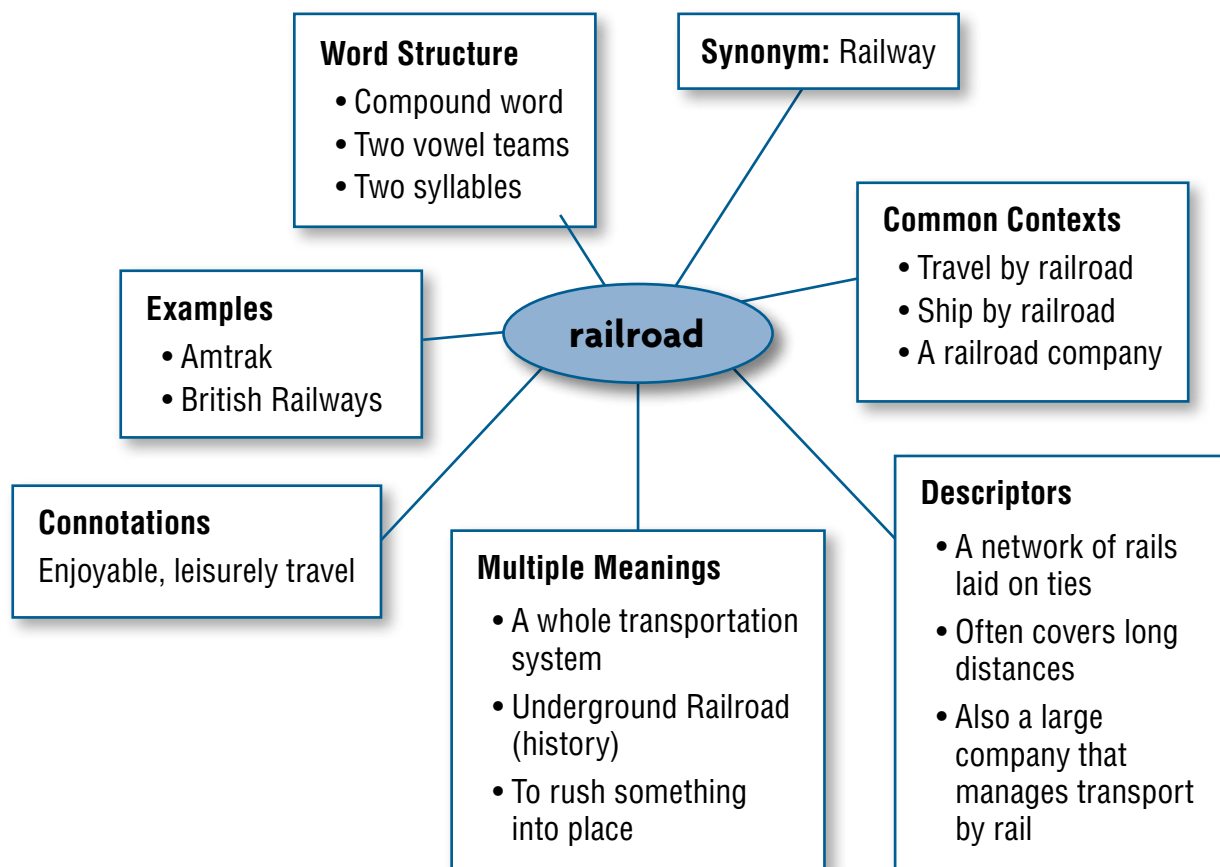


Figure 5.6 Semantic Map of a Well-Known Word in the Mental Lexicon

How can teachers help students establish high-quality, elaborated mental connections in memory as they learn words? According to Stahl and Nagy (2006), two primary mechanisms are at work:

- Multiple encounters with words, most likely through reading, being read to, and/or being surrounded by a language-rich environment
- Direct, planned, explicit teaching of selected words

In the remainder of this unit, the focus will be on word-learning processes and experiences that provide natural encounters with language in various settings—and on direct, planned, explicit teaching of words before, during, and after text reading.

Broad and Deep Vocabulary Instruction

Objective 2.2: Understand how deep knowledge of a word is established through experience and instruction.

Excellent vocabulary instruction aims to develop broad acquaintance with many words and thorough knowledge of some. Tannenbaum, Torgesen, and Wagner (2006) studied 203 third-grade students to determine how two aspects of vocabulary knowledge were related to reading comprehension:

- Breadth of vocabulary (recognizing a lot of words given context)
- Depth of vocabulary (being able to provide a complete, accurate definition for known words and knowing their multiple meanings)

Deeper knowledge of word meanings was associated with fluent recall of the words and an ability to categorize them. Breadth of vocabulary, when compared to depth, had the stronger relationship with reading comprehension. Both aspects of vocabulary contributed to reading comprehension, however, and each was related to the other.

With such evidence, it's clear that implicit and incidental word-learning processes are vital to students' vocabulary growth. Leading researchers (Beck, McKeown, & Kucan, 2013; Graves, 2006; Stahl & Nagy, 2006) agree that teachers cannot teach thousands of words directly every year. If teachers can teach a few hundred words thoroughly, hundreds more must be learned without a lot of in-depth instruction. Three main mechanisms for incidental word learning are responsible for vocabulary growth beyond the specific instructional activities that teachers devise:

- Listening to the language of caregivers and other family and community members
- Being read to
- Reading independently



Three main mechanisms for incidental word learning can further vocabulary growth beyond the instructional activities that teachers devise: listening to the language of others, being read to, and reading independently.

Objectives for Unit 6

After completing each session, you should have met the following objectives.

Sessions	Unit 6 Objectives
1. What Is the Goal of Reading Comprehension Instruction? (p. 71)	1.1 Survey the language and cognitive skills that support reading comprehension (the Reading Rope and beyond). 1.2 Distinguish comprehension products from comprehension processes. 1.3 Understand the goal of instruction: to construct a coherent mental model of the text. 1.4 Plan to mediate comprehension before, during, and after text reading.
2. What Causes Poor Comprehension? (p. 85)	2.1 Identify the characteristics of students who struggle with language and reading comprehension. 2.2 Recognize the uses and limitations of standardized reading comprehension tests.
3. How Can Students Be Prepared for Reading? (p. 93)	3.1 Understand how vocabulary, background knowledge, and reading comprehension are connected. 3.2 Plan to teach texts by establishing a purpose, introducing key words and ideas, and building requisite background knowledge.
4. How Does Sentence Structure Affect Comprehension? (p. 105)	4.1 Understand how syntax or sentence structure can affect students' reading comprehension. 4.2 Provide practice to help students build competence with sentence-level understanding. 4.3 In previewing text, anticipate uncommon sentence grammar or structure that students might not understand, and instruct accordingly.
5. How Are Ideas Tied Together in Text? (p. 121)	5.1 Understand the importance of text coherence and its relationship to mental coherence. 5.2 Plan for having students identify and understand the use of various cohesive devices in text.
6. How Does Text Structure Affect Comprehension? (p. 131)	6.1 Understand how text organization in different genres affects comprehension. 6.2 Explain the uses and structure of narrative text. 6.3 Explain the uses and structures of informational text.

Preview Questions

Think about the answers to these questions before studying this unit.

1. What methods or activities do you currently use to teach reading comprehension?
2. How do those methods or activities reflect the way(s) in which *you* learned to understand what you read?

Session

How Does Sentence Structure Affect Comprehension?

Preview Questions

Think about the answers to these questions before studying this session.

1. Do your students ever have trouble understanding complex sentences?
2. Does your instruction include explicit teaching of sentence structure and comprehension at the sentence level?

Syntax and Its Relationship to Meaning

Objective 4.1: Understand how syntax or sentence structure can affect students' reading comprehension.

The Comprehension Planning Checklist (Appendix B, p. B8) lists each important aspect of comprehension instruction. This session focuses on issues with syntax or sentence structure that might affect comprehension and how to plan for them *before* carrying out a teacher-led comprehension lesson.

To comprehend text, the reader must decode and identify the meanings of individual words. The reader must also decipher the meanings of the words in the context of sentences. Further, he or she must integrate meanings across sentences and make inferences that depend on background knowledge and verbal reasoning skills. Finally, the successful reader constructs a mental model that combines prior knowledge with the ideas in the text (Cain & Oakhill, 2007).

Recall the process of constructing a mental model that was described earlier in this unit (pp. 78–81). Those who comprehend well are simultaneously interpreting the surface code—the wording and **syntax**—and the text base, or the unstated meanings below the surface. As readers develop, they can move from literal (i.e., who, what, when, where) to more implicit understanding (i.e., why, how) of what a text says. To accomplish this growth, young readers not only must acquire foundational reading skills and academic and literary vocabulary, but they also must be able to interpret the meaning underlying the structure of sentences. Interpretation of sentences is required if students are to comprehend whole texts (Scott, 2009).

Appendix B: Comprehension Planning Checklist	
Title	Page Numbers/Other Notes
Before Reading	
Establish Purpose for Reading. Why read this text? What are the takeaways or enduring understandings students should gain from this text?	
Identify Text Structure. Is this informational or narrative text?	
Prepare Background Knowledge. What background or topic context is needed?	
Select Vocabulary. What words should be pretaught?	
Identify Challenging Language. What are difficult sentences/phrases/academic language?	
During Reading	
Plan Questions. Anticipate Student Questions. Mark text for stopping to ask questions and queries.	
Use Text Structure to Organize Thinking. Use graphic organizer or outline to show structure.	
After Reading	
Was Purpose Met? Did Students' Thinking Change? Evaluate student understanding. Is rereading planned?	
Assessment: Can Students Express Takeaways? Use Text Evidence? Evaluate how students express the big ideas/enduring understandings from the reading. Can students support their ideas with text evidence?	

(Full-size checklist appears on p. B8)



syntax

The system of rules governing permissible word order in sentences.



(Full-size mental model figure appears on p. 78)

Unit 1 noted how academic language—the language found in books—differs considerably from the language of conversation. Academic written language differs from conversational language not only in terms of vocabulary but also in terms of syntax. Syntax in academic language may have the following:

- Several propositions or meaning units in a sentence
- Longer complex sentences with embedded clauses
- Strict adherence to conventional usage and grammar
- Tighter logic between sentences with less redundancy
- Few, if any, conversational cues

When students are asked to read informational or narrative texts, they can be presented with statements, directions, and questions worded in ways that make it



Sheer unfamiliarity with the structures of sentences in academic writing can trip up students whose exposure to academic language is limited or ELs whose first language has a different syntax from English.

difficult for them to comprehend. Even if these texts are read aloud, sheer unfamiliarity with the structures of sentences in academic writing can trip up students whose exposure to academic language is limited or ELs whose first language has a different syntax from English. This session will focus on what can be challenging about syntax, and what teachers can do to help students develop better comprehension at the level of the sentence.

Readability Formulas

Readability formulas, such as the Lexile® measures, were created to help teachers choose academic texts for students that they would be able to comprehend at either an independent or instructional level. In order to match text to grade-level reading expectations, these formulas to a great extent measure the length and grammatical complexity of sentences. Texts considered “low level” often use very simple sentence structures. The closer a text gets to authentic academic language, the more complex and lengthy the sentences may become.

Putting Words Together to Make Sense

Syntax is the system in a language that specifies how words, phrases, and clauses can be sequenced. To associate words and phrases with meaning, their roles within a sentence or context must be deciphered. For example, consider how the meanings of these groups of words change as their order changes:

- The boy a homerun hit.
- The homerun a boy hit.
- The homerun hit a boy.
- The boy hit a homerun.

Why does meaning change when the order of words changes? Because the underlying linguistic structure, or syntactic framework, determines *who* is doing *what* to *whom* and in *what* way. Words fill slots in the sentence structure, and those slots determine the relationships among the words, which in turn determine what the sentence means.

Another function of syntax is to help disambiguate or resolve the meanings of words with multiple uses and multiple meanings. Consider these examples, all with the word *pitch*:

- The chorus sang on *pitch*.
- The girl *pitched* the ball.
- The salesman gave a strong *pitch* for the product.
- The driveway angles down at a steep *pitch*.

Within the context of a sentence, there is also a difference in meaning between the possessive and plural forms of words. In addition, meaning is affected by punctuation. Consider these examples:

- We applauded the class's work.
We applauded the classes' work.
We applauded the classes at work.
- It's a plane that just landed.
Its plane just landed.
- Slow, children crossing
Slow children crossing

The intended meaning of the sentence determines the structure of the sentence, which in turn determines the morphological form of the words in it, especially the use of suffixes. *Inflectional suffixes* mark the number of nouns (-s, -es), the tense and number of verbs (-s, -ing, -ed), and the degree of comparatives (-er, -est). *Derivational suffixes* indicate the grammatical role of a word within a sentence (noun, verb, adjective, adverb). Consider these examples:

- July fourth marks our nation's *independence*. (singular noun)
Independent thinkers are some of the best. (adjective)
- Children are their parents' *dependents*. (plural noun)
Communities *depend* on one another. (present tense verb)
We have *depended* on our guides. (past tense verb)

Readers who struggle with comprehension may not process the meanings of sentences for several reasons. First, some students may lack experience with or exposure to the longer, more formally constructed sentences found in written text. In addition, the working memory capacity of some students may not be sufficient to hold a whole sentence on the “cognitive desktop” until its meaning is fully understood. Finally, students with weaker language abilities or with divergent dialects find that certain sentence structures are quite difficult to interpret.



As students develop a sense of the underlying structure of syntax, they will be able to group words into phrases and read with appropriate prosody or expression. They will also be able to identify the main *who*, *is doing*, and *what* or *to what* parts of the sentence.

As students develop a sense of the underlying structure of syntax, they will be able to group words into phrases and read with appropriate prosody or expression. They will also be able to identify the main *who*, *is doing*, and *what* or *to what* parts of the sentence. Sentence by sentence, the meaning of the text can then be assembled.

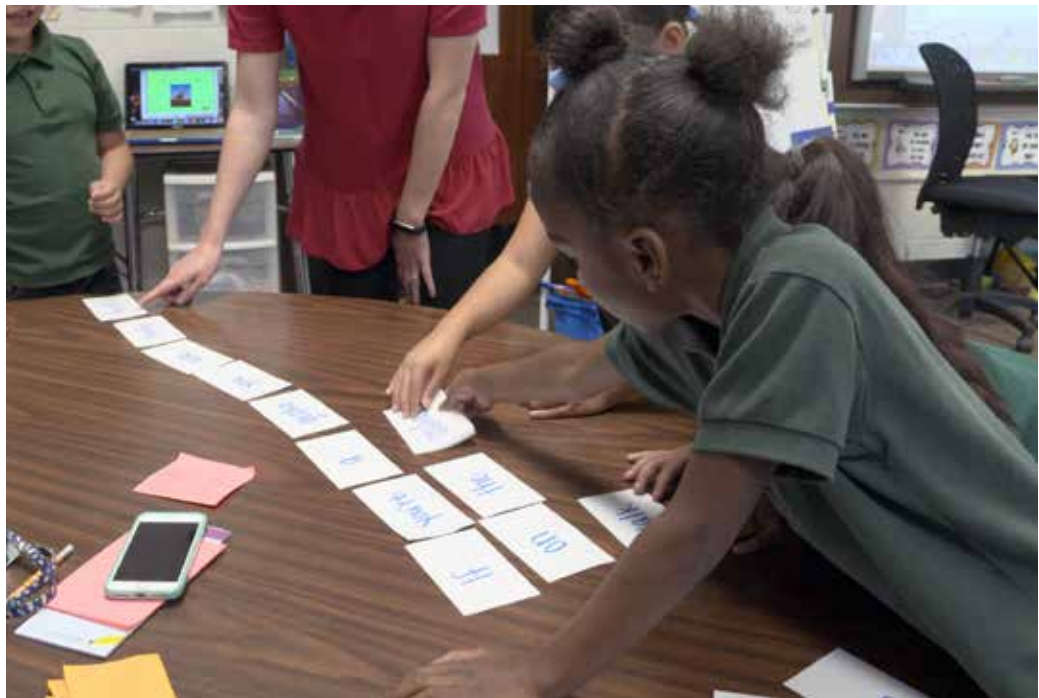
Teaching Sentence Types

Objective 4.2: Provide practice to help students build competence with sentence-level understanding.

Teachers often have little success teaching young students to identify nouns, verbs, adjectives, and other parts of speech. The concepts are too abstract, and young students often do not have the metalinguistic skill to reflect on words in that way. Discovery of the *function* of words in sentences, however, can be successful and useful. Function is best described as the job a word or phrase does in a sentence. What question does it answer: *Who or what? What kind? Did what? To whom or what? Where? When? How? Why?*



Complete sentences have two parts: a complete subject telling *who* or *what* the sentence is about and a complete predicate telling the *action* or *what* the subject is doing, thinking, or feeling.



The Complete Sentence

A complete sentence has two parts: the complete *subject*, telling *who* or *what* the sentence is about, and the complete *predicate*, telling the *action* or *what* the subject is doing, thinking, or feeling. Instruction about sentences should begin by explaining to students that complete sentences have both of these parts.

Examples of activities that teachers can use to develop awareness of subject (*who* or *what*) and predicate (*action*) are as follows:

- Have students match a part on the left with a part on the right to make a complete sentence. These can be put on sentence strips and matched.

Who or What?	Action (Doing, Thinking, or Feeling)?
The cowardly lion	needed oil to move his arms.
The tin man	wanted more straw.
The stuffed scarecrow	wiped his eyes with his tail.

- Have students put one line under the sentence part that tells *who* or *what* the sentence is about, and two lines under the part that tells the *action* or *what* they are doing or feeling.
 - The bear and lion fought with the wolves.
 - The wise old wolf saved the man-cub from the tiger.
- Give only one part of a sentence to students, and have them create the missing part to complete the sentence.

Who or What?	Action (Doing, Thinking, or Feeling)?
My funny friend	
	dug up some worms.
Six colorful eggs	
	is going to a theme park.

Four Sentence Types

Young students also need to understand the four different types of basic complete sentences (Table 6.2). In learning to speak and then to read and write, they discover that each type of complete sentence can have a different structure, a different form of punctuation, and a different prosody when read aloud.

Table 6.2: Types of Sentences

Sentence Type	Purpose	Example
Statement	To state, say, or tell	I read every day. I (<i>who</i>) read every day (<i>action</i>).
Command	To tell someone to do something	Line up for lunch. You (<i>who</i>) line up for lunch (<i>action</i>).
Exclamation	To say something with emotion or feeling	The class loves pizza! The class (<i>who</i>) loves pizza (<i>action</i>).
Question	To ask for or about something	Which book should I read next? I (<i>who</i>) should read which book next (<i>action</i>)?

Objectives for Unit 7

After completing each session, you should have met the following objectives.

Sessions	Unit 7 Objectives
1. How Should Instruction Be Balanced to Include Comprehension? (p. 147)	1.1 Plan to teach both foundational skills and language comprehension. 1.2 Define <i>high-quality text</i> , and know where to find it.
2. Which Comprehension Strategies Can Be Used during and after Reading? (p. 157)	2.1 Identify which comprehension strategies are supported by research. 2.2 Understand how to integrate research-supported strategies into all comprehension instruction, as appropriate. 2.3 Plan to incorporate some effective strategies during reading. 2.4 Plan to incorporate some effective strategies after reading. 2.5 Teach students to generate questions before, during, and after reading.
3. How Should Comprehension Be Mediated through Questioning? (p. 177)	3.1 Describe the importance of generating questions that deepen understanding of text. 3.2 Understand how querying facilitates students' inferences and abilities to construct the mental model of the text. 3.3 Plan where to place questions at critical points in the text.
4. What Should Students Do after Reading a Text? (p. 191)	4.1 Reread and revisit text for various purposes. 4.2 Help students select, represent, analyze, apply, and/or remember the enduring understandings from reading a narrative. 4.3 Help students select, represent, analyze, apply, and/or remember the enduring understandings from reading informational text. 4.4 Understand the importance of varying ways for students to respond to text after reading.
5. What Is the Process for Planning an Entire Lesson? (p. 203)	5.1 Use a planning guide for comprehension instruction of narrative text. 5.2 Use a planning guide for comprehension instruction of informational text.
6. How Can Instruction Be Adapted for Special Populations? (p. 217)	6.1 Teach Standard American English to nonstandard dialect speakers. 6.2 Provide extra support and instruction for English Learners. 6.3 Adjust instruction for students with language disorders and/or low verbal-reasoning abilities.

Preview Questions

Think about the answers to these questions before studying this unit.

- How frequently do you incorporate high-quality texts into your reading comprehension instruction?
- How do the texts, methods, or activities you use reflect your own experiences in learning to understand what you read?

Session

How Should Instruction Be Balanced to Include Comprehension?

Preview Questions

Think about the answers to these questions before studying this session.

1. Do you believe that the texts used for language comprehension instruction in your classroom are well written and engaging for students? Why or why not?
2. How well are you able to apportion instructional time so that you teach foundational skills and language comprehension daily?

Balancing Foundational Skills and Language Comprehension

Objective 1.1: Plan to teach both foundational skills and language comprehension.

In looking at all the scientific consensus reports cited in this course, it is clear that code-emphasis approaches to beginning reading have *always* obtained better results with students in general, and are especially vital for students in the lower 40 percent of the population. As Foorman et al. (2016) reported, evidence for explicit instruction in phonology and phonics continues to be strong, and evidence for comprehension-focused instruction—in accounting for early reading results in grades K–2—continues to be weak. There are no consensus reports from the scientific community that muster substantial and consistent evidence to the contrary (Seidenberg, 2017). Teaching foundational skills obtains better results for *all* students, especially those at risk for reading failure.



Code-emphasis approaches to beginning reading have *always* obtained better results with students in general, and are especially vital for students in the lower 40 percent of the population.

Remember the Simple View of Reading (Gough & Tunmer, 1986; Hoover & Gough, 1990) and the fact that reading comprehension is the product of printed word recognition and language comprehension. If students cannot decode printed English, they cannot comprehend it. If students cannot comprehend spoken English, they cannot comprehend written English either.

The Simple View of Reading



Nevertheless, the research that supports the importance of code-emphasis approaches does not tell the whole story about reading and language arts instruction. The previous units of LETRS also elaborated the following important points:

- Code-emphasis approaches will not be effective until and unless students have acquired the underlying phonological skills that enable them to decode.
- Reading abilities and difficulties exist on a continuum; not all difficulties are alike. Therefore, instruction must be informed by appropriate data.
- Code-emphasis instruction will not result in fluent reading unless students practice what they are learning and apply skills during text reading.
- Code-emphasis approaches to beginning reading must be supplemented with read-alouds, discussions, and other methods of oral language development.
- As reading is learned, vocabulary and language comprehension become more and more important enablers of reading comprehension. In first grade, most of passage reading comprehension is accounted for by word-reading ability (decoding). By third grade, once students are automatic and fluent in reading the words, language comprehension becomes more important than word recognition in accounting for passage reading comprehension (*Figure 7.1*).

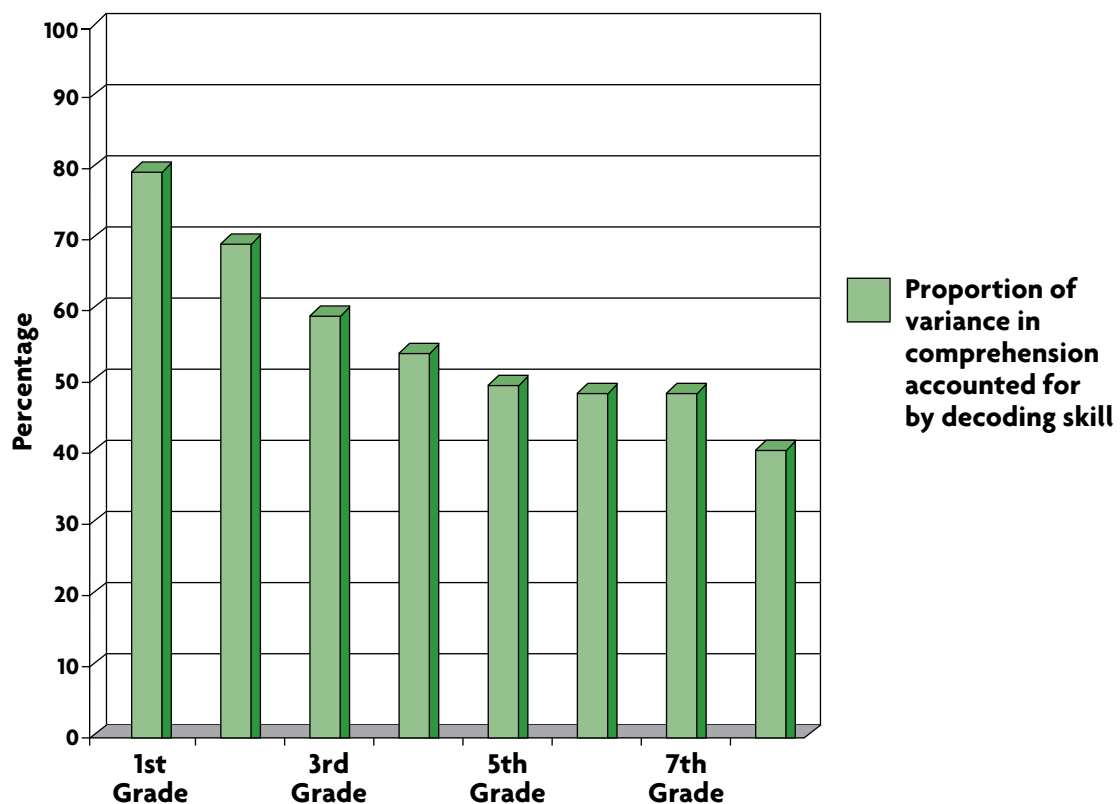


Figure 7.1 How the Relationship between Decoding and Comprehension Changes Over Time (Based on data from the Connecticut Longitudinal Study, Copyright 1997 From Foundations of Reading Acquisition and Dyslexia: Implications for Early Intervention, by Foorman, Francis, Shaywitz, Shaywitz & Fletcher. Reproduced by permission of Taylor and Francis Group, LLC, a division of Informa plc, permission conveyed through Copyright Clearance Center, Inc.)

When teachers consider how much time to spend on which component of instruction, these realities pose dilemmas. How can a teacher who understands the importance of both foundational skills and language comprehension marry these two purposes in the classroom? Just what is the right balance? Teachers need to preplan blocks of time for each component. Instructional time for English language arts should include two hours or more in first grade and a minimum of 90 minutes in second and third grade. Foundational skills instruction should take about half of that time in kindergarten and first grade, and somewhat less than that with second- and third-graders who are on track.



Instructional time for English language arts should include two hours or more in first grade and at least 90 minutes in second and third grades. Foundational skills instruction should take about half the time in kindergarten and first grade, and somewhat less than that with second- and third-graders who are on track.

LETRS has provided planning tools to help teachers address all important components of literacy instruction. Teachers can use these planning tools to teach both components of word recognition and language comprehension in parallel. The General Phonics Lesson Plan, introduced in Unit 3, lists the components of a code-based lesson and provides guidelines for how to budget instructional time to build students' word-recognition skills. These time estimates should be adjusted based on grade and skill levels. As students progress, activities can gradually and successfully link sounds with symbols and sense, and students can read material for meaning. (For a blank General Phonics Lesson Plan, see Appendix E, page B19.)

The Simple View of Reading



Table 3.2: General Phonics Lesson Plan
(Based on lesson plan contributed by Susan Hall from *Phonics Lesson Library*™, by 95 Percent Group Inc.)

Component of Lesson	Instructional Routines and Techniques	Approx. Time
State Goal and Purpose	State concept focus and expectations for outcomes ("Today we will study . . .")	1 min.
Practice Phonological Awareness	Warm-up exercises, listening to and manipulating sounds in spoken words	3 min.
Review Previous Lesson	Fluency drills; rereading familiar text; checking retention of learned words or concepts	3 min.
Introduce New Concept	Explicit, direct teaching of new phoneme-grapheme correspondence or letter pattern	3–5 min.
Provide Guided Practice	Teacher-led practice blending words, reading pattern-based words, phoneme-grapheme mapping, reading phrases and sentences	5 min.
Provide Extended Practice	Word sorts, word chains, word families, cloze tasks; timed reading of learned words	5 min.
Practice Dictation	Dictation of sounds, words, sentences	8 min.
Connect to Word Meaning	With phonics vocabulary, construct multiple-meaning web; locate words that have similar meanings or that go together; find the odd one out in a set of words; use two vocabulary words in a sentence, etc.	5 min.
Read Text	Read decodable text with a high proportion of words that have been taught	8 min.

Appendix B: Comprehension Planning Checklist

Title _____	
Before Reading	Page Numbers/Other Notes
Establish Purpose for Reading. Why read this text? What are the takeaways or enduring understandings students should gain from this text?	
Identify Text Structure. Is this informational or narrative text?	
Prepare Background Knowledge. What background or topic context is needed?	
Select Vocabulary. What words should be pretaught?	
Identify Challenging Language. What are difficult sentences/phrases/academic language?	
During Reading	
Plan Questions. Anticipate Student Questions. Mark text for stopping to ask questions and queries.	
Use Text Structure to Organize Thinking. Use graphic organizer or outline to show structure.	
After Reading	
Was Purpose Met? Did Students' Thinking Change? Evaluate student understanding. Is rereading planned?	
Assessment: Can Students Express Takeaways? Use Text Evidence? Evaluate how students express the big ideas/enduring understandings from the reading. Can students support their ideas with text evidence?	

The Comprehension Planning Checklist, introduced in Unit 6 (p. 84), takes teachers step by step through a comprehension lesson including what to do before, during, and after reading of a read-aloud or teacher-guided student text. Time allotments for comprehension lessons will generally increase as students progress in foundational skills, usually in second and third grade, and can spend time developing their abilities to comprehend more complex, high-quality text. (For a blank Comprehension Planning Checklist, see Appendix B, page B8.)

Giving appropriate attention to the two major domains that support reading comprehension is the hallmark of informed instruction. The tendency in K–3



Giving appropriate attention to the two major domains that support reading comprehension is the hallmark of informed instruction.

education, however, is for one of the domains to be “out” and the other “in,” with pendulum swings back and forth. Consider what can—and does—happen when only one half of the Simple View of Reading equation is honored in curriculum and lesson planning.

Too Much Emphasis on Foundational Skills

The first four units of LETRS developed a rationale for the General Phonics Lesson Plan (Appendix E, p. B19). Beyond phonics, the critical role of phonological and phonemic awareness in learning to decode, and the importance of teaching all aspects of language structure (e.g., phoneme-grapheme correspondences, orthographic patterns, morphology) in the context of a phonics lesson were



Literacy is going to require more than skilled word recognition.

emphasized. There is an extensive body of research that supports these effective practices. Yet it is important to remember that literacy is going to require more than skilled word recognition.

Screening measures typically assess the subskills of phonemic awareness, letter naming, nonsense word decoding, spelling, and oral reading fluency, because those skills predict early reading growth and achievement. Vocabulary and language comprehension are harder to measure. Further, their importance for reading comprehension is not really apparent until fourth grade and beyond (Vellutino, Tunmer, Jaccard, & Chen, 2007). Therefore, teachers who base their instructional decisions too heavily on the results of valid screeners such as *DIBELS® Next* and *AIMSweb®* may tend to lose sight of the big picture and spend almost all instructional time on foundational reading skills.

During the height of the Reading First era (between 2002–2008), schools implementing the requirements of this federally funded initiative saw an uptick in students’ ability to read passages with fluency and comprehension by third grade (Foorman, Petscher, Lefsky, & Toste, 2010), as well as a reduction in reading failure. Nevertheless, skeptics contended that language comprehension and exposure to a rich literacy curriculum were being shortchanged (Pearson, 2010). Perhaps there may have been some truth to that based on those cases where there was an overemphasis of foundational skills to the exclusion of comprehension instruction.

Especially during this time period, LETRS trainers observed well-intentioned teachers implementing small-group instruction in word recognition and spelling, while meaningful curricular content was nowhere in sight.

The test of a robust curriculum in grades K–3 depends on whether an observer, upon walking into a classroom, can tell what students are learning not only in foundational reading skills but also in literature, science, social studies, or the arts. An overemphasis on foundational skills can leave students bereft of the background knowledge, vocabulary, and language comprehension associated with content-rich text.



An overemphasis on foundational skills can leave students bereft of the background knowledge, vocabulary, and language comprehension associated with content-rich text.

Too Much Emphasis on Literature and Language Comprehension

The Common Core State Standards or CCSS (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010), although politically controversial, have nevertheless had an enormous influence on early reading instructional practices. The instructional shifts that CCSS made from previous state standards promoted the following:

- Reading, writing, and speaking grounded in evidence
- Regular practice with complex texts and academic language
- Building knowledge through content-rich nonfiction

All of these lofty goals depend on a student's ability to read the words with sufficient accuracy and fluency to support comprehension. All of the writing goals depend on a student's proficiency with handwriting, keyboarding, spelling, sentence formation, and language formulation. The organization of the CCSS, however, does not adequately distinguish between the "learning to read and write" phase (grades K–3), and the "reading and writing to learn" phase (grade 4 and up).

In the CCSS, the same anchor standards are specified for every grade level, with the same emphasis. Standards for foundational reading skills are listed separately and placed *after* the standards for reading literature and informational text, suggesting that they are less important, easily learned in the context of more important "authentic" reading experiences, and deserving of less emphasis in instruction. All of those ideas directly contradict decades of scientific work.

This emphasis on literature-focused instruction in the CCSS, especially for grades K–3, was accompanied by guidelines for publishers to rewrite their materials. Simultaneously, a nonprofit foundation supported a curriculum development project to help teachers implement the CCSS. Curriculum maps for grades K–5 were posted online and in book form. At this foundation's request, Dr. Louisa Moats wrote detailed guidelines for teaching foundational skills in grades K–2. When published, these guidelines were placed in the back of the book and listed separately from the literature-focused thematic units. The message to teachers seemed clear: Foundational skills are optional, less exciting to teach, less substantive, and not related to "real" reading.

Objectives for Unit 8

After completing each session, you should have met the following objectives.

Sessions	Unit 8 Objectives
1. Why Is Writing So Challenging? (p. 231)	1.1 Understand the reasons why writing is important. 1.2 Describe the foundational and language skills necessary for writing. 1.3 Explain the phases of the writing process. 1.4 Review the research consensus on effective writing instruction.
2. How Should Teachers Prepare Students for Writing? (p. 249)	2.1 Adopt an integrated lesson framework for foundational skills and composition. 2.2 Systematically teach letter formation and build handwriting fluency. 2.3 Teach spelling explicitly, emphasizing language structure and orthographic regularities to support fluent writing.
3. How Can Students Gain Competence in Building Sentences? (p. 267)	3.1 Review the importance of sentence generation as a foundational literacy skill. 3.2 Systematically and cumulatively build command of sentences by following a developmental progression.
4. How Can Narrative Composition Be Supported? (p. 281)	4.1 Understand narrative writing development and create a writers' environment. 4.2 Plan a narrative writing lesson and support students in planning a narrative. 4.3 Support the translating (drafting) phase of narrative writing. 4.4 Structure review and feedback for success.
5. How Should Informational and Opinion Writing Be Taught? (p. 297)	5.1 Understand informational and opinion writing development. 5.2 Teach how to write paragraphs to support informational and opinion writing. 5.3 Plan an informational or opinion writing lesson and support students in planning. 5.4 Support the translating (drafting) phase of informational and opinion writing. 5.5 Structure review and feedback to improve informational and opinion writing.
6. How Can Student Writing Progress Be Assessed? (p. 315)	6.1 Understand the methods for assessing student progress in writing. 6.2 Evaluate student writing using a checklist. 6.3 Implement a plan for writing across the school year.

Preview Questions

Think about the answers to these questions before studying this unit.

1. How do you teach writing currently?
2. Do you have students who are learning to read but who struggle with some or all aspects of writing? What aspects in particular do they struggle with?

Session

How Can Students Gain Competence in Building Sentences?

Preview Questions

Think about the answers to these questions before studying this session.

1. When and how do you focus on sentence generation?
2. Are these activities done orally, through written language, or both?
3. Do you have an approach to teaching basic sentence structure?

The Skill of Writing Sentences

Objective 3.1: Review the importance of sentence generation as a foundational literacy skill.

Teachers define the idea of a sentence to students in different ways. Some describe a sentence as a “complete thought.” Others define it as a group of words with a capital letter and a period. Yet others rely upon the students’ sixth (linguistic) sense to know what a sentence is, without ever explaining it at all.

A sentence can be defined, but the idea of a sentence is abstract and often hard for students to grasp. In linguistics, a sentence is an abstract framework or linguistic structure that has slots for *categories* of words and phrases (Fromkin, Rodman, & Hyams, 2014; Moats, 2010). Certain slots must be filled for a sentence to be complete. Other slots are optional.



The idea of a sentence is abstract and often hard for students to grasp.

As described in Unit 6 (p. 109), a complete sentence has two parts: a complete subject, telling *who* or *what* the sentence is about, and the complete predicate, telling the *action* or *what* the subject is doing, thinking, or feeling. When the verb phrase includes a form of the verb *to be*, it can also describe a state of being. The subject must be a noun or noun phrase; the predicate must include a verb or verb phrase. Therefore, a complete sentence is, minimally, a noun phrase plus a verb phrase:

Subject	+ Predicate	} = Complete Sentence
Noun Phrase	+ Verb Phrase	
Who or What	+ Action	

Who or What?	Action (Doing, Thinking, Feeling, or Being?)
Blue Cloud	carefully lifted the baby.
A dam	is a barrier that blocks the flow of water.
I	think Lizzie knew I didn't want to hurt her.

In essence, each sentence itself tells a short story. It explains the *who* or *what* and *what* they did, thought, or felt or their state of being. In addition, it can tell the *when*, *where*, *how*, or *why* this action or event occurred.



Instruction should emphasize the function of the subject and predicate and the words or phrases that are in each. By tying each part of a sentence to the question word it is answering, teachers can illuminate the connection between syntax and meaning.

Instruction that will make sense to young students will emphasize the function of the subject and predicate and the words or phrases that are in each. By tying each part of a sentence to the question word it is answering, teachers can illuminate the connection between syntax and meaning. Students like the second-grader below can enjoy discovering how a sentence works:

We learned about (Subject) and
(Predicate) and it was fun alot. I
like the (Subject) and the (Predicate)
We even work on it well like it
alot. The Subject is the naming part
and the Predicate is the telling part.
Oh yeah when I grow up I want to
be a Astronot \ a House maker \ a
movie star \ a princapal \ a pilitt \ a
farmer \ a news reporter.

Translation: We learned about subject and predicate and it was fun alot. I like the subject and the predicate We even work on it well like it alot. The subject is the naming part and the predicate is the telling part. Oh yeah when I grow up I want to be a Astronaut \ a House maker \ a movie star \ a principal \ a pilot \ a farmer \ a news reporter.

Syntax and Meaning

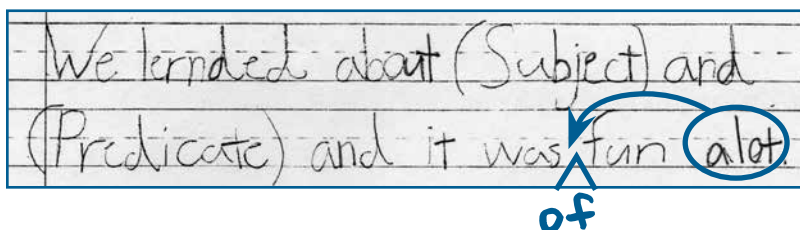
As described in Session 4 of Unit 6 (p. 105), both the words of a sentence and the syntax or the structure of a sentence convey its meaning. Word meanings often depend on the role the word plays in a sentence—and sentences, of course, must have meaningful words to make sense. For example, the meaning of the word *pitch* depends on the sentence's context.

Who or What?	Action (Doing, Thinking, Feeling, or Being)?
The pine pitch (<i>noun</i>)	stuck to my fingers.
(You— <i>implied subject</i>)	Please pitch (<i>verb</i>) the hay onto the truck.
The pitched (<i>adjective</i>) roof	shed the rain.

Many words in English can fill more than one slot in a sentence framework. For any sentence to make sense—and for the meanings of words to be clear—the words must be in the right order and used according to the rules of sentence structure or grammar that all speakers of the language know and follow. The underlying sentence structure requires that words be used in a certain order. Still, the number of words that can fill any given slot is vast. Sentences are infinitely variable, and few sentences are exactly alike. Thus, sentence production is both endlessly creative and constrained by linguistic norms and requirements.



For any sentence to make sense—and for the meanings of words to be clear—the words must be in the right order and used according to the rules of sentence structure or grammar.



Although every adult speaker knows—at least subconsciously—the rules and conventions for sentence production, effective writers must have conscious control of the words and be able to manage the way that ideas are expressed. Experts do not agree on the best way to teach grammar, sentence production, or syntactic awareness (Graham & Perin, 2007; Jones, Myhill, & Bailey, 2012), yet students must gain command of the sentence before they can write effectively (Hochman & Wexler, 2017). Strong composition depends on strong sentences.

Clearly expressing ideas through writing depends very much on the deliberate manipulation of words within sentence structures. Good writers know how to think about word order and its relationship with the ideas they are trying to express (Scott, 2009). Good writers can identify something to change if the sentence seems awkward, ambiguous, too complicated, or incomplete. They use syntactic awareness to make those changes, employing metalinguistic awareness that develops very gradually over many years, through a lot of modeling and practice.



Good writers know how to think about word order and its relationship with the ideas they are trying to express. Good writers can sit back and identify something to change if the sentence seems awkward, ambiguous, too complicated, or incomplete.

For example, consider the thoughtful use of language practiced by the delegates to the Constitutional Convention held in 1787. The writers of the United States Constitution worked for four months to produce a document for establishing a new government. The first draft of the Constitution was published with wide margins so that delegates could make notes and edit it. Note how they modified and clarified their objectives in the finished preamble below, which consists of one carefully crafted, history-changing sentence.

Preamble to the Constitution of the United States	
First Draft (August 6, 1787) We the People of the States of New-Hampshire, Massachusetts, Rhode-Island and Providence Plantations, Connecticut, New-York, New-Jersey, Pennsylvania, Delaware, Maryland, Virginia, North-Carolina, South-Carolina, and Georgia, do ordain, declare and establish the following Constitution for the Government of Ourselves and our Posterity.	First Official Printing (September 17, 1787) We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

Grade-Level Sentence-Writing Expectations

What is expected of students in each grade in terms of sentence writing? The Common Core State Standards for Language propose the expectations in *Table 8.7* with regard to sentence writing and associated capitalization and punctuation (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). Clearly, the Common Core State Standards reflect high expectations for knowledge of sentence types, sentence structure, and sentence formation. However, at a minimum, the standards provide a logical order for scaffolding sentence-writing instruction.

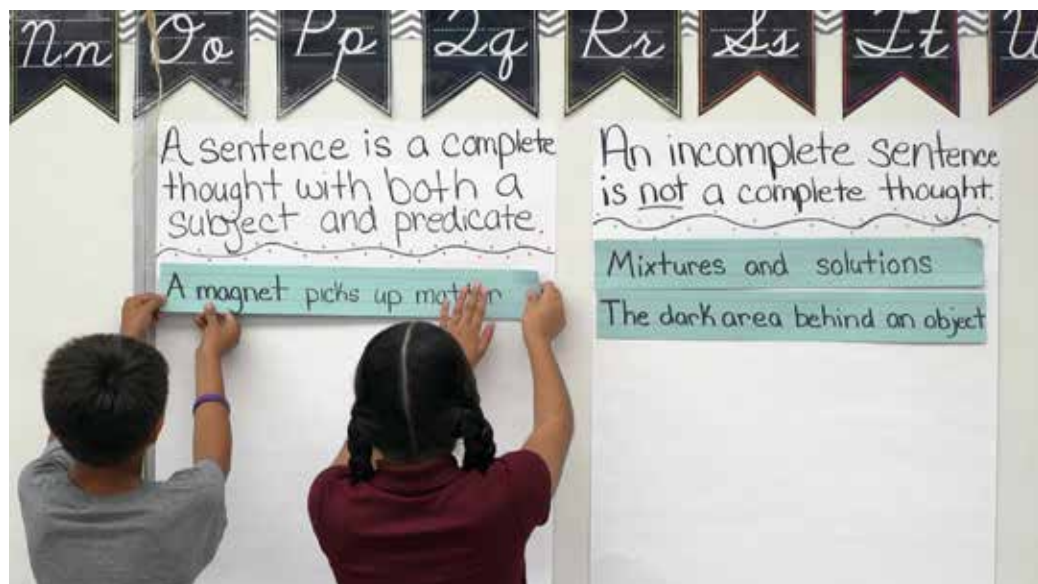


Table 8.7: Common Core State Standards for Sentence Writing

(Adapted from National Governors Association Center
for Best Practices & Council of Chief State School Officers, 2010)

Grade	CCSS Language Standards	Example Sentences
Kindergarten	<ul style="list-style-type: none"> • Produce and expand complete sentences in shared language activities. • Capitalize the first word in a sentence and the pronoun <i>I</i>. • Recognize and name end punctuation. 	I lik my rabt.
First Grade	<ul style="list-style-type: none"> • Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts. • Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Capitalize dates and names of people. • Use end punctuation for sentences. • Use commas in dates and to separate single words in a series. 	My favorite animal hers [is] a dog. He liecks to play al_t. He liecks to eat snow. Thae liecks play cach. I lieck dogs.
Second Grade	<ul style="list-style-type: none"> • Produce, expand, and rearrange complete simple and compound sentences. • Produce and expand complete sentences to provide requested detail or clarification. • Capitalize holidays, product names, and geographic names. • Use an apostrophe to form contractions and frequently occurring possessives. 	Our new pet, a big rabbit, likes to be cuddled and petted. If I do not clean his cage, it will start to stink and my mother will get mad at me. I don't want that!
Third Grade	<ul style="list-style-type: none"> • Produce simple, compound, and complex sentences. • Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. • Ensure subject-verb and pronoun-antecedent agreement. • Use commas and quotation marks in dialogue. • Form and use possessives. 	Taking care of a pet rabbit means giving them a safe place to live, plenty of hay to eat, and lots of love.

SESSION 1

SESSION 2

SESSION 3

SESSION 4

SESSION 5

SESSION 6



Language Essentials for Teachers of Reading and Spelling

LETRS is a professional development course that empowers teachers to understand the *what*, *why*, and *how* of literacy instruction, based on the most current scientific research. LETRS provides deeper knowledge of reading instruction as well as how to assess and address student needs based on age, grade, and ability levels.

This manual is accompanied by state-of-the-art, interactive technology to support a blended learning model. The online instruction aligns to the units in this manual and shows how to directly apply LETRS principles and practices to the classroom.

Learning to be a skilled instructor, whether in a regular class or an intervention setting, can take a long time, a lot of practice, and a lot of study. This LETRS course translates current findings from reading science into practical guidance that empowers all teachers to instruct with genuine confidence.

Volume 1

- Unit 1** The Challenge of Learning to Read
- Unit 2** The Speech Sounds of English
- Unit 3** Teaching Beginning Phonics, Word Recognition, and Spelling
- Unit 4** Advanced Decoding, Spelling, and Word Recognition

Volume 2

- Unit 5** The Mighty Word: Oral Language and Vocabulary
- Unit 6** Digging for Meaning: Understanding Reading Comprehension
- Unit 7** Text-Driven Comprehension Instruction
- Unit 8** The Reading-Writing Connection

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The Need for Research-Based Literacy Professional Development

What Research Says about the Need for Impactful Literacy
Professional Development, and How **LETRS** Meets the Challenge

Table of Contents

Introduction.3

The Science of Teaching and Learning to Read.4

The Need for Deep Teacher Knowledge of Language.5

The Importance of Expertise in Teaching a Broad Range of Reading Skills.6

Addressing Reading Difficulties7

How **LETRS** Develops Deep Teacher Knowledge of Language8

A Comprehensive Course of Study9

Where Research Meets Practice10



Introduction

Teachers matter more to student success than any other aspect of schooling. They, not programs, teach students how to read. In fact, the National Reading Panel Report determined that explicit training for new and experienced teachers improves overall student outcomes. Yet, a study of teacher-training institutions found that many do not require coursework in all five essential components of reading instruction determined by the National Reading Panel.

With the latest NAEP Reading Report Card showing that 63 percent of fourth grade students are not performing at proficient reading levels, teachers need access to deeper knowledge, skills, and practice to successfully prevent and address reading difficulties.

This guide focuses on the need for professional development that fills gaps in teacher preparation and translates the extensive body of research about language and literacy development into effective classroom practice.

The Science of Teaching and Learning to Read

School leaders across the United States face a critical literacy challenge—preservice teacher education has largely been inadequate to prepare teachers to deliver effective literacy instruction. The National Reading Panel (NRP) report and subsequent research have established a solid evidence base for essential components of reading instruction. However, survey research indicates that classroom teachers are not receiving sufficient preservice preparation in order to implement the NRP’s research-based recommendations regarding the science of teaching and learning to read (Joshi, Binks, Hougen, Dahlgren, Ocker-Dean, & Smith, 2009; National Institutes of Child Health and Human Development, 2000; Walsh, Glaser, & Wilcox, 2006).

In their meta-analysis of research on the teaching of reading, the NRP determined that the components of effective reading instruction include explicit, systematic teaching of phonemic awareness and phonics, guided oral reading to improve fluency, direct and indirect vocabulary building, and exposure to a variety of comprehension strategies.... Finally, and importantly, the panel [noted] that explicit preparation in reading for “both new and established teachers” had been shown to produce higher student achievement. (Walsh et al., 2006, p. 8; also see National Institutes of Child Health and Human Development [NICHD], 2000)

Research Studies

Subsequent research has further supported the case for the science of reading as the foundation for teaching reading (e.g., Walsh et al., 2006, citing Rayner, Foorman, Perfetti, Pestsy, & Seidenberg, 2001). Unfortunately, the findings from this research are not reflected in the typical teacher preservice education curriculum.

For example, Walsh et al. (2006) initiated an investigation into the knowledge that preservice teachers were receiving (or not receiving) relative to the findings of the National Reading Panel, based on an earlier study by Steiner and Rozen (2004). The Walsh team analyzed each course from a representative sample of 72 higher education institutions to determine what preservice teachers were learning in their required reading courses and the extent to which the NRP’s five components of reading were included in the courses. Only 15% (11 out of 72 institutions) taught all of the components of reading (Walsh, 2006, p. 22). Furthermore, review of the most frequently used textbooks found “mistakes and misrepresentations of the reading process” (p. 38).

In 2009, another research team conducted their own survey of 78 college and university professors who taught reading education classes to preservice reading teachers. They wanted to understand how knowledgeable higher education instructors were in the science of reading (Joshi et al., 2009, p. 395). One of the key findings of their research was that only 54% of the college and university instructors correctly recognized the definition of phonemic awareness (p. 37). Mean percentages of assessment items answered correctly by the reading instructors by category include: phonology: 79%; phonics: 56%; morphology: 34%; and comprehension: 58% (p. 396).¹

The Team’s Findings

The Joshi team determined that while evidence-based reading practices are available, many classroom teachers have not received adequate preservice or in-service professional development to apply the knowledge. The results of the study also indicated that “instructors at many teacher training institutions may... not be knowledgeable about the basic linguistic constructs needed for literacy development” (Joshi et al., 2009, p. 400).

The Joshi team determined that while evidence-based reading practices are available, many classroom teachers have not received adequate preservice or in-service professional development to apply the knowledge.

¹ The data are rounded to the nearest percent.

The Need for Deep Teacher Knowledge of Language

To be effective teachers of literacy, teachers must be knowledgeable about the structure of oral and written language, language and literacy skill development, and related pedagogy. Yet most teachers lack the academic preparation necessary to support their students' language and literacy development. The fact that preservice teachers are not receiving adequate instruction in the science of reading points to the need for robust professional development for in-service teachers.

Teachers of reading must be teachers of language, according to Moats (2010). In her research-based textbook on literacy instruction, Moats concludes that, to be effective teachers of literacy, they must be knowledgeable about the structure of oral and written language, how literacy is acquired, and related pedagogy (2010, p. 2, citing Brady & Moats, 1997; Moats, 1999; Moats & Lyon, 1996; Snow, Griffin & Burns, 2005). She maintains that reading teachers must study the systems and forms of language—both oral and written—so they are prepared to incorporate critical language skills into direct, systematic, and sequenced lessons (pp. 8, 15). More specifically, Moats asserts that teachers need expertise to deliver direct teaching of “phonological skills, sound-symbol correspondence (phonics), fluent word recognition and text reading, vocabulary, text comprehension, and literature appreciation” (Moats, 2010, p. 17).

In their research review, Cunningham and her colleagues similarly found a “growing consensus” that elementary school teachers of reading “must understand the theoretical and empirical underpinnings of reading development.” (Cunningham, Zibulsky, and Callahan, 2009, citing multiple research studies). Cunningham et al. point to the vital role that word recognition skills play in early reading acquisition and development—“how phonological awareness and the alphabetic principle are at the very foundation of learning to decode accurately and, later, how phonologic, orthographic, syntactic, and semantic knowledge lead to automatic and fluent reading which, in turn, leads to making meaning from text,” (p. 491). Cunningham warns that just recognizing the key role that language, text structure, and vocabulary development play in word recognition and comprehension is not enough. Elementary teachers also need a “wide range of [associated literacy] content knowledge in order to effectively scaffold students' reading development” (pp. 491-492).

... Moats concludes that, to be effective teachers of literacy, educators must be knowledgeable about the structure of oral and written language, how literacy is acquired, and related pedagogy.



The Importance of **Expertise** in Teaching a Broad Range of Reading Skills

Phonological awareness and phonics

Both phonological awareness and phonics are essential for reading acquisition (Cunningham et. al., 2009, p. 499, citing Dickinson & Tabors, 2001; NICHD, 2000). Thus, as Moats noted above, teachers need specific expertise in order to deliver direct teaching of phonological skills, phonics, [and] fluent word recognition. (Moats, 2010, p. 17). More explicit level of teacher knowledge is needed to “explain pronunciation and spelling, where the words came from, and how spelling is related to meaning” (p. 9).

Morphology

It is also important for teachers to understand morphology—knowledge of the smallest significant units of words, such as prefixes, suffixes, roots, and inflections. Since the same root morphemes are found in multiple words, learning a morpheme in one word can open the meaning to many new words that contain that morpheme (Oakhill, Cain, & Elbro, 2014, p. 66). In a review of 22 studies, Bowers, Kirby, and Deacon (2010) found that teaching morphology to children had significant effects on the development of both vocabulary and reading comprehension. Such effects were enhanced if teaching did not just focus on the analysis of single words but was combined with comprehension instruction (Oakhill et. al., 2014, p. 66).

Vocabulary development

In their overview of research on reading comprehension, Oakhill, Cain, and Elbro (2014) found that vocabulary development is critical to reading comprehension, and they advised that it be taught both directly and indirectly (p. 67; also see Walsh et. al., 2006, and NICHD, 2000). Oakhill et al. (2014) note that direct vocabulary instruction is needed to pre-teach key words and terms that are likely to be unknown to readers of a text. Indirect vocabulary development focuses on enhancing “the reader’s ability to infer and refine word meanings from a text” (Oakhill et al., 2014, p. 67). In teaching vocabulary, Oakhill et al. recommend aiming for “deeper levels of vocabulary knowledge... [which] means that children should not just learn word definitions, but also how unfamiliar words relate to other words” (Oakhill et. al., p. 65).

Comprehension

As noted previously, the National Reading Panel found that “exposure to a variety of comprehension strategies” was key to effective reading instruction (Walsh et. al., 2006, p. 8; also see NICHD, 2000). According to Oakhill et. al.’s (2014) research review, there are many aspects of language in text that should be taught explicitly in order to support reading to learn—such as how syntax and meaning are related and how text is organized and structured. These researchers affirm that educators can teach children how to derive meaning from context by searching the text for clues about meaning.

Addressing Reading Difficulties

Skillful teaching can prevent most reading problems.

According to the findings of numerous studies, “classroom instruction that builds phoneme awareness, phonic decoding skills, text reading fluency, vocabulary and various aspects of comprehension is the best antidote for reading difficulty” (Moats, 2010, p. 15, citing multiple sources). Multiple researchers have found that “explicit teaching of oral and written language remains the core principle of effective instruction for both novice and struggling readers” (Moats, 2010, p. 2, citing Aaron, Joshi, & Quatroche, 2008).

These findings suggest that teachers who work to strengthen students’ areas of weakness are most likely to help their students improve (Moats, 2010, p. 16). It also suggests the importance of using diagnostic assessment to identify students’ areas of weakness.

Like most students, readers with dyslexia or dyslexia-like tendencies also benefit from direct, explicit systematic, and intensive instruction (Washburn, Joshi, & Binks-Cantrell, 2011, p. 167, citing Torgesen, 2002; Vellutino et al., 1996). Washburn et al. found that “students who had teachers who were both knowledgeable and devoted more time to explicit decoding instruction made significantly higher gains in word reading” (p. 168). Similarly, Piasta et al. (2009) provided evidence that the “teachers who are most effective with struggling readers have both content knowledge and practical skill and are more inclined to use direct systematic, explicit, structured language methods for those who do not learn easily” (Moats, 2010, p. 16, citing Piasta, Connor, Fishman, & Morrison, 2009). Unfortunately, Washburn et al.’s (2011) review of the research led to the conclusion that teachers do not have the knowledge they need to work with struggling readers, particularly children with dyslexia (p. 177).



How **LETRS** Develops Deep Teacher Knowledge of Language

LETRS®—Language Essentials for Teachers of Reading and Spelling—provides the professional development teachers need to acquire deep knowledge of language and literacy development, in order to be effective in helping students become highly capable readers.

LETRS provides a systematic process to educate teachers about the science of reading, the development of oral and written language, and how to incorporate knowledge of language into effective reading instruction—knowledge that teachers do not receive during preservice education. Throughout the **LETRS** course of study, teachers are exposed to evidence-based research on reading and explore systems of oral and written language that are critical to literacy development:

- Phonology
- Orthography
- Morphology
- Semantics
- Syntax
- Discourse
- Pragmatics

The following chart defines and provides examples of these important systems of language.

System of Language: Definitions and Examples		
LANGUAGE SYSTEM	DEFINITION	EXAMPLES
Phonology	The rule system within a language by which phonemes can be sequenced, combined, and pronounced to make words	No English word begins with the sound /ng/; the sounds /p/ and /k/ are never adjacent in the same syllable.
Orthography	A writing system for representing language	Every English word ending in /v/ is spelled with -ve, the letter x is never doubled.
Morphology	The study of meaningful units in a language and how the units are combined in word formation	<i>Nat-</i> is a root. <i>Nature</i> is a noun; <i>natural</i> is an adjective; <i>naturalist</i> is a noun; <i>naturally</i> is an adverb.
Semantics	The study of word and phrase meanings and relationships	The word <i>rank</i> has multiple meanings. The words <i>order</i> and <i>sequence</i> have similar meanings.
Syntax	The system of rules governing permissible word order in sentences	"Our district recruits new teachers" is a sentence; "New teachers our district recruits" is not a sentence.
Discourse	Written or spoken communication or the exchange of information and ideas, usually longer than a sentence, between individuals or between writer and reader	Discourse includes paragraph structure, cohesive ties, and genre conventions such as story structure.
Pragmatics	The system of rules and conventions for using language and related gestures in a social context	To one person I say, "That is my seat!" To another, I say, "Excuse me, my ticket has that seat number."

One of the fundamental ideas in **LETRS** is that language processing underlies reading and writing, and students' difficulties with reading and writing are most effectively addressed if the structures and functions of language are taught directly.

A Comprehensive Course of Study

LETRS is a comprehensive course of study that helps translate the body of language and literacy research into effective classroom practice. It covers the five essential components of reading as recommended by the National Reading Panel: phonemic awareness, phonics, vocabulary, reading fluency, and reading comprehension. In addition, **LETRS** addresses oral language, spelling, and writing; helps teachers understand how language, reading, and writing are related to each other; and presents the strategies that are most helpful in improving reading outcomes.

In **LETRS** Unit 1, teachers learn:

- What the brain does while reading
- The many skills that are gradually integrated while learning to read
- The relationship between learning to read and learning to spell
- Major types of reading difficulties
- The role of assessment in prevention of reading difficulties, early intervention, and differentiating instruction

In Unit 2, **LETRS** targets children's development of phonological skills:

- The role and importance of phonological processing and development and phonemic awareness in reading
- How to teach and assess phonological skills

Unit 3 focuses on teaching beginning phonics, word recognition, and spelling, including:

- The importance of phonic code-emphasis instruction
- English orthography and phonics
- How to begin teaching phonics and word recognition
- Effective word practice routines
- The relationship between reading and spelling, and how to teach spelling
- Use of decodable texts

In Unit 4, teachers expand their knowledge of phonics, word study, and spelling, including:

- Why and how to teach syllable patterns
- When and how to teach morphology
- The meaning of reading fluency and how to build fluency

In Unit 5, teachers explore the domain of vocabulary development:

- The importance of vocabulary development for oral language proficiency and reading comprehension
- Effective vocabulary instruction and practice
- How to foster independent word-learning strategies in a language-rich classroom

In later units, **LETRS** focuses on reading comprehension and writing, including:

- The importance of constructing a mental model while reading
- Preparing students for reading
- The role of syntax and sentence structure
- The role of cohesive devices
- The role of text structure
- Effective comprehension strategy instruction
- The reading-writing connection: foundational writing skills and using writing to support reading comprehension

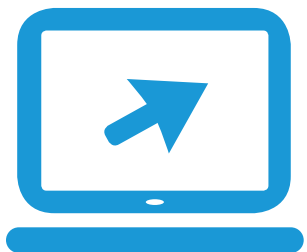
Where Research Meets Practice

Despite strong research evidence pointing to the most effective methods of teaching reading, most new teachers are not equipped with sufficient knowledge to put evidence-based reading strategies into practice. Preservice teachers rarely receive this kind of instruction in their college experience, and practicing teachers rarely receive systematic, comprehensive in-service professional development on language and literacy. It is essential that today's reading teachers have access to professional development that increases their content knowledge about the science of reading and enhances their understanding of effective strategies for teaching students how to read, write, and spell.

It is essential that today's reading teachers have access to professional development that increases their content knowledge about the science of reading and enhances their understanding of effective strategies for teaching students how to read, write, and spell.

LETRS was developed to meet this need—to help teachers of reading acquire the deep knowledge of language and literacy development they need for classroom success. It is a systematic, comprehensive course of study based on more than 30 years of reading research to help teachers become effective in developing student literacy. The **LETRS** curriculum addresses the five areas essential to successful reading instruction identified by The National Reading Panel—phonemic awareness, phonics, vocabulary, reading fluency, and comprehension—plus oral language, spelling, and writing. The program not only provides teachers with a deeper understanding of what causes reading difficulties, but how to overcome them.

LETRS has been designed to fill a gap in teacher knowledge that can have a dramatic impact on literacy success for our students. It incorporates successful teaching and learning strategies that are evidence-based and have proven themselves over time.



For more information, visit:
<https://www.voyagersopris.com/professional-development/letrs/try-it>

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