

**Indiana Department of
Education in Partnership with
Indiana University**

Dyslexia Toolkit

**An anthology of resources and materials
to support the implementation of
dyslexia interventions**

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BLOOMINGTON

Purpose of the Dyslexia Toolkit

Indiana Code 20-35.5 *et. seq.*, as created by SEA 217 (2018) requires schools to screen all students in kindergarten through second grade. If students are identified as “at risk” or “at some risk” for dyslexia, then the Indiana Code requires that schools provide tiered interventions to address the needs of these students. The Indiana Department of Education, in conjunction with Indiana University’s School of Education, created this dyslexia toolkit to provide additional information, resources, and materials to support educators as they implement reading interventions with students with the characteristics of dyslexia.

The toolkit provides detailed information about reading development and acquisition, scientifically-based reading instruction and intervention, recommended approaches for dyslexia intervention, and the areas of reading (i.e., phonological awareness, alphabet knowledge, sound-symbol relationships, decoding, encoding) screened in the universal, level I, and level II screeners. The toolkit provides guidance and recommendations for teaching reading skills with a structured literacy approach. Each section of the toolkit corresponds with a “resources” section with links to additional resources such as videos, sample lesson plans, materials (e.g., flash cards, manipulatives, word lists), books, articles, professional development, professional organizations and centers, etc.

It is recommended that this toolkit be used to further educators’ professional knowledge about reading interventions and guide their decision making, intervention planning, and lesson delivery. This toolkit was not created to recommend or endorse a particular curriculum, product, or program. Ultimately, we hope this toolkit provides educators with resources and materials in response to, “how do we teach” and “what do we teach” students who are exhibiting the characteristics of dyslexia.

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Disclaimer

The information, resources, and materials in this dyslexia toolkit were created and compiled by the authors of the toolkit and do not necessarily represent the opinions and positions of the Indiana Department of Education or Indiana University. This guide is based, to the greatest extent possible, on high-quality empirical research available at the time of publication. The authors strived to provide unbiased research and information with the goal to provide information to teachers to do what is best for students. The inclusion or exclusion of any resources, guides, programs, curricula, and/or materials in this toolkit should not be considered an endorsement by the Indiana Department of Education or Indiana University.

Formats

This document is available in a .pdf format. It is also available online as a living document. Individuals can submit resources they would like to recommend for inclusion in the toolkit through a [Google form](#). The toolkit and the corresponding resource pages will be updated continually with these resources once reviewed by specialists at the Indiana Department of Education and Indiana University.

Recommended Reference

This toolkit is available to the public. Permission to reprint is not necessary, but the toolkit should be referenced as follows:

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<https://www.doe.in.gov/literacy/dyslexia>

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Breakdown of the Definition of Dyslexia

Breakdown of the Definition of Dyslexia

The definition for dyslexia in Indiana law is as follows: “ ‘Dyslexia’ means a specific learning disability that: is neurological in origin and characterized by difficulties with accurate fluent word recognition; and poor spelling and decoding abilities; typically results from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction; may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge; and may require the provision of special education services after an eligibility determination is made in accordance with 511 IAC 7-40.”

Part One: Dyslexia is distinguished from other learning disabilities due to weaknesses occurring at the phonological level. A student who has a weakness at the phonological level has difficulty manipulating units of oral language such as words, syllables, or individual sounds. One of the more complex skills at the phonological level is being able to blend and segment individual sounds. This is called phonemic awareness. An example of a phonemic awareness task is giving a student three sounds to blend together such as c-a-t, the student produces the word cat. A student with dyslexia may struggle with this task and produce the word *cap* instead of *cat*. Students with dyslexia who have a significant weakness at the phonological level will have difficulty acquiring basic foundational reading skills.

Part Two: Dyslexia is a Specific Learning Disability. This means the student struggles with basic early reading and language problems. Dyslexia is neurobiological in nature and not due to educational or environmental factors. Family history is one of the strongest risk factors for struggling readers and developing the characteristics of dyslexia. Today, we have scientific evidence supporting our understanding that dyslexia is caused by a difference in how the brain processes phonological information.

Part Three: Dyslexia is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. In the classroom, students with dyslexia may struggle with decoding or sounding out words, reading words accurately and fluently, and developing basic spelling skills. These basic literacy skills typically develop in kindergarten through second grade but may remain a challenge for a student with dyslexia as they progress through school.

Part Four: These struggles typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities, and the provision of effective classroom instruction. Typically, the reading difficulties a student with the characteristics of dyslexia experiences are not expected in relation to the strengths the student demonstrates in other academic areas. For example, a student

with dyslexia struggles with basic reading skills but may demonstrate average or above-average academic ability in other subjects. Additionally, the difficulties a student with dyslexia experiences are not expected given the student has been provided the same effective classroom instruction as peers who are making adequate grade-level progress.

Part Five: Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. For the student with the characteristics of dyslexia, the inability to decode fluently and accurately may impair the ability to comprehend text. Because of this challenge, the student with characteristics of dyslexia who has not received appropriate intervention may read less, and therefore have less opportunity to develop vocabulary, background knowledge, and less practice at reading to comprehend.

The Science of Reading

The Science of Reading

What is the Science of Reading?

The science of reading refers to a body of research from the fields of education, cognitive psychology, developmental psychology, and neuroscience, that explains how individuals learn how to read and best practices for reading instruction^{1,2}. Recent advances in technology and a greater understanding of neurobiology have allowed researchers and practitioners who work with typical and struggling readers to understand how reading develops in the brain and the skills that contribute to proficient reading. It is important for educators to understand this body of research because it directly affects how reading is taught and using methods that are not aligned with research can have a negative impact on students' reading achievement. As such, *the purpose of this section of the toolkit is to provide a brief overview of this body of research and provide additional resources for educators and other practitioners to explore.*

Areas of the Brain Involved in Reading

A common misconception about reading is that all humans “learn to read in a different way.” Although reading is a relatively recent cultural invention, the human brain is not prewired to learn to read naturally³. Neurobiological research has demonstrated that reading is a complex process that occurs in three different but connected areas of the brain^{1,4}. These three areas work together to help individuals read words:

- Frontal Lobe – the inferior frontal gyrus in the frontal lobe is responsible for grammatical and speech processing, in addition to information about the sounds in words
- Temporoparietal Area – responsible for processing and storing speech sounds; where phonemes (sounds) are connected to graphemes (letters); also involved in word and sentence meanings
- Occipitotemporal Area – processes visual information (e.g., letters, words)

Imaging studies, such as fMRI studies, show that these different areas of the brain are activated during reading⁴. There are two main pathways of the brain that are activated during reading:

1. Dorsal Pathway – activated during decoding/sounding out
2. Ventral Pathway – activated when words are read by sight (i.e., automatically without sounding out)

Struggling readers, including students with dyslexia, activate *different* pathways and areas of their brain than proficient readers do, which causes these students to use other, *less efficient*, areas of their brain to read words⁴. Despite this, high-quality

evidence-based instruction and intervention can actually “rewire” the brains of students with dyslexia so that they can use more efficient areas and pathways to read⁵.

The Simple View of Reading and Scarborough’s Reading Rope

In the Simple View of Reading (SVR), reading comprehension is conceptualized as the product of two component skills: decoding and linguistic comprehension^{6,7}. Decoding, a word-level skill, involves rapidly and efficiently retrieving words from memory, and linguistic comprehension consists of the literal and inferential construction and interpretation of the meaning of those words^{7,8}. If an individual is able to decode words, but does not understand what those words mean, then they will not be able to comprehend a text. Conversely, if an individual is able to understand what words mean, but not decode them, they will also not be able to comprehend text. Because many students with dyslexia have difficulties with decoding, they are likely to have difficulty comprehending text. This does NOT mean that reading is a simple process, only that two main components (decoding and linguistic comprehension) contribute the most to overall reading comprehension. [Click here to view an infographic about the Simple View of Reading.](#)

Scarborough (2001)⁹ created a graphic called the “Reading Rope” that depicts the components of the SVR. To become a skilled reader, a student must develop increasing speed and accuracy in decoding and linguistic comprehension skills⁹. Specifically, automatic decoding frees up an individual’s attentional resources so that they can comprehend text. To reach this level of automaticity, students require proper instruction that focuses on mastering decoding skills. Due to copyright reasons, we cannot reprint the graphic in this toolkit; however, [click here to view the reading rope and the International Dyslexia Association’s accompanying explanation.](#)

Word-Reading and Spelling Development

In order for students to be able to accurately and automatically decode words, they need to learn that that writing is a symbolic system used to represent spoken language and the smallest units of language (phonemes) are represented by print (also known as the *alphabetic principle*)^{10,11}. While acquiring the alphabetic principle, individuals progress through several stages of alphabetic decoding, in which they learn to map phonemes to graphemes^{10,12,13}. Ehri’s (1998)¹² stage model of reading development describes these progressive stages as follows:

- Pre-Alphabetic – pre-reading stage where individuals do not make letter-to-sound connections; “reading” is based on visual cues
- Partial Alphabetic – individuals begin to connect some phonemes to graphemes, but these representations are not complete

- Full Alphabetic – individuals develop more complete representations of words and their phoneme-grapheme relationships
- Consolidated Alphabetic – individuals have acquired a large bank of words they can read by sight (i.e., automatically and accurately) and now recognize larger units of language in words such as syllables and morphemes

Individuals progress through similar stages for spelling^{11,14}; however, spelling is often more difficult for individuals to acquire than word-reading^{14,15,16,17}. Spelling requires individuals to learn to visually identify letters by their shape and to physically produce those shapes¹¹. Proficient spelling also requires individuals to acquire in-depth knowledge about the structure of the English language system¹⁴. Spelling proficiency is acquired by learning about different patterns in words:

- Phonological (Sound) Patterns – understanding of the sounds in words
- Graphotactic (Written) Patterns – how words are written or represented in print
- Morphological (Structure) Patterns – understanding the meanings of words or parts of words

Word-reading is also acquired and enhanced through an individual's spelling development. As an individual repeatedly associates phonemes to graphemes and larger units of language (i.e., orthographic mapping), these associations become engrained in the memory and easier to retrieve with automaticity^{12,13}.

Accurate and Automatic Word-Reading

Although individuals initially learn to read by activating the dorsal pathway in the brain to decode words, the dorsal pathway is slower and less automatic than the ventral pathway where words are read by sight. There are two key processes necessary for accurate and automatic sight-word reading (i.e., proficient word-reading):

1. connecting a word's pronunciation to its meaning and spelling; and
2. connecting a word's meaning to its spelling, so that it can be read without going through the phonological system which slows down the process^{10,13,18}.

Proficient word-reading occurs when a word's pronunciation is associated with its meaning and its written spelling^{13,14,18}. With practice, individuals begin to automatically connect words' pronunciations, meanings, and spellings and this allows an individual's speed and accuracy to improve^{19,20}. This also helps individuals bypass the slower and less efficient dorsal/decoding pathway. This allows the cognitive resources (i.e., working memory) to be allocated to reading comprehension^{21,22,23}. If individuals do not become accurate and automatic word-readers, then they must constantly rely on the slower dorsal pathway to decode words, which can cause difficulties with spelling, word-reading, and text comprehension^{10,20}.

Linguistic/Language Comprehension

Accurate and automatic word-reading alone is not sufficient for individuals to be able to comprehend text. Proficient reading comprehension also requires the reader to be able to comprehend language⁶. Language comprehension requires in-depth knowledge of morphology, semantics, syntax, background knowledge, verbal reasoning, and literacy knowledge^{3,9}. Morphology is the study of the smallest units of language that have meaning (i.e., prefixes, suffixes, roots, base words). Semantics (vocabulary) involves the meaning of words, phrases, and sentences. Syntax includes grammatical structure and parts of speech.

The Five Components of Reading

How does all of this information relate to the five “components” of reading, as identified by the National Reading Panel’s (NRP’s) report on reading instruction²⁴? Although the NRP identified five “components” of reading instruction from research (phonemic awareness, phonics, fluency, vocabulary, and reading comprehension), it is important to note that each of these “components” are highly connected and should not be taught as distinct skills²⁵. For example, phonological awareness, phonics, and word-reading fluency are a part of decoding or word-recognition in the SVR, whereas vocabulary is a part of linguistic comprehension. These components are typically taught together in a comprehensive literacy program. The five “components” are described below^{3,24}:

- Phonemic Awareness – the ability to identify, think about, and manipulate the smallest sounds (phonemes) in language
- Phonics – a method for teaching phoneme-grapheme correspondences for reading and spelling
- Fluency – the ability to read a text accurately, automatically, and with expression
- Vocabulary – understanding and using words in oral and written language
- Comprehension – the ultimate goal of reading; understanding what is read

Additional Resources about The Science of Reading

Additional resources (e.g., books, articles, websites, learning modules) about the Science of Reading are available in the [Science of Reading Resources section](#) of this toolkit. These resources are not endorsed by the Indiana Department of Education or Indiana University.

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Science of Reading Resources

The resources listed in this document were reviewed and compiled by specialists at the Indiana Department of Education (IDOE) and faculty at Indiana University (IU); however, these resources are not endorsed by the IDOE or IU system.

[The online Google doc version of this document](#) is “live”, which means that resources will be added frequently. If you have found or created resources that you think should be listed in this document, [please click here to submit them for review](#).

Books

- [Brain Words: How the Science of Reading Informs Teaching](#) - by J. Richard Gentry & Gene P. Ouellete
- [Equipped for Reading Success](#) - by David Kilpatrick
- [Language at the Speed of Sight: How We Read, Why So Many Can't and What Can Be Done About It](#) - by Mark Seidenberg
- [Proust and the Squid: The Story and Science of the Reading Brain](#) - By Maryanne Wolf
- [Reading in the Brain: The New Science of How We Read](#) - by Stanislas Dehaene
- [The Science of Reading: A Handbook](#) - edited by Margaret Snowling & Charles Hulme
- [The Reading Mind](#) - by Daniel T. Willingham

Articles

- [Reading Rockets. \(n.d.\). How children learn to read.](#)
- [Stewart, L. \(2019\). The science of reading: Evidence for a new era of reading instruction.](#)
- [Castles, A., Rastle, K., Nation, K. \(2018\). Ending the reading wars: Reading acquisition from novice to expert. Psychological Science in the Public Interest, 19\(1\), 5-51.](#)
- [Petscher, Y., Cabell, S. Q., Catts, H. W., Compton, D. L., Foorman, B. R., Hart, S. A., Lonigan, C. J., Phillips, B. M., Schatschneider, C., Steacy, L. M., Terry, N. P., & Wagner, R. K. \(2020\). How the science of reading informs 21st century education. Reading Research Quarterly, 55\(S1\), S267-S282.](#)
- [Kearns, D. M., Hancock, R., Hoefft, F., Pugh, K. R., & Frost, S. J. \(2019\). The neurobiology of dyslexia. TEACHING Exceptional Children, 51\(3\), 175-188.](#)
- [Spear-Swerling, L., & Sternberg, R. \(2001\) What science offers teachers of reading.](#)

- [Moats, L. \(2020\). Teaching reading is rocket science: What expert teachers of reading should know and be able to do. American Educator.](#)
- [Seidenberg M. S. \(2013\). The science of reading and its educational implications. Language Learning and Development, 9\(4\), 331–360.](#)
- [Shanahan, T. \(2019, May\). What is the science of reading?](#)
- [Wolf, M. \(n.d.\). Every child is unique... and every child has to learn the same skills.](#)
- [Lane, H. B. \(2020\). How children learn to read words: Ehri's phases. University of Florida Literacy Institute.](#)

Podcasts

- [Educate](#) - by American Public Media
- [Hard Words: Why Aren't Kids Being Taught to Read?](#)
- [What the Words Say](#)
- [At a Loss for Words: How a Flawed Idea is Teaching Millions of Kids to be Poor Readers](#)
- [The Science of Reading](#) - by Amplify
- [Teaching, Reading, and Learning](#) - by The Reading League
- [See, Hear, Speak Podcast](#) - by the Winward School and Winward Institute
- [Read Podcast](#) - by Tiffany Hogan

Videos

- [The Reading League's YouTube Channel](#)
- [How the Brain Learns to Read - Stanislas Dehaene](#)
- [An Interview with Dr. Mark Seidenberg](#)
- [Orthographic mapping: What it is and why it's so important](#)
- [YouTube Playlist with Mark Seidenberg](#)
- [Haskins Global Literacy Hub Videos](#)
- [Children of the Code Videos](#)
- [What Teachers Should Know about the Science of Reading](#)
- [CORE: Science of Reading Webinars](#)
- [The Science of Reading - An Overview \(by Dr. Jan Hasbrouck\)](#) - The Reading League
- [The Animated Reading Rope](#) - AIM Institute for Learning and Research
- [The Simple View of Reading](#) - Reading Rockets

Infographics and Fact Sheets

- [Scarborough's Reading Rope: A Groundbreaking Infographic](#)
- [NCII - The Simple View of Reading](#)
- [Four-Part Processing Model](#)
- [The Ladder of Reading - Nancy Young](#)

Professional Development Modules and Courses

- [The Reading League's Online Academy](#)
- [Really Great Reading](#)
- [Achieve the Core](#)

Professional Organizations and Centers

- [The Reading League](#)
- [National Center for Improving Literacy](#)
- [The Right to Read Project](#)
- [Florida Center for Reading Research](#)
- [University of Florida Literacy Institute \(UFLI\)](#)
- [Iowa Reading Research Center](#)
- [Minnesota Center for Reading Research](#)
- [Vaughn-Gross Center for Reading and Language Arts](#)
- [The Meadows Center for Preventing Educational Risk](#)
- [Children's Learning Institute](#)
- [Texas Center for Learning Disabilities](#)
- [The Yale Center for Dyslexia and Creativity](#)
- [The Center for Effective Reading Instruction](#)

AIM Institute for Learning and Research: The Reading Rope Videos

- [Phonological Awareness](#)
- [Sight Recognition](#)
- [Decoding](#)
- [Vocabulary](#)
- [Verbal Reasoning](#)
- [Background Knowledge](#)
- [Language Structures](#)
- [Literacy Knowledge](#)

Scientifically-Based Reading Instruction and Intervention

Scientifically-Based Reading Instruction and Intervention

The purpose of this section of the toolkit is to discuss the importance of using a structured literacy approach that is based in the science of reading and to compare this approach to a balanced literacy approach.

What is Structured Literacy?

Structured literacy is a scientifically-based approach to reading instruction recommended by the International Dyslexia Association for struggling readers and individuals with dyslexia^{1,2}. It is supported by research from practice guides by the Institute of Education Sciences and high-quality reviews of intervention research^{3,4,5,6}. In a structured approach to literacy instruction, the components of language (i.e., phonology, sound-symbol association, syllables, morphology, syntax, and semantics) are taught to students using an explicit, systematic method that incorporates diagnostics teaching and cumulative review^{1,2,7}. This approach does not require students to guess or imply what the teacher is trying to teach. It is highly interactive and includes frequent teacher-student interactions where students receive meaningful feedback.

The Components of Language Emphasized in Structured Literacy

Each of the six major components of language are described below^{1,2,7,8}:

- **Phonology** –the sound structure of a spoken language; includes phonemic awareness – the ability to distinguish, blend, segment, and manipulate individual sounds (phonemes) in words
- **Sound-Symbol Recognition** – how sounds (phonemes) map to letters (graphemes); also referred to as letter-sound correspondences, sound-symbol correspondences, phoneme-grapheme correspondences; leads to the development of the *alphabetic principle* – the knowledge that letters represent sounds
- **Syllables** – knowledge of the six syllable types and syllable division patterns; leads to advanced word-reading skills beyond sound-symbol recognition
- **Morphology** – understanding that words are made up of *morphemes* – the smallest unit of meaning in a word; includes prefixes, suffixes, roots, base words, combining forms; leads to the development of advanced single- and multi-syllable word reading and with academic vocabulary
- **Syntax** – grammar, sentence structure, and mechanics in sentences; supports effective communication through oral and written language
- **Semantics** – meanings of words and phrases; includes oral and written vocabulary (expressive and receptive)

Key Features of Structured Literacy Instruction

There are several key features of lessons that incorporate a structured literacy approach^{1,2,7}:

1. Explicit teaching (including modeling and appropriate practice) of all language components
2. Skills are broken down into small, applicable chunks
3. Lessons are systematic and sequential – in other words, each lesson builds on previous skills and is taught in a logical order that considers prerequisites
4. Lesson goals are clearly stated to students
5. Skills are taught and practiced in isolation before they are practiced in decodable texts (e.g., students practice sounding out Consonant-Vowel-Consonant words in a list before they read these words in a decodable story)
6. Decodable texts (texts in which the majority of words can be sounded out) are used to provide students with additional word-reading practice.
7. Previously learned and mastered skills are reviewed frequently (i.e., cumulative review); these reviews lead students to develop automaticity necessary for fluent text reading

The Problem with Balanced Literacy Approaches

Balanced approaches to literacy instruction often go by various names, such as traditional or typical reading instruction, whole-language, Four Blocks, Reading Recovery, and Guided Reading⁷. These approaches often incorporate practices that do not directly teach students specific skills; instead, they rely on more implicit activities where students are expected to infer different reading skills. Students spend a lot of class time working with partners or independently to practice reading skills⁷. Although balanced literacy approaches incorporate some practices that align with the science of reading, they do not meet the needs of students who require explicit systematic instruction, including students who are “at risk” or “at some risk” or exhibit the characteristics of dyslexia^{7,9}.

Balanced literacy approaches are typically based in the whole language theory of reading and three-cueing system. These approaches emphasize meaning-based instruction and the belief that readers use cues (e.g., semantic, syntactic, and graphophonic) to pronounce words¹⁰. For example, when a student comes to an unknown word, he/she may be asked: Does it make sense? Does it sound right? Does it look right? In programs that are based in balanced literacy, students are asked to use these cues to read unknown words and they read predictable, leveled, or trade books instead of decodable books⁷. These predictable and leveled texts have many pictures, and teachers direct students to look at these pictures to read unknown words.

Additionally, critical phonemic awareness and phonics skills may be taught, but are rarely done so in an explicit, systematic, or sequential manner⁷.

Structured Literacy versus Balanced Literacy

Many resources exist that explain the differences between structured literacy and balanced literacy. Due to copyright laws, these resources cannot be reproduced in this toolkit; however, we have linked these resources in the [Scientifically-Based Reading Instruction and Intervention Resources section](#) of this toolkit.

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<https://www.nifdi.org/news/hempenstall-blog/441-part-1-whole-language-what-was-that-all-about>

Scientifically-Based Reading Instruction and Intervention Resources

The resources and programs listed in this document were reviewed and compiled by specialists at the Indiana Department of Education (IDOE) and faculty at Indiana University (IU); however, these resources are not endorsed by the IDOE or IU system.

[The online Google doc version of this document](#) is “live”, which means that resources will be added frequently. If you have found or created resources that you think should be listed in this document, [please click here to submit them for review](#).

Scientifically-Based Reading Instruction and Structured Literacy

- [International Dyslexia Association. \(2019\). Structured literacy: An introductory guide.](#)
- [Cowden, C. D. \(2016\). What is structured literacy? A primer on effective reading instruction. The International Dyslexia Association.](#)
- [International Dyslexia Association. \(2020\). Structured literacy: Effective instruction for students with dyslexia and related reading difficulties.](#)
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- [Hempenstall, K. \(2016\). Read about it: Scientific evidence for effective teaching of reading. The Centre for Independent Studies.](#)
- Stanovich, P. J., & Stanovich, K. E. (2003). [Using research and reason in education: How teachers can use scientifically-based research to make curricular & instructional decisions.](#) RMC Research Corporation.
- [Sayeski, K. L., Earle, G. A., Davis, R., & Calamari, J. \(2019\). Orton Gillingham: Who, what, and how. TEACHING Exceptional Children, 51\(3\), 240-249.](#)
- [Center on Teaching and Learning. Big ideas in beginning reading. University of Oregon.](#)
- [Parker, S. \(2020, March\). A brief history of reading instruction.](#)
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Critiques of Balanced Literacy, Whole-Language, and 3-Cueing

- [Hempenstall, K. \(2013, November\). The three-cueing system in reading: Will it ever go away?](#)

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- [Right to Read Project. \(2019\). The implicit messages in teaching reading as cueing \[infographic\].](#)
- [Right to Read Project. \(2019\). You might unknowingly be teaching whole-language strategies if... \[infographic\].](#)
- [Right to Read Project. \(2019\). Reading as a guessing game \[infographic\].](#)
- [Right to Read Project. \(2019\). Rethinking reading strategies \[infographic\].](#)
- [Vaites, K. \(2019, October\). The trouble with common word recognition strategies.](#)
- [Vaites, K. \(2019, November\). Leveled reading groups don't work: Why aren't we talking about it?](#)
- [Right to Read Project. \(2019\). Leveling charges at Fountas & Pinnell.](#)

Understanding the Difference Between Structured Literacy and Balanced Literacy

- [Moats, L. \(2007\). Whole-language high-jinks: How to tell when “scientifically-based reading instruction” isn’t. Thomas B. Fordham Foundation & Institute.](#)
- [Spear-Swerling, L. \(2019\). Structured literacy and typical literacy practices: Understanding differences to create instructional opportunities. TEACHING Exceptional Children, 51\(3\), 201–211.](#)
- [Lorimor-Easley, N. A., & Reed, D. K. \(2019\). An explanation of structured literacy, and a comparison to balanced literacy. Iowa Reading Research Center.](#)
- [Education Week. \(2019, October\). Phonics vs. balanced literacy: A classroom comparison.](#)

Books

- [Teaching Reading Sourcebook \(3rd Edition\)](#) - by CORE Literacy Library
- [Reading Research in Action: A Teacher’s Guide for Student Success](#) - by [Peggy McCardle, Ph.D., MPH](#), [Vinita Chhabra](#), and [Barbara Kapinus](#)
- [The Power of RTI and Reading Profiles: A Blueprint for Solving Reading Problems](#) - by Louise Spear-Swerling
- [Equipped for Reading Success: A Comprehensive, Step-by-Step Program for Developing Phonemic Awareness and Fluent Word Recognition](#) - by David Kilpatrick
- [Essentials of Assessing, Preventing, and Overcoming Reading Difficulties](#) - by David Kilpatrick
- [Speech to Print: Language Essentials for Teachers \(3rd ed.\)](#) - by Louisa Moats

- [Multisensory Teaching of Basic Language Skills \(4th ed.\)](#) - by Judith Birsh and Suzanne Carreker
- [Direct Instruction Reading \(6th Edition\)](#) - by Douglas Carnine, Jerry Silbert, Edward Kame'enui, Patricia Travers, and Timothy Slocum

Teaching Guides and Lessons

- [First Grade Reading Intervention: Sample Lesson Plans and Sequence - Texas Center for Learning Disabilities](#)
- [Using Student Center Activities to Differentiate Reading Instruction: A Guide for Teachers](#) - Florida Center for Reading Research
- [Building the Foundation: A Suggested Progression of Sub-Skills to Achieve the Reading Standards: Foundational Skills in the Common Core Standards](#) - Center on Instruction
- [Teacher Practice Guide: Teaching Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade](#) - Institute of Education Sciences
- [Reading Strategies & Activities Resource Book: For Students at Risk for Reading Difficulties, Including Dyslexia](#) - University of Texas and Texas Education Agency
- [Reducing Reading Difficulties for Kindergarten Through Third Grade Students: Introduction to the 3-Tier Reading Model](#) - Vaughn-Gross Center on Reading and Language Arts
- [A Consumer's Guide to Evaluating Core, Supplemental, and Intervention Reading Programs Grades K-3: A Critical Elements Analysis \(by UO CTL\)](#)
- [Improving Reading Comprehension in Kindergarten through 3rd Grade](#) - Institute of Education Sciences, U.S. Department of Education
- [Assisting Students Struggling with Reading: Response to Intervention \(RtI\) and Multi-Tier Intervention in the Primary Grades](#) - Institute of Education Sciences, U.S. Department of Education

Professional Development and Online Learning Modules

- [Teaching Foundational Reading Skills Free Online Course with PD Credit \(based on IES Practice Guide; through NCS & IES\)](#)
- [Intensive Intervention in Reading Free Online Course \(by NCII\)](#)
- [RTI \(Part 3\): Reading Instruction \(by IRIS Center through VU & OSEP\)](#)
- [RTI \(Part 5\): A Closer Look at Tier 3 \(by IRIS Center through VU & OSEP\)](#)
- [3-Tier Reading Model Reading Intervention: Tier 2 \(Online Module by UT Building Capacity for RTI\)](#)
- [Reading Course Enhancement Module](#) - CEEDAR Center & University of Florida

Videos

- [Structured Literacy Lesson](#) - Literacy How
- [An Overview of Structured Literacy](#) - Center for Dyslexia MTSU
- [Leaders and Learning in Literacy: Structured Literacy with Dr. Lousie Spear-Swerling](#) - PaTTAN
- [Elements of an Effective Reading Program through Structured Literacy](#) - CORE Learn
- [What is Structured Literacy](#) - CORE Learn
- [Overview of the Foundational Reading Skills Practice Guide and PLC Webinar](#) - Institute of Education Sciences, U.S. Department of Education
- [University of Florida Literacy Institute Webinars on Teaching Reading Online and Dyslexia](#)

Resource Repositories on Reading

- [National Center for Improving Literacy](#)
- [Lead for Literacy Center](#)
- [Haskins Global Literacy Hub Library](#)
- [Iowa Center for Reading Research](#)
- [Instructional Resources \(Lesson Plans, Videos, etc.\) to Support RTI in Reading](#) - University of Texas's Building Capacity for RTI

Websites

- [Reading Rockets](#)
- [Five from Five](#)

Recommended Instructional Approaches

Recommended Instructional Approaches

Introduction

This section of the toolkit describes the instructional approaches for dyslexia interventions that are recommended by Indiana Dyslexia Screening and Intervention Act¹. These approaches are used in instruction that is provided **in addition to** scientifically-based core reading instruction in general education. Instructional approaches are the methods and practices used to teach students content, not the content itself. In other words, instructional approaches provide teachers with guidance on **how** to deliver instruction to students, not **what** to teach. The Indiana Dyslexia Screening and Intervention Act¹ does not require schools to use a specific program, curriculum, or product for students who require dyslexia intervention; however, it does recommend that dyslexia interventions include instructional approaches that are:

- explicit and direct
- systematic and sequential
- cumulative
- individualized
- multisensory

These recommended approaches are *evidence-based*, which means they are supported by high-quality experimental research² and have led to improved reading and writing outcomes for all students, including those with and at risk for reading disabilities such as dyslexia^{3,4,5,6}. Additionally, these approaches are aligned with Structured Literacy, an approach recommended by the International Dyslexia Association⁷.

The recommended instructional approaches can be implemented in various settings including:

- general or special education settings,
- tiered systems of support (e.g., Response to Intervention [RTI], Multi-Tiered Systems of Support [MTSS]), and
- specially designed instruction.

Resources to support the use of these recommended approaches are available in the [Recommended Approaches Resources section](#) of this toolkit.

Explicit and Direct Instruction

Explicit and direct instructional approaches are fully-guided and structured teaching methods that incorporate specific procedures for selecting lesson content, designing lessons and practice opportunities, and delivering lessons to help students meet specific learning goals^{8,9}. Table 1 lists these elements of explicit instruction. Explicit

instruction is used when students are learning new skills and content (i.e., they are beginners) or when students have experienced difficulty in a content area^{8,10}. Explicit and direct instructional approaches are supported by decades of research and have led to positive outcomes in all academic areas¹¹. These methods do not require students to guess or imply what the teacher is trying to teach¹⁰. Archer and Hughes' (2010)⁸ definition of explicit instruction also incorporates the other instructional approaches (e.g., systematic, sequential, cumulative, diagnostic) recommended by the Dyslexia Screening and Intervention Act¹.

Table 1. Elements of Explicit Instruction

Content & Practice	Design Elements	Delivery Elements
<ul style="list-style-type: none"> ● include only the most important skills, vocabulary, concepts, and/or rules ● sequence skills logically ● break down complex skills into smaller steps ● frequent practice opportunities 	<ul style="list-style-type: none"> ● clearly stated lesson goals and relevance ● review of prerequisite skills ● models/step-by-step demonstrations ● guided practice ● clear and concise language 	<ul style="list-style-type: none"> ● multiple opportunities to respond ● monitoring of students' performance ● feedback ● pacing

Note. Adapted from Archer and Hughes (2010)⁸.

Systematic and Sequential

Instruction that is systematic is highly-structured⁸. Instruction that is sequential ensures that skills are sequenced logically (i.e., easier or prerequisite skills are taught before more difficult skills) and that each lesson builds upon previously taught skills⁸. For example, a scope and sequence for decoding skills would introduce single-syllable words (e.g., cat, list), before words with two or more syllables (e.g., oyster, giant). When lessons and interventions have a carefully planned scope and sequence, then this reduces the cognitive demands placed on students' working memory¹². In other words, teaching skills in small chunks and a predictable sequence allows students to focus on the most important information and helps them more fully process that information¹². Although most commercially-published curricula and programs have a scope and sequence, this dyslexia toolkit also includes a general scope and sequence for each of the components of reading (e.g., phonological awareness, letter-sound correspondences, decoding).

Cumulative Review

Interventions for students with dyslexia should also incorporate frequent cumulative review, which involves reviewing previously learned skills, in addition to new skills⁸. Cumulative review promotes maintenance or retention of skills over time¹³. In a dyslexia intervention, a teacher might have students review their previously learned letter-sound correspondences (e.g., ai, ay, t, ch, d) at the beginning of each lesson or at pre-determined intervals such as once or twice a week. Once a student has initially acquired a reading skill, then spacing out or distributing cumulative review practice sessions over that skill helps students maintain their skills over time¹³.

Individualized Instruction

Instruction is individualized when it is based on assessment data from various sources (e.g., dyslexia screeners, progress monitoring assessments, diagnostic assessments, classroom formative assessments). This data is used to determine a student's current level of achievement or performance (i.e., baseline), and then plan and adjust instruction to meet the needs of that student. For example, if assessment data show that a student has mastered decoding short vowels in single-syllable words, but has not yet mastered decoding long vowel patterns in single-syllable words, then the teacher would plan to begin new instruction on long vowel patterns. Additionally, teachers can conduct error analyses on assessments to determine where and why errors are occurring and plan instruction to address those errors.

Instruction can also be individualized when assessment data is used to adjust instruction or intensify interventions, a process known as *data-based individualization (DBI)*¹⁴. "DBI relies on the systematic and frequent collection and analysis of student-level data, modification of intervention components when those data indicate inadequate response, and use of teachers' clinical experience and judgment to individualize intervention" (National Center for Intensive Intervention, 2013, p. 3). The changes made to instruction can be quantitative or qualitative. Table 2 lists examples of quantitative and qualitative changes to instruction that can be made using a DBI process.

Table 2. Qualitative and Quantitative Changes in Data-Based Individualization

Quantitative Changes	Qualitative Changes
<ul style="list-style-type: none"> ● reduced group size ● additional intervention time (e.g., more days per week, more time per session) ● different setting 	<ul style="list-style-type: none"> ● selection of examples specifically tailored to students' needs ● additional practice opportunities ● feedback and error correction

Note. Adapted from National Center for Intensive Intervention's [Data-Based Individualization: A Framework for Intensive Intervention](#)¹⁴.

Quantitative Changes Example: A teacher is providing dyslexia intervention to a small group of first grade students three times per week. The teacher is currently teaching students to read consonant digraphs (e.g., sh, ch) in isolation and real words. The teacher realizes that two of the four students in the small group are having difficulty with consonant digraphs, even after receiving direct and explicit instruction. The teacher decides to work with those two students for two extra days (in addition to the three days they're already receiving). The teacher reduced the group size and increased the amount of instruction for the two students.

Qualitative Change Example: A teacher is providing dyslexia intervention to a small group of first grade students three times per week. The teacher is currently teaching students to read consonant digraphs (e.g., sh, ch) in isolation and real words. The teacher realizes that one student has not yet mastered the ch digraph, so teacher provides that student with additional practice reading just the ch digraph in words (a qualitative change) while the other students in the small group practice partner reading words that include all previously taught consonant digraphs.

Multisensory Elements and Maximizing Student Engagement

Dyslexia interventions should also incorporate multisensory elements that require students to engage with the lesson through more than one modality (auditory, kinesthetic, visual, tactile). Multisensory elements act as the “glue” that holds all of the other recommended approaches together and promote student engagement and interaction in a lesson. Dyslexia interventions may include multisensory elements such as clapping while saying sounds, using chips or counters to segment sounds, moving letter tiles to create words, etc. For example, when students are learning the letters of the alphabet, they would say the name of the letter, say the sound the letter makes, look at the letter, and trace the letter.

Interventions can also maximize students' engagement by incorporating frequent opportunities for students to respond during lessons^{8,15,16}. Teachers should provide

students with multiple opportunities to respond (OTR) throughout all parts of a lesson (e.g., modeling, guided practice, independent practice) because OTRs are associated with increased academic achievement and on-task behavior^{16,17,18}.

Table 3. Examples of Opportunities to Respond

Response Type	Examples
Verbal	<ul style="list-style-type: none"> ● choral responses ● partner responses ● group/team responses ● individual responses
Written	<ul style="list-style-type: none"> ● whiteboards ● sticky notes ● worksheets ● graph paper ● posters ● graphic organizers ● brainstorming ● warm-up activities or exit tickets
Kinesthetic	<ul style="list-style-type: none"> ● response cards ● touching/pointing ● acting out ● gestures ● hand signals ● highlighting/underlining
Technology	<ul style="list-style-type: none"> ● clickers or remote response systems/apps ● online quiz sites (Quizlet, Kahoot) ● plickers

Note. From Archer & Hughes (2010)⁸

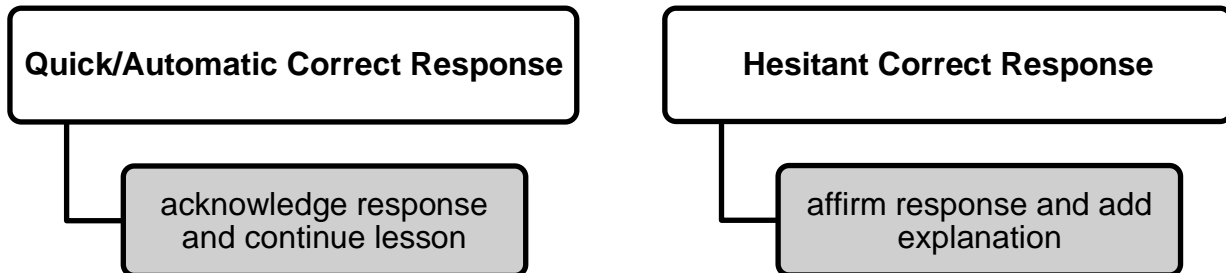
Teacher Feedback

Although teacher feedback is not stated in the Dyslexia Screening and Intervention Act¹, it is a critical element of instruction that is necessary for students' success. The purpose of teacher feedback is to increase students' motivation, engagement, and performance by affirming correct responses or correcting incorrect responses^{8,19,20}. Feedback should be:

- specific and goal directed,
- clear and tangible, and
- provided immediately (or as soon as possible) after the response.

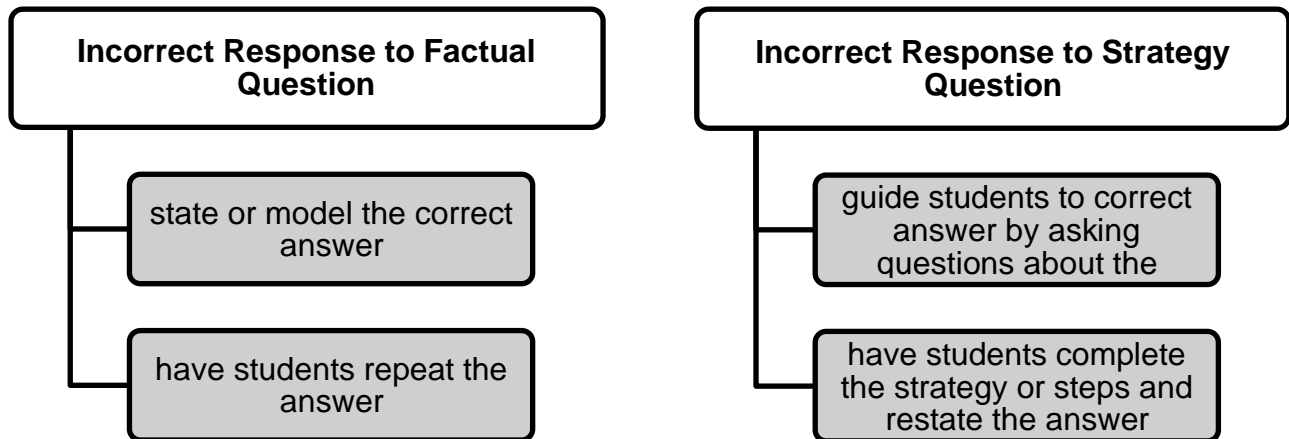
Figures 1 and 2 provide guidelines for how to provide affirmative and corrective feedback.

Figure 1. How to Provide Affirmative Feedback for Correct Responses



Note. Adapted from Archer & Hughes (2010)⁸

Figure 2. How to Provide Corrective Feedback



Note. Adapted from Archer & Hughes (2010)⁸

Resources to Support the Recommended Approaches

Additional resources to support the recommended approaches are available in the [Recommended Approaches Resources section](#) of this toolkit. These resources are not endorsed by the Indiana Department of Education or the Indiana University system.

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Recommended Instructional Approaches Resources

The resources listed in this document were reviewed and compiled by specialists at the Indiana Department of Education (IDOE) and faculty at Indiana University (IU); however, these resources are not endorsed by the IDOE or IU system.

[The online Google doc version of this document](#) is “live”, which means that resources will be added frequently. If you have found or created resources that you think should be listed in this document, [please click here to submit them for review](#).

Explicit, Systematic, Sequential Instruction

Resource Type	Resource Name/Reference and Web Link
Books	<ul style="list-style-type: none"> • Archer, A. L., & Hughes, C. A. (2010). <i>Explicit instruction: Effective and efficient teaching</i>. Guildford Press. • Goeke, J. L. (2009). <i>Explicit Instruction: Strategies for Meaningful Direct Teaching</i>. Pearson.
Chapters, Guides & Articles	<ul style="list-style-type: none"> • Archer & Hughes (2010) “Exploring the Foundations of Explicit Instruction” • Stockard, J., Wood, T. W., Coughlin, C., & Khoury, C. R. (2018). The effectiveness of Direct Instruction curricula: A meta-analysis of a half century of research. <i>Review of Educational Research</i>, 88(4), 479–507. doi:10.3102/0034654317751919 • Explicit Instruction: What You Need to Know • Recognizing Effective Special Education Teachers (RESET) Explicit Instruction Rubric & Rubric Manual • High-Leverage Practices in Special Education • High-Leverage Practices in Special Education: Instruction-Research Synthesis • Riccomini, P. J., Morano, P. J., & Hughes, C. A. (2017). Big ideas in special education: Specially designed instruction, high-leverage practices, explicit instruction, and intensive intervention. <i>Teaching Exceptional Children</i>, 50(1), 20-27. https://doi.org/10.1177/2F0040059917724412 • Kirschner, P. A., Sweller, J., Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-

	<p>based, experiential, and inquiry-based teaching. Educational Psychologist, 41(2), 75-86.</p> <ul style="list-style-type: none"> • International Dyslexia Association. (2020). Structured literacy: Effective instruction for students with dyslexia and related reading difficulties. • NCII List of Explicit Instruction Resources • Martin, A. J. (2016). Using Load Reduction Instruction (LRI) to boost motivation and engagement. British Psychological Society. • Smith, J. L. M., Saez, L., & Doabler, C. T. (2016). Using explicit and systematic instruction to support working memory. TEACHING Exceptional Children, 48, 275-281.
<p>Online Courses & Modules</p>	<ul style="list-style-type: none"> • National Center for Intensive Intervention’s Features of Explicit Instruction Online Course • Module 5: Modeling and Practicing to Help Students Reach Academic Goals • Module 6: Supporting Practices: Using Effective Methods to Elicit Frequent Responses • Module 7: Supporting Practices: Providing Immediate Specific Feedback and Maintaining a Brisk Pace • Module 8: Evaluating the Use of Explicit Instruction to Support Students’ Academic Needs
<p>Presentations and Videos</p>	<ul style="list-style-type: none"> • High-Leverage Practice #16: Use Explicit Instruction • National Center for Intensive Intervention’s Webinar: To Be Clear: What Every Educator Needs to Know About Explicit Instruction • Explicit, Systematic Instruction: Elementary • Why Explicit Instruction? • Explicit Instruction Explanation • Explicit Teaching Delivery • HLPs 8 and 22: Provide Positive and Constructive Feedback to Guide Students’ Learning and Behavior
<p>Videos of Explicit Instruction</p>	<ul style="list-style-type: none"> • Anita Archer’s Elementary Explicit Instruction Videos • Anita Archer’s Secondary Explicit Instruction Videos • I Do, We Do, You Do

Websites	<ul style="list-style-type: none"> • Anita Archer’s Explicit Instruction Website • Recognizing Effective Special Education Teachers (RESET) • National Institute for Direct Instruction (NIDI)
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Resources to Support the Other Recommended Approaches

Approach	Resource and Weblink
Cumulative Review	<ul style="list-style-type: none"> • Hughes, C. A., & Lee, J.-Y. (2019). Effective Approaches for Scheduling and Formatting Practice: Distributed, Cumulative, and Interleaved Practice. Teaching Exceptional Children, 51(6), 411-423. (journal article) • Morano, S. (2019). Retrieval Practice for Retention and Transfer. Teaching Exceptional Children, 51(6), 436-444. (journal article) • Retrieval Practice (website)
Individualized Instruction	<ul style="list-style-type: none"> • NCII Data-Based Individualization: A Framework for Intensive Intervention (resource guide) • Edmonds, R. Z., Gandhi, A. G., & Danielson, L. (2019). Essentials of Intensive Intervention. Guilford Press. (book) • National Center for Intensive Intervention (website) • NCII’s Introduction to Intensive Intervention Self-Paced Module(online learning module) • IRIS Module: Intensive Intervention (Part I): Using Data-Based Individualization to Intensify Instruction (online learning module) • IRIS Module: Intensive Intervention (Part II): Collecting and Analyzing Data for Data-Based Individualization (online learning module)
Multisensory and Engagement	<ul style="list-style-type: none"> • 8 Multisensory Techniques for Teaching Reading • Phonics Instruction: the Value of a Multisensory Approach • IDA Multisensory Structured Language Teaching Fact Sheet • IMSE Multi-Sensory Instruction in the Classroom: 5 Activities to Use • LD Online: Use Multisensory Approaches • Opportunities to Respond Tip Sheet • Providing Multiple Opportunities to Respond

Approach	Resource and Weblink
	<ul style="list-style-type: none"> • ibestt Intervention Guide: Opportunities to Respond
Teacher Feedback	<ul style="list-style-type: none"> • HLPs 8 and 22: Provide Positive and Constructive Feedback to Guide Students' Learning and Behavior (video) • Hattie, J., & Timperley, H. (2007). The Power of Feedback. Review of Educational Research, 77(1), 81-112. (journal article) • Wisniewski, B., Zierer, K., & Hattie, J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. Frontiers in Psychology. (journal article) • Hattie, J., & Clarke, S. (2018). Visible Learning: Feedback.Routledge. (book)

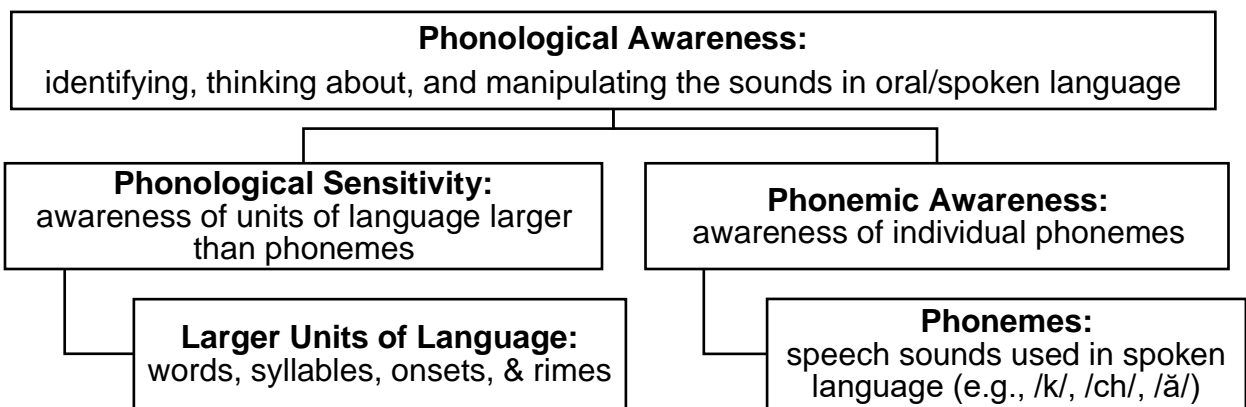
Phonological Awareness

Phonological Awareness

Defining Phonological Awareness

To become proficient readers and spellers, students need to develop *phonological awareness*, which includes the ability to identify, think about, and manipulate the sounds in oral/spoken language¹. Phonological awareness includes two types of skills: (1) *phonological sensitivity* and (2) *phonemic awareness* (See Figure 1).^{1,2,3} *Phonological sensitivity* includes larger units of language such as words, syllables, onsets, and rimes, and *phonemic awareness* involves the smallest, individual sounds in spoken speech.

Figure 1. Key Phonological Awareness Concepts^{1,2,3}



To teach phonological awareness skills, teachers must have a strong understanding of *phonology* – the speech sounds in oral/spoken language and the rules for sequencing, combining, and pronouncing those sounds^{1,3}. Teachers who have greater knowledge of the components of language are better equipped to teach reading and spelling to young children and to individuals with and at-risk for dyslexia⁵. The units of language important for teaching phonological awareness are described in *Table 1*.

Table 1. Phonological Units of Language^{3,4}

Unit	Description	Examples
Word	whole words	bat, farm, swim, top
	compound words	sandbox, baseball, campground
Syllable	a word or word part that contains one vowel sound	party = <i>part</i> + <i>y</i> ; it has two syllables because it has two vowel sounds: /ar/ and /ē/
Onset	the part of a word that comes before the vowel sound; some words do not have an onset	the onset in <i>tap</i> is [t]; the onset in <i>swim</i> is [sw]; there is no onset in the word <i>at</i> and the rime is [at]

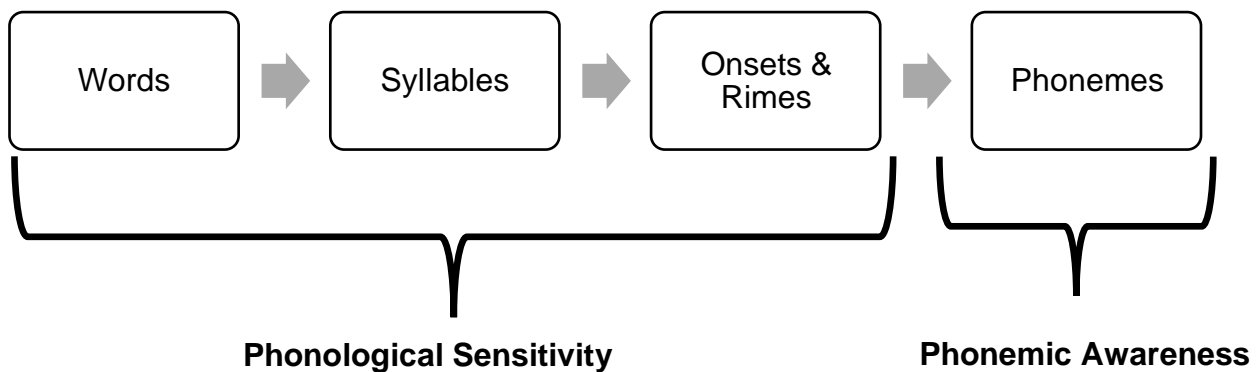
Unit	Description	Examples
Rime	the vowel sound and everything that follows the vowel sound in a word	the rime in <i>tap</i> is [ap]; the rime in <i>swim</i> is [im]; the rime in <i>at</i> is [at]
Phoneme	the smallest unit of sound in a word; it is what makes one word different from another	/b/ in the word <i>bat</i> ; /h/ in the word <i>hat</i> ; <i>bat</i> and <i>hat</i> differ by their first phoneme (/b/ versus /h/)

Note. Adapted from Honig et al. (2018)⁴ and Moats et al. (2020)³.

Development of Phonological Awareness Skills

Children’s phonological awareness skills develop gradually over time, and they typically acquire phonological sensitivity of the larger units of language before they become aware of the individual sounds in speech (Figure 2). For example, it will be easier for a child to orally blend together the syllables in a word (e.g., *base* + *ball* = *baseball*), than to orally blend individual speech sounds (e.g., /k/ /ă/ /t/ = *cat*).

Figure 2. Development of Phonological Skills



Phonemes – The Smallest Unit of Sound

There are approximately 43 *phonemes* or speech sounds in the English language and these phonemes are categorized by how the sounds are produced in the mouth.³ Most materials and programs for teaching reading and spelling use phonics symbols for these 43 phonemes (such as /k/ for the first sound in the word *cat* or /ă/ for the first sound in word *at*) and phonics symbols will be used throughout this toolkit.

There are 25 *consonant phonemes* and they are spoken with the mouth partially closed and the teeth, lips, or tongue interrupt the airflow.

Table 2 Consonant Phonemes^{3,4}

Consonant Phonemes	Phonic Symbol (Example)
speech sounds in which the mouth is partially closed and the flow of air is blocked by the teeth, lips, or tongue	/b/ (<u>b</u> oy), /ch/ (<u>ch</u> ip), /d/ (<u>d</u> ig), /f/ (<u>f</u> un), /g/ (<u>g</u> et), /h/ (<u>h</u> op), /j/ (<u>j</u> ym), /k/ (<u>k</u> at), /l/ (<u>l</u> ag), /m/ (<u>m</u> ix), /n/ (<u>n</u> ap), /ng/ (<u>ng</u>), /p/ (<u>p</u> et), /r/ (<u>r</u> at), /s/ (<u>s</u> at), /sh/ (<u>sh</u>), /t/ (<u>t</u> op), /th/ - unvoiced (<u>th</u>), /th/ - voiced (<u>th</u> at), /v/ (<u>v</u> an), /w/ (<u>w</u> ent), /wh/ (<u>wh</u> ite), /y/ (<u>y</u> et), /z/ (<u>z</u> it), /zh/ (<u>zh</u> ecision)

Note. Consonant and vowel phonemes are categorized by their sounds, not the letters used to represent those sounds.

Consonant phonemes can also be classified by where they are made in the mouth and how they are pronounced:

- **Continuous**- sounds that can be held out until air runs out (/m/, /n/, /ng/, /f/, /v/, /th/, /th/, /s/, /z/, /sh/, /zh/, /w/, /y/, /l/, /r/)
- **Stop phonemes**- sounds cannot be held out; air flow is stopped (/p/, /b/, /t/, /d/, /k/, /g/, /h/, /ch/, /j/, /wh/)
- **Voiced**- sounds pronounced with the vocal cords vibrating (/b/, /d/, /g/, /n/, /m/, /ng/, /v/, /th/, /z/, /zh/, /j/, /w/, /y/, /l/, /r/)
- **Unvoiced**- the vocal cords do not vibrate (/p/, /t/, /d/, /k/, /f/, /th/, /s/, /sh/, /h/, /ch/, /wh/)

When beginning instruction in blending, teachers should first select words that begin with continuous phonemes, because these are easier than words that begin with stop phonemes. Although teachers do not typically teach the terms “voiced” and “unvoiced” during phonological awareness instruction, it is helpful for teachers to know the difference between these two types of phonemes because they can use this knowledge to help students correct their pronunciation. For example, a student who is making the /p/ phoneme voiced, can be told by a teacher to say the /p/ with a “puff of air.” Teachers could also have students put their hands up to their neck/throat to feel whether or not it is vibrating.

There are 18 vowel phonemes, and they are spoken with the mouth open and uninterrupted airflow.³ All vowel phonemes are voiced and continuous, but have additional features (see Table 3) to classify them:

- **Short**: vowel sounds made when the vocal cords are relaxed; a breve symbol (˘) above the vowel letter indicates the short sound
- **Long**: vowel sounds made when the vocal cords are tensed; a macron symbol (¯) above the vowel indicates the long sound

- Diphthong: vowel sounds that glide together
- R-Controlled: when an r immediately follows a vowel, it changes its sound

Table 3. Vowel Phonemes and Phonic Symbols

Vowel Phonemes	Phonic Symbol (Example)
speech sounds in which the mouth is open and the flow of air is not blocked by the teeth, lips, or tongue	<p><u>Short Vowel Phonemes</u>: /ă/ (at), /ĕ/ (bet), /ĭ/ (it), /ŏ/ (hot), /ŭ/ (up), /au/ or /aw/ (sauce)*, /oŏ/ (book)*</p> <p><u>Long Vowel Phonemes</u>: /ā/ (lay), /ē/ (event), /ī/ (ice), /ō/ (open), /ū/ (unit), /oo/ (moon)</p> <p><u>R-Controlled Vowel Phonemes</u>: /ar/ (car), /or/ (for), /er/ or /ir/ or /ur/ (her)</p> <p><u>Diphthongs</u>: /ou/ or /ow/ (down), /oi/ or /oy/ (boil)</p>

Note. Consonant and vowel phonemes are categorized by their sounds, not the letters used to represent those sounds; * /au/ or /aw/ and /oŏ/ are considered ‘short’ vowel phonemes by linguists.³

The consonant and vowel phonemes can be combined to create two different spoken syllable types (*simple* and *complex*), which are different from the six types of written syllables (Table 4). Teachers should teach blending and segmenting with simple syllables before complex syllables.³

Table 4. Spoken Syllable Types

Syllable Type	Definition	Examples
Simple Syllable	syllables where there is a single consonant phoneme before and/or after a vowel phoneme	be = /b/ /ē/ map = /m/ /ă/ /p/ bike = /b/ /ī/ /k/ at = /ă/ /t/
Complex Syllable	syllables where two or more consonant phonemes come before and/or after the vowel phoneme in the syllable	jump = /j/ /ŭ/ /m/ /p/ swim = /s/ /w/ /ī/ /m/ ant = /ă/ /n/ /t/

Phonological Awareness Skills

Phonological awareness can be taught at each level (i.e., word, syllable, onset and rime, and phoneme) and includes skills such as counting, categorizing, rhyming, blending, segmenting, and manipulating (adding, deleting, and substituting). The most important skills to teach are blending, segmenting, and manipulating at the phoneme-

level (i.e., phonemic awareness).^{3,4} Table 5 describes each skill and provides examples at various levels.

Table 5. Phonological Awareness Skills

Skill	Description	Examples (Unit of Language)
counting	counting the words in a sentence or phrase, the syllables in a word, or the phonemes in a word	How many words are in this sentence: <i>He went to the store.</i> (WL – S)
		How many syllables are in the word <i>bagel</i> ? (SL)
		How many sounds are in the word <i>tap</i> ? (PL)
categorizing	identifying which words belong or do not belong	Which word does not rhyme with the other words: <i>cat, top, hat, or bat</i> ? (OR)
		Which word does not start with the same sound: <i>cup, cap, hat, or cat</i> ? (PL)
rhyming	<u>recognizing</u> : determining when two words or more words rhyme	Which of the following words rhyme: <i>tap, cup, swim, cap</i> ? (OR)
	<u>generating</u> : producing a word that rhymes with a given word	Tell me a word that rhymes with <i>fan</i> . (OR)
blending	putting units of language together to say a whole word	<i>birth + day = birthday</i> (WL – C)
		<i>teach + ing = teaching</i> (SL)
		<i>sw + im = swim</i> = (OR)
		<i>/t/ /ă/ /p/ = tap</i> (PL)
segmenting	separating units of language and saying each unit individually	Clap each word in the sentence: “ <i>I went swimming</i> ” (WL – S)
		<i>campground = camp + ground</i> (WL – C)
		<i>teaching = teach + ing</i> (SL)
		<i>swim = sw + im</i> (OR)
		<i>tap = /t/ /ă/ /p/</i> (PL)
manipulating	<u>adding</u> : adding a unit of language to say a new word	Add <i>ground</i> after <i>camp</i> . (WL – C)
		Add <i>-ing</i> after <i>run</i> (SL)
		Add <i>/t/</i> to beginning of <i>rim</i> . (PL)
	<u>deleting</u> : removing a unit of language to say a new word	Remove <i>day</i> from <i>birthday</i> . (WL – C)
		Remove <i>-ing</i> from <i>swimming</i> (SL)
		Remove <i>/t/</i> from the word <i>trim</i> . (PL)
		Change <i>base</i> in <i>baseball</i> to <i>foot</i> . (WL – C)

Skill	Description	Examples (Unit of Language)
	<u>substituting</u> : changing a unit of language to say a new word	Change the /k/ in <i>cat</i> to /h/. (PL)

Note. **WL** = Word-Level; **C** = Compound Words; **S** = Sentences; **SL** = Syllable-Level; **OR** = Onset and Rime Level; **PL** = Phoneme Level; based on Honig et al. (2018)⁴

The Importance of Phonological Awareness

1. Phonological awareness instruction leads to the development of the *alphabetic principle* – the understanding that speech sounds are represented by letters⁵ and is crucial for *orthographic mapping* – the process for storing words in the brain so their pronunciation, spelling, and meaning can be retrieved automatically^{3,6}. When children understand the alphabetic principle and can accurately and automatically map sounds to their letters, they:
 - Spend less time focused on decoding or sounding out words, and
 - Have more space available in their memory to comprehend what they read.⁷

2. Some children enter kindergarten with basic phonological awareness skills (i.e., phonological sensitivity), but the majority of students will require a structured instructional approach to literacy that emphasizes *phonemic awareness*.^{3,5,8,9}
 - *Phonemic awareness*, the ability to identify, think about, and manipulate phonemes, is strongly associated with children’s reading achievement in later grades.^{10,11,12}
 - Teachers should dedicate more instructional time for activities that develop children’s phonemic awareness, than for activities that focus on phonological sensitivity (especially after kindergarten).^{3,4}

3. Children with and at-risk for dyslexia often have difficulties with the phonological component of language that make accurate and fluent word recognition, decoding, and spelling challenging.¹³ It is essential that these children receive structured literacy instruction⁸ and supplemental intervention that:
 - Focuses on basic and more advanced phonemic awareness skills,
 - Is explicit, direct, systematic, sequential, and cumulative,
 - Is based on data and individualized to meet each student’s needs, and
 - Maximizes student engagement through multisensory approaches.¹⁴

Suggested Scope and Sequence for Phonological Awareness Instruction and Intervention

There is no one agreed upon scope and sequence for phonological awareness instruction and intervention, but teachers should emphasize the most important phonological awareness skills that are related to later reading success: blending, segmenting, and manipulating (adding, deleting, or substituting).^{3,4}

Tier 1/General Education/Core Instruction

- **Kindergarten:** Approximately 10-15 minutes of the daily reading block should be spent on phonological awareness instruction. Teachers should begin by teaching phonological sensitivity with larger units of language (i.e., words, syllables, and onsets and rimes), but the majority of instructional time should be spent on activities that develop phonemic awareness.
- **First Grade:** Teachers should plan for 10 minutes of phonemic awareness instruction daily for the first three months of school.³ Teachers should focus exclusively on phonemic awareness, and only provide instruction to develop phonological sensitivity as needed.

Sample 90-minute Core Reading Block Schedules:

- [Sample Literacy Blocks for grades K-5](#)
- [Sample Literacy Center Activities by Component](#)

Tiers 2-3/Intervention

Students who have been identified through the screening process as needing additional reading intervention (through multi-tiered systems of support [MTSS], response to intervention [RTI], or dyslexia screening [SEA 217¹⁴]) should be provided with supplemental intervention to address their needs. Supplemental interventions (often described as Tier 2 or Tier 3 interventions) should be provided during the school day and should be **in addition to** the mandated 90-minute core reading block.

Supplemental reading intervention lessons typically include several different lesson segments that address multiple components of reading (e.g., phonological awareness, letter-sound correspondences, decoding, spelling). Phonological awareness instruction should be one of those segments and Table 6 below provides guidelines for incorporating phonological awareness into supplemental reading lessons.

Table 6. Phonological Awareness Guidelines for Supplemental Reading Intervention*

Grade	Length	Frequency	Focus**
Kindergarten	10-15 minutes	3-5 times weekly	Phonological Sensitivity & Phonemic Awareness
1 st Grade & Above	5-10 minutes	3-5 times weekly	Phonemic Awareness

Note. *Main focus of phonological awareness instruction. Once students have been introduced to the names and shapes of letters, letters can be incorporated into phonemic awareness activities.

To determine a starting point for instruction/intervention in phonological awareness skills, we recommend that schools analyze data from screening assessments. Universal screening assessments in reading provide basic information about which students are performing on-grade level and which students might be at-risk for reading difficulties and disabilities such as dyslexia; however, screening assessments often do not provide enough information to plan individualized instruction/intervention. Level I and Level II dyslexia screeners approved for use by Indiana’s Dyslexia Screening and Intervention Act (IC 20-35.5)¹⁴ can provide educators with additional data to help plan instruction/intervention. We recommend that schools:

- Administer assessments (universal, Level I, and Level II¹⁴) that measure phonemic awareness skills such as blending, segmenting, and identifying initial sounds because these provide the most useful information to plan instruction/intervention that meets the individual needs of students.
- Do not use results from assessments that measure phonological sensitivity skills (e.g., rhyming, sentence segmentation) or broad phonological processing skills (e.g., rapid naming of pictures, objects, colors, etc.)¹ to plan instruction/intervention because these types of assessments do not always provide information necessary for educators to determine specific phonological skills students have and have not mastered.

Schools/educators that do not already have a pre-existing program that adequately covers phonological awareness skills or those that want to supplement their pre-existing programs can use the suggested scope and sequence in *Table 7* to guide phonological awareness instruction/intervention.

Table 7. Suggested Phonological Awareness Scope and Sequence

Grades	Sequence* (Aspect of Phonological Awareness)	IN ELA Standards
N/A (Early PS Skills)	Segment Sentences (PS-WL)	N/A
	Blend Compound Words (PS-WL)	N/A
	Segment Compound Words (PS-WL)	N/A
Kindergarten (Basic PS & PA Skills)	1. Blend Syllables in Multisyllable Words (PS-SL)	K.RF.3.2
	2. Segment Syllables in Multisyllable Words (PS-SL)	K.RF.3.2
	3. Manipulate (Add, Delete, Substitute) Words in Compound Words (PS-WL)	K.RF.3.5
	4. Manipulate (Add, Delete, Substitute) Syllables in Multisyllable Words (PS-SL)	K.RF.3.5
	Recognize/Identify Rhymes (PS-OR)	K.RF.3.1
	Generate Rhymes (PS-OR)	K.RF.3.1
	Blend Onsets and Rimes in Simple One-Syllable Words without Beginning Consonant Blends (PS-OR)	K.RF.3.3
	Segment Onsets and Rimes in Simple One-Syllable Words without Beginning Consonant Blends (PS-OR)	K.RF.3.3
	Blend Onsets and Rimes in Complex One-Syllable Words Beginning with Consonant Blends (PS-OR)	K.RF.3.3
	Segment Onsets and Rimes in Complex One-Syllable Words Beginning with Consonant Blends (PS-OR)	K.RF.3.3
	Segment the First Sound in One-Syllable Words with Simple Syllables (PA-PL)	K.RF.3.4 1.RF.3.4
	Blend Simple One-Syllable Words with 2-3 Phonemes (PA-PL) 1. Blend words that begin with continuous sounds 2. Blend words that begin with stop sounds	K.RF.3.4
	Segment Simple One-Syllable Words with 2-3 Phonemes (PA-PL) 1. Count the number of phonemes 2. Say each phoneme 3. Identify a phoneme's position in a word	K.RF.3.4 1.RF.3.5
1st Grade and Above (Basic PS Skills- Only if Needed)	Blend Onsets and Rimes in One-Syllable Words with Simple and Complex Syllables (PS-OR)	K.RF.3.3
	Segment Onsets and Rimes in One-Syllable Words with Simple and Complex Syllables (PS-OR)	K.RF.3.3

Grades	Sequence* (Aspect of Phonological Awareness)	IN ELA Standards
1st Grade and Above (Basic & Advanced PA Skills)	Segment the First Sound in One-Syllable Words with Simple and Complex Syllables (PA-PL)	K.RF.3.4 1.RF.3.4
	Blend Simple One-Syllable Words with 2-3 Phonemes (PA-PL) 1. Blend words that begin with continuous sounds 2. Blend words that begin with stop sounds	K.RF.3.4
	Segment Simple One-Syllable Words with 2-3 Phonemes (PA-PL) 1. Count the number of phonemes 2. Say each phoneme 3. Identify a phoneme’s position	K.RF.3.4 1.RF.3.4 1.RF.3.5
	Blend Complex One-Syllable Words with 3-5 phonemes (PA-PL)	1.RF.3.2
	Segment Complex One-Syllable Words with 3-5 phonemes (PA-PL)	1.RF.3.5
	Manipulate (Add, Delete, Substitute) Phonemes in One-Syllable Words (PA-PL)	1.RF.3.3

Note. *These are sequenced by approximate level of difficulty, from easiest to most difficult; **WL** = Word-Level; **SL** = Syllable-Level; **OR** = Onset and Rime Level; **PL** = Phoneme Level; **PS** = Phonological Sensitivity; **PA** = Phonemic Awareness

Explicit Instruction in Phonological Awareness

This section provides a routine/approach that teachers can use to explicitly and systematically teach phonological awareness skills without a pre-existing program or curriculum. It also addresses how to incorporate adequate practice, cumulative review, and multisensory approaches to maximize student engagement during phonological awareness instruction. The explicit instructional routine in *Table 8* can be used to introduce new phonological awareness skills to students. This routine can be adapted for word, syllable, onset and rime, and phoneme-level skills. Additional examples of explicit phonological awareness instructional routines and lessons plans are available in the [Phonological Awareness Resources section](#) of this toolkit.

Table 8. Sample Explicit Phonological Awareness Lesson Segment for New Skill

Phonological Awareness Lesson Segment: New Skill Introduction and Practice	
Skill	Blending simple one-syllable words with 2 phonemes
Prerequisite Skills	blending compound words, syllables, and onsets & rimes (provide short review/warm-up if necessary)
Materials	2 counters for each student and the teacher (multisensory element), list of one-syllable words (simple syllables) with two phonemes (see IDOE Phonological Awareness Word List)
Introduction & Purpose	<i>Today, we're going to be working on putting together the sounds we hear in words. We've already worked on putting together bigger parts of words, but now we're going to focus on each individual sound in the words we hear. This is going to help us become better readers and spellers.</i>
Explicit Instruction	<p><u>Step 1:</u> <u>Modeling</u> <u>(I Do)</u></p> <p><i>I'm going to say the individual sounds in a word and then put them together to make a whole word. As I say each sound, I am going to touch a counter. Then, I'm going to move the counters together and say the whole word. Listen and watch. /ă/. The teacher touches the first counter.</i></p> <p><i>/t/. The teacher touches the second counter.</i></p> <p><i>When I put /ă/ and /t/ together, the word is 'at'. The teacher moves the counters together to 'show' sounds blending to make a word.</i></p>
	<p><u>Step 2:</u> <u>Guided Practice</u> <u>(We Do)</u></p> <p>The teacher places two counters in front of each student.</p> <p><i>Let's try it all together. Touch each counter as I say the sounds. /ă/. Teacher and students touch the first counter.</i></p> <p><i>/t/. Teacher and students touch the second counter.</i></p> <p><i>Put the sounds together. What word? Teacher and students push the two counters together and say, 'at.'</i></p>

	<p><u>Step 3:</u> <u>Independent Practice (You Do)</u></p>	<p><i>Your turn. Touch each counter as I say the sounds. /ă/. Students touch the first counter.</i></p> <p><i>/t/. Students touch the second counter.</i></p> <p><i>Put the sounds together. What word? Students push the two counters together and say, ‘at.’</i></p>
	<p><u>Repeat Steps 1-3</u></p>	<p>Repeat steps 1-3 for two or three more simple one-syllable words (e.g., me, it, shy) until students are beginning to show proficiency.</p> <p>Once students begin to demonstrate they understand the concept, move to guided and/or independent practice with new words.</p>
	<p><u>Step 4:</u> <u>Additional Guided & Independent Practice</u></p>	<p><i>Now that I’ve shown you how to put sounds together in words and we’ve practiced some words all together, let’s try putting together the sounds in some new words. Touch each counter as I say the sounds.</i></p> <p><i>/b/. Teacher and students touch the first counter.</i></p> <p><i>/ē/. Teacher and students touch the second counter.</i></p> <p><i>Put the sounds together. What word? Teacher and students push the two counters together and say, ‘be.’</i></p> <p><i>Your turn. Touch each counter as I say the sounds.</i></p> <p><i>/b/. Students touch the first counter.</i></p> <p><i>/ē/. Students touch the second counter.</i></p> <p><i>Put the sounds together. What word? Students push the two counters together and say, ‘be.’</i></p>
	<p><u>Step 5:</u> <u>Additional Independent Practice</u></p>	<p><i>Your turn. Let’s practice all the words we’ve learned in this lesson. Touch each counter as I say the sounds. /sound 1/. Students touch the first counter.</i></p> <p><i>/sound 2/. Students touch the second counter.</i></p> <p><i>Put the sounds together. What word? Students push the two counters together and say, ‘word.’</i></p>

<p>Lesson Segment Notes</p>	<ul style="list-style-type: none"> ● During guided and independent practice, provide immediate corrective feedback when students make an error. Return to modeling (step 1) and then have students practice again: <ul style="list-style-type: none"> ○ <i>Let's try that again. My turn. Listen to me say each sound and put them together. /b/. /ē/. The teacher touches a counter for each sound. What word? The teacher moves the two counters together and says, 'be.'</i> Now, <i>let's do it all together. Listen to me say the sounds. /b/. /ē/. The teacher and students touch a counter for each sound. What word? The teacher and students move the two counters together and say, 'be' together. Your turn. /b/. /ē/. The students touch a counter for each sound. What word? The students move the two counters together and say, 'be.'</i> ● Lessons can be adapted to include any kind of multisensory movement, such as chips, counters, clapping, tapping, snapping, etc. It is important to clearly explain and demonstrate how to use the multisensory procedure before expecting students to use it independently. ● Through the entire lesson segment, all students should have frequent and multiple opportunities to respond. Teachers should use procedures that engage all students, such as choral responses, and should limit calling on individual students.
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Practice Activities for Phonological Awareness

Practice is an important component of all explicit, instructional approaches. Without appropriate guided and independent practice, students will not be able to acquire skills to mastery-level and they will not be able to retain those skills over time.¹⁵ Practice (guided and independent) should be provided AFTER a skill has been modeled/demonstrated (I Do) and teachers should provide affirmative or corrective feedback during practice activities. Additional practice activities are available in the [Phonological Awareness Resources section](#) of this toolkit. Remember:

- These practice activities are useful for warm-up, cumulative review, or during student centers.
- These activities do NOT explicitly model phonological awareness skills.
- Teachers may have to model/demonstrate how to complete these activities, before allowing students to use them during guided or independent practice.

Video Examples of Phonological Awareness Instruction and Practice

Video examples of phonological awareness instruction and practice are available in the [Phonological Awareness Resources section](#) of this toolkit. As a reminder, video clips of instructional practices that are publicly available online do not always demonstrate all of the recommended instructional approaches. These videos only provide a sample of what phonological awareness instruction might look like at different grade levels.

General Teaching Tips for Phonological Awareness

- Phonological awareness skills are oral language skills that do not involve connecting units of language (e.g., words, syllables, onsets, phonemes) to the printed alphabet or letters.^{1,3,4}
 - Once students learn the names and shapes of letters, letters can be incorporated into phonemic awareness lessons; however, this technically makes the lesson focus on sound-symbol relationships, decoding (sounding out), or encoding (spelling).
- Always begin with larger units of language (words, syllables, and onsets and rimes) then move to activities with individual phonemes.^{3,4,16}
- Spend the majority of instructional time teaching phonemic awareness because it is most closely related to reading and spelling achievement.
- Teach only one phonological awareness skill per lesson.⁴
- Pronounce phonemes/sounds correctly. Do not pronounce stop sounds with an /uh/ or vowel sound after them. For example, do not say /buh/ for /b/.³
- Carefully select words for phonological awareness instruction, depending on the skill being taught⁴:
 - Words that begin with continuous phonemes are easier for students to blend than those that begin with stop phonemes.
 - Simple syllables are easier to blend and segment than complex syllables.

IDOE Resources for Teaching Phonological and Phonemic Awareness

- [IDOE Phonological Awareness Word List](#)

Additional Resources for Phonological Awareness

Additional phonological awareness resources are available in the [Phonological Awareness Resources section](#) of this toolkit.

Commercial Phonological and Phonemic Awareness Programs

The resources listed below are examples of commercial programs that address phonological awareness skills. These programs are not endorsed by the Indiana Department of Education nor the Indiana University system.

- [Heggerty Phonemic Awareness Curriculum by Literacy Resources LLC](#)
- [Phonemic Awareness in Young Children: A Classroom Curriculum by Marilyn Adams, Barbara Foorman, Ingvar Lundberg, and Terri Beeler](#)
- [Road to the Code: A Phonological Awareness Program for Young Children](#) by Benita Blachman, Eileen Ball, Rochella Black, and Darlene Tangel
- [Lindamood Phoneme Sequencing Program for Reading, Spelling, and Speech by Lindamood-Bell Learning Processes](#)
- [The Intensive Phonological Awareness Program](#)

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Words for Phonological Awareness Instruction

Word Type	Words List
Compound Words	<p>airplane, applesauce, backyard, baseball, bathtub, batman, bedspread, beehive, beeswax, bookcase, breadstick, broomstick, bullfrog, cardboard, carpool, cartwheel, coastline, coatrack, cookbook, countdown, cowboy, cowgirl, crosswalk, daytime, doorbell, downtown, drainpipe, eyelash, fishhook, flashlight, football, footprints, greenhouse, groundhog, handbook, headband, headlight, highway, highway, homework, jigsaw, ladybug, leapfrog, mushroom, newsletter, newsprint, newsroom, noontime, northwest, oatmeal, outfit, outside, paintbrush, peanut, pigtail, playmate, playpen, poolside, popcorn, railroad, raindrop, rooftop, rowboat, sailboat, schoolbook, schoolhouse, schoolroom, seaside, seatbelt, seaweed, seesaw, shortcut, sixteen, snowball, snowflake, snowman, snowstorm, soapsuds, somehow, southwest, speedway, steamboat, Sunday, sundown, sunshine, teapot, tinfoil, tiptoe, toenail, toothbrush, upset, waistband, waistline</p>
Two-Syllable Words	<p>able, action, admit, advance, advice, afraid, after, annoy, apart, apple, April, artist, athlete, away, baby, barber, basic, beetle, belong, blanket, bottle, breakfast, bumpy, bunny, butter, cabin, cable, candle, captain, careful, carpet, cartoon, center, challenge, chicken, children, circle, city, classic, compare, complain, concert, concrete, contest, corner, counting, cycle, daddy, darkness, decide, dentist, desert, diner, disturb, divide, dusty, eagle, enjoy, enter, equal, excite, explain, fancy, farmer, finish, forbid, forgave, forget, frozen, funny, further, fuzzy, garden, garlic, gentle, greatest, happen, happy, hornet, hundred, igloo, instead, jelly, jogger, juggle, July, kindness, kitten, lady, landed, lantern, lazy, little, magic, magnet, maple, marble, market, maybe, meadow, messy, middle, Midwest, miscount, misprint, mistake, mommy, monkey, morning, music, napkin, nervous, never, northern, number, order, panda, partner, payment, pencil, penny, perfect, perform, perfume, permit, person, picture, pillow, pony, predict, prepay, prevent, priceless, princess, puddle, puppy, purchase, purple, puzzle, quickly, raccoon, rainy, rattle, recess, recline, rely, reprint, riddle, river, robin, robot, safely, sample, sentence, seven, sharpen, silence, silent, silly, silver, simple, sleepy, sloppy, snuggle, sparkle, spider, staple, student, study, submit, suggest, sunny, super, surprise, table, target, teddy, termite, thirsty, thirteen, Thursday, tiny, title, tricky, tumble, tummy, tunnel, turtle, unfair, whistle, wiggle, window, winter, yellow, zero</p>

<p>Three-Syllable Words</p>	<p>addition, adventure, alphabet, amusement, animal, argument, attendance, attention, attraction, audience, babysit, benefit, borderline, butterfly, capable, carelessness, combining, comparing, completely, completion, confusion, connected, consistent, continue, contribute, dangerous, dealership, decision, department, developed, difficult, disagree, disappear, disloyal, disorder, disturbance, donation, dramatic, educate, encourage, energy, engineer, entertain, estimate, evidence, example, expected, expensive, explaining, fantastic, finishing, fisherman, flowerpot, forgetful, foundation, gingerbread, grandmother, grocery, handwriting, hibernate, holiday, honesty, imagine, imperfect, impolite, important, impressive, incomplete, inhabit, instructed, instructor, introduce, invention, inventor, leadership, manager, maximum, medical, memorize, minimum, obstacle, obvious, operate, organize, peppermint, personal, porcupine, potato, principal, protection, punishing, recapture, reconnect, reinvent, relaxing, remainder, remember, returning, seventeen, similar, strategy, summarize, teenager, telephone, tornado, umbrella, uncertain, uncommon, understand, vacation, valentine, vitamin, windowsill</p>	
<p>Four-Syllable Words</p>	<p>agreeable, apparently, astonishes, automatic, category, combination, competition, consistently, contribution, development, difficulty, disappearing, disrespectful, education, educator, encouragement, entertainment, expectation, firefighter, impossible, incredible, investigate, manageable, misinform, misunderstand, obviously, ordinary, participate, reconnection, reliable, reorganize, unexpected, unproductive, unsuccessful</p>	
<p>Onset & Rime</p>	<p>Onset & Rime (no blends)</p>	<p>Select any word with an onset that has one phoneme from the One-Syllable Words (Simple Syllables) Three-Phonemes List</p>
	<p>Onset & Rime (with consonant blends)</p>	<p>Select any word with an onset from the One-Syllable Words (Complex Syllables) Three- Four- or Five-Phonemes Lists</p>
<p>One-Syllable Words (Simple Syllables)</p>	<p>Words with Two Phonemes</p>	<p>ace, ache, age, aid, aim, an, ape, arm, art, ash, at, ate, bay, be, bow, boy, by, car, cow, day, doe, each, edge, eel, egg, far, few, fur, go, hay, he, hi, how, ice, if, in, is, it, itch, jar, jaw, joy, key, knee, law, lay, lie, low, may, ray, me, mow, new, no, now, oak, oat, odd, off, oil, on, out, owl, own, pay, pie, raw, ray, row, saw, say, see, she, show, shy, sigh, sir, so, tea, thaw, tie, to, toe, toy, up, us, use, war, way, we, why, zoo</p>

	<p>Words with Three Phonemes</p>	<p>back, bad, badge, bait, bake, bark, barn, bat, batch, bath, beach, bead, bean, bed, beg, big, bike, bin, bird, birth, bite, boil, bone, book, boot, booth, born, both, bowl, bug, burn, cage, cake, call, can, card, cart, case, cash, cat, catch, cave, cell, chain, charge, chart, chat, cheek, chin, chip, chip, chirp, choice, chop, chose, church, coin, cone, cook, cook, cool, cord, corn, cube, cup, curb, curl, dark, dash, dawn, deck, dime, dirt, ditch, dodge, dog, doll, down, face, fade, fail, faith, fake, farm, fawn, feed, feel, feet, fetch, fill, firm, fish, fit, fog, foil, food, foot, force, fork, form, fort, fudge, fun, fuse, gate, gate, gem, germ, get, goal, goat, good, hard, harm, hat, hatch, hate, hawk, head, head, hedge, hide, hike, hill, hole, home, hood, hook, hoop, hope, horn, howl, hug, huge, hurt, jail, join, joke, judge, jug, keep, keep, kid, kiss, kite, lace, laid, lake, lamb, lame, lap, large, latch, late, lead, leaf, leak, leap, ledge, leg, let, lick, life, lime, line, loud, mad, main, make, march, mat, match, math, meat, men, mess, mice, mine, miss, mood, mop, moth, much, mute, nail, neat, need, nice, nine, noon, north, nose, nose, notch, nut, pad, page, paid, park, part, peace, peach, peel, pen, phone, pick, pig, pile, pin, pipe, pitch, pool, porch, pork, pot, rain, rat, rate, reach, read, rib, rice, rich, ridge, rise, road, rock, roof, room, root, rope, rude, rule, rush, sack, sad, sale, same, sane, sauce, sell, set, shake, shark, shed, sheet, ship, shirt, shook, shop, shout, shut, side, size, soap, soil, song, sort, south, sun, sun, surf, take, tape, teach, teeth, ten, that, them, theme, these, thick, thin, third, thorn, tide, tile, time, toad, took, tool, top, torn, town, tube, tune, turn, vat, verb, voice, vote, wag, wage, wake, wet, whale, wheat, wheel, wife, wish, wood, worn, yap, yard, yarn, yet, zoom</p>
<p>One-Syllable Words (Complex Syllables)</p>	<p>Words with Three Phonemes</p>	<p>and, ant, blew, blow, blur, claw, clay, crow, cry, draw, drew, dry, east, elf, end, flaw, flea, flew, flow, fly, fry, glow, gray, grow, ink, play, pray, scar, short, sky, slay, slow, snow, star, stew, sway, three, throw, tray, tree, try</p>
	<p>Words with Four Phonemes</p>	<p>band, beast, belt, bend, best, blade, bled, bleed, bloom, blurt, blush, boast, brace, brag, braid, brain, brave, bread, breath, bride, bridge, broke, broom, brown, brush, bump, burnt, burst, camp, clap, clash, clean, click, clip, clock, clog, clown, coast, cold,</p>

		<p>count, crab, crane, crash, crate, creek, crib, crowd, crown, dance, dent, desk, drain, drawn, dream, drip, drive, drop, drove, drown, drum, dust, faint, fast, fault, feast, fence, first, fist, flag, flake, fled, float, flop, flute, found, fox, frame, fresh, frog, frown, gift, glad, glass, grab, grade, grain, grape, grass, green, greet, grill, groan, growl, health, joint, junk, just, land, launch, lift, limp, list, mask, meant, melt, milk, mist, must, nest, paint, past, pest, pink, place, plan, plane, plate, pledge, plug, plum, point, pound, price, prince, prize, proof, quake (/q/ /w/ /ā/ /k/), raft, rest, risk, roast, scarf, self, sent, shelf, shred, shrub, since, skate, skill, skin, skip, skirt, skit, slack, sleep, slice, slid, slide, slouch, slurp, smart, smell, smooth, snack, snail, snake, sneak, snug, sound, space, spark, speak, speech, speed, spell, spice, spill, spin, spoil, sport, spot, spray, stack, stage, stain, start, steal, stern, stick, sting, stole, stone, stood, stool, stop, storm, stove, straw, stray, stride, stuck, sunk, sweep, sweet, swim, swirl, switch, task, tent, think, thirst, thread, throat, throne, track, trail, trait, trash, treat, trim, trip, trout, truck, twice, twirl, vent, waist, wealth, went, woods</p>
	<p>Words with Five Phonemes</p>	<p>brisk, drink, grand, ground, print, scrap, scrape, scratch, scream, screen, scrub, shrimp, shrunk, spend, spent, splash, splat, split, sprain, spread, spring, squirt, strand, stream, street, stress, stride, strike, string, stripe, twist</p>
<p>Phoneme Manipulation</p>	<p>Addition</p>	<p>start with /īt/ → add /h/, /b/, /f/, /k/, /l/, /m/, /p/, /s/ start with /īn/ → add /b/, /k/, /f/, /p/, /t/, /w/ start with /āť/ → add /b/, /k/, /f/, /h/, /m/, /p/, /r/, /s/ start with /ān/ → add /b/, /f/, /k/, /m/, /p/, /r/, /t/, /v/ start with /ānd/ → add /b/, /h/, /l/, /s/ start with /ām/ → add /h/, /j/, /l/, /p/, /s/, /y/ start with /āt/ → add /b/, /d/, /f/, /g/, /h/, /l/ /m/, /r/, /w/ start with /āk/ → add /b/, /k/, /f/, /j/, /l/, /m/, /r/, /s/, /t/ start with /ōť/ → add /b/, /k/, /g/, /h/, /j/, /l/, /n/, /p/, /r/ start with /ēd/ → add /b/, /d/, /f/, /h/, /l/, /r/, /s/, /w/ start with /ün/ → add /b/, /d/, /f/, /p/, /r/, /s/, /w/</p> <p><u>Select any other one-syllable word families, such as:</u> /īng/, /ēt/, /īm/, /öp/, /āp/, /āk/, /īg/, /īp/, /üg/, /ūt/, /ar/, /üp/, /ēnt/, /īd/, /ök/, /ām/, /āp/ /all/, /öb/, /īght/, /on/, /ān/, /āl/</p>

	<p>Deletion</p>	<p><u>delete the initial sound from the following words:</u> blow, brisk, claw, crow, draw, drink, flaw, flow, glow, gray, ground, grow, play, pray, slay, slow, snow, sway, throw, tray, bled, bleed, brace, brag, braid, brain, bread, bride, bridge, broom, brush, clap, clash, clean, click, clip, clock, clog, crash, crate, crib, drain, drip, flag, flake, fled, glad, grain, place, plane, plate, pledge, plug, price, proof, quake, shred, shrub, sleep, slid, smart, snail, space, spark, speak, speech, spill, spin, spot, spray, stack, start, steal, stick, stone, stop, stray, stuck, sweep, switch, thread, track, trail, trash, street, trim, trip</p> <p><u>delete the final sound from the following words:</u> ant, band, burnt, blurt, brown, dance, dent, joint, paint, scarf, tent, think, woods</p>
	<p>Substitution</p>	<p>change /h/ in <i>hat</i> to /m/, /b/, /k/, /f/, /p/, /r/, or /s/ change /ă/ in <i>hat</i> to /ō/, /ū/, /ī/, /ē/, or /ā/ change /t/ in <i>hat</i> to /d/, /m/, /s/, or /v/ change /t/ in <i>top</i> to /h/, /m/, or /p/ change /ō/ <i>top</i> to /ă/, /ā/, / ĭ /, or /ī/ change /p/ in <i>top</i> to /k/, /m/, or /t/ change /s/ in <i>sit</i> to /b/, /k/, /f/, /h/, /l/, or /p/ change /i/ in <i>sit</i> to /ă/, /è/, /ē/, /ī/, /ū/ change /t/ in <i>sit</i> to /k/, /l/, /p/, or /ks/ Select any other one-syllable word with 2-5 phonemes in which the first, middle, or last sound/phoneme can be replaced.</p>

Phonological Awareness Resources

The resources and programs listed in this document were reviewed and compiled by specialists at the Indiana Department of Education (IDOE) and faculty at Indiana University (IU); however, these resources are not endorsed by the IDOE or IU system.

[The online Google doc version of this document](#) is “live”, which means that resources will be added frequently. If you have found or created resources that you think should be listed in this document, [please click here to submit them for review](#).

Explicit Phonological Awareness Instructional Routines and Lesson Plans

Skill	Link to Routine or Lesson Plan
Sentence Segmentation	<ul style="list-style-type: none"> • FCRR Sentence Segmentation Instructional Routine (K)
Syllable Segmentation	<ul style="list-style-type: none"> • FCRR Syllable Segmentation Instructional Routine (K)
Rhyme Recognition	<ul style="list-style-type: none"> • FCRR Recognizing Rhymes Instructional Routine (K)
Blending Onset and Rime	<ul style="list-style-type: none"> • UT/TEA "Phonemic Awareness" Chapter in Reading Strategies & Activities Resource Book For Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Blending Onset & Rime (pages 29-42)
Phoneme Isolation, Discrimination, & Matching First Sounds	<ul style="list-style-type: none"> • UT/TEA "Phonemic Awareness" Chapter in Reading Strategies & Activities Resource Book For Students at Risk for Reading Difficulties, Including Dyslexia by UT/TEA <ul style="list-style-type: none"> ○ Isolating, Discriminating, and Matching First Sounds (pages 13-16) • FCRR Phoneme Isolation Instructional Routine (K) • FCRR Phoneme Isolation Instructional Routine (1) • UO CTL Sound Isolation Teaching Strategy

Skill	Link to Routine or Lesson Plan
Phoneme Blending	<ul style="list-style-type: none"> ● UT/TEA "Phonemic Awareness" Chapter in Reading Strategies & Activities Resource Book For Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Blending Phoneme by Phoneme (pages 43-57) ● UO CTL Phoneme Blending Teaching Strategy ● FCRR Phoneme Blending Instructional Routine (K) ● FCRR Phoneme Blending Instructional Routine (1)
Phoneme Segmenting	<ul style="list-style-type: none"> ● Using Elkonin Sound Boxes (English & Spanish) ● UO CTL Phoneme Segmenting Teaching Strategy ● UT/TEA "Phonemic Awareness" Chapter in Reading Strategies & Activities Resource Book For Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Segmenting Sound by Sound (pages 58-71) ● FCRR Phoneme Segmenting Instructional Routine (K) ● FCRR Phoneme Segmenting Instructional Routine (1)
Phoneme Manipulation	<ul style="list-style-type: none"> ● UT/TEA "Phonemic Awareness" Chapter in Reading Strategies & Activities Resource Book For Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Deletion and Substitution (pages 72-85)

Note: FCRR = Florida Center for Reading Research; UO CTL = University of Oregon Center on Teaching and Learning; UT = University of Texas; TEA = Texas Education Agency; (K) = Kindergarten; (1) = 1st Grade & Above

Phonological Awareness Practice Activities

Skill	Links to Practice Activities
FCRR Teacher Guide	<ul style="list-style-type: none"> ● FCRR Teacher Resource Guide for Student Center Activities (Grades K-1) ● FCRR Teacher Resource Guide for Student Center Activities (Grades 2-3)
Sentence Segmentation	<ul style="list-style-type: none"> ● FCRR Nursery Rhyme (K-1) ● FCRR Sentence Game (K-1) ● FCRR Sentence Graph (K-1)
Compound Words	<ul style="list-style-type: none"> ● FCRR Compound Word Flip Book ● FCRR Compound Word Piece it Together ● FCRR Compound Word Search ● FCRR Compound Word Egg Hunt ● FCRR Compound Word Game ● FCRR Compound Word Takeaway Game
Syllables	<ul style="list-style-type: none"> ● FCRR Syllable Clapping Names (K-1) ● FCRR Syllable Hopscotch (K-1) ● FCRR Syllable Graph (K-1) ● FCRR Syllable Say (K-1) ● FCRR Feed the Animals (K-1)
Rhyming	<ul style="list-style-type: none"> ● FCRR Rhyme Flip Book (K-1) ● FCRR Matching Rhyme Time (K-1) ● FCRR Rhyming Game (K-1) ● FCRR Rhyme Closed Sort (K-1) ● FCRR Pocket Rhymes (K-1) ● FCRR Rhyme Memory Match (K-1) ● FCRR Rhyme or No Rhyme (K-1) ● FCRR Rhyming A – LOT – OH (K-1) ● FCRR Rhyme Pie (K-1)
Alliteration	<ul style="list-style-type: none"> ● FCRR Alliteration Action (K-1) ● FCRR Popular Pals (K-1) ● FCRR Silly Sentence Big Book (K-1)

Skill	Links to Practice Activities
Onset & Rime	<ul style="list-style-type: none"> ● FCRR Quick Pick (K-1) ● FCRR Guessing Game (K-1) ● FCRR Rime House (K-1) ● FCRR Sound Detective (K-1)
Phoneme Isolating	<ul style="list-style-type: none"> ● First Sound Isolation <ul style="list-style-type: none"> ○ Supplemental Materials ● FCRR See It-Sound It (K-1) ● FCRR Sound Quest (K-1) ● FCRR The Last Sound Is... (K-1) ● FCRR Move and Tell (K-1) ● FCRR Bag of Sounds (2-3) ● FCRR Phoneme Quest (2-3) ● FCRR Final Phoneme Find (2-3) ● FCRR Medial Phoneme Find (2-3)
Phoneme Blending	<ul style="list-style-type: none"> ● FCRR What's My Word (2-3)
Phoneme Segmenting	<ul style="list-style-type: none"> ● Phonemic Awareness: Phoneme Segmentation <ul style="list-style-type: none"> ○ Supplemental Materials ● FCRR Say and Slide Phonemes (K-1) ● FCRR Phoneme Hopscotch (K-1) ● FCRR Phoneme Feud (K-1) ● FCRR Phoneme Photos (K-1) ● FCRR The Sound Game (K-1) ● FCRR Phoneme Closed Sort (K-1) ● FCRR Sound Spin (K-1) ● FCRR Phoneme Counting Sort (2-3) ● FCRR The Phoneme Game (2-3) ● FCRR Phoneme Challenge (2-3)
Phoneme Segmenting & Blending	<ul style="list-style-type: none"> ● FCRR Treasure Chest (K-1) ● FCRR Picture Slide (K-1) ● FCRR Phoneme Split and Say (2-3) ● FCRR Phoneme Break and Make (2-3)

Skill	Links to Practice Activities
Phoneme Manipulating	<ul style="list-style-type: none"> ● FCRR Drop and Say (K-1) ● FCRR Name Changes (K-1) ● FCRR What's Left? (2-3) ● FCRR Phoneme Swap (2-3) ● FCRR Final Phoneme Pie (2-3) ● FCRR Word Change (2-3) ● FCRR Make It, Find It, Keep It (2-3) ● FCRR Phoneme Position Sort (2-3) ● FCRR Sound Changes (2-3)
Phoneme Matching	<ul style="list-style-type: none"> ● FCRR One Card Out (K-1) ● FCRR Pack-A-Backpack (K-1) ● FCRR Sound It-Bag It (K-1) ● FCRR Sound Bags (K-1) ● FCRR Sound Snacker-Sound Smacker (K-1) ● FCRR Phoneme Go Fish (K-1) ● FCRR Final Sound Match-Up (K-1) ● FCRR Sound Pictures and Picture Puzzles (K-1) ● FCRR Sound Train (K-1) ● FCRR Phoneme Dominoes (K-1) ● FCRR Sound Pie (K-1) ● FCRR Initial Phoneme Picture Sort (2-3) ● FCRR Final Phoneme Pyramid (2-3) ● FCRR Medial Match (2-3) ● FCRR Match Maker (2-3) ● FCRR Final Phoneme Spin (2-3) ● FCRR Vowel Picture Sort (2-3) ● FCRR Final Phoneme Memory (2-3) ● FCRR Medial Phoneme Dominoes (2-3)

Note. The majority of these activities come from the [Florida Center for Reading Research](#) and the University of Texas system and Texas Education Agency. These activities can be adapted for whole or small group instruction or intervention for students in kindergarten through second-grade.

Video Examples of Phonological Awareness Instruction and Practice

Skill	Link to Video Example
Sentence Segmentation	<ul style="list-style-type: none"> ● Small Group Kindergarten Instruction: Sentence Segmentation ● Listen and Move Sentence Segmentation Practice Game
Compound Words	<ul style="list-style-type: none"> ● Making and Breaking Compound Words ● Blending Compound Words
Syllables	<ul style="list-style-type: none"> ● Small Group Kindergarten Instruction: Syllables ● Clapping Syllables
Rhyming	<ul style="list-style-type: none"> ● Introduction to Rhyming ● Rhyme Matching Practice Game ● Generating Rhyming Words Practice ● Teaching Rhyming Using Thumbs Up or Down ● Practice Recognizing Words: Thumbs Up or Down
Onset and Rime	<ul style="list-style-type: none"> ● Introduction to Onset & Rime ● Rime House Practice Activity ● Segmenting Onset & Rime Practice ● Blending Onset & Rime (Using Picture Cards)
Phonemes	<ul style="list-style-type: none"> ● Phoneme Blending and Segmenting ● Phoneme Blending Practice ● Small Group 1st Grade Instruction: Segmenting Phonemes with Elkonin Boxes and then Connecting Phonemes to Letters ● Phonemic Awareness Practice Activity: Segmenting 3 Phoneme Words ● Phoneme Isolation: Beginning, Middle, End Practice ● Phoneme Manipulation (Substitution) with Blocks Practice ● Phoneme Manipulation (Addition) ● Saying Individual Sounds in Words

Additional Resources for Phonological Awareness Instruction and Intervention

Resource Type	Links to Resources
Guides & Handouts	<ul style="list-style-type: none"> ● Foundations of Reading: Effective Phonological Awareness Instruction & Progress Monitoring (by UT CRLA & TEA) ● Kindergarten Phonological Awareness Guide from the Kindergarten Teacher Reading Academy by UT CRLA & TEA (English & Spanish) ● First Grade Phonological Awareness Guide from the First-Grade Teacher Reading Academy by UT CRLA & TEA (English & Spanish) ● Big Ideas in Beginning Reading: Phonemic Awareness (by UO CTL) <ul style="list-style-type: none"> ○ Concepts and Research ○ Instruction ○ Assessment ● Phonemic Awareness (by UO CTL) <ul style="list-style-type: none"> ○ Critical Features of Phonemic Awareness Instruction ○ Sequencing Phonemic Awareness Skills ○ Teaching Strategies and Examples ○ Student Benchmarks ○ Programs and Materials ● Guidelines for Teaching Phonological Awareness (by UT Building Capacity for RTI) ● Phonological and Phonemic Awareness Resources (by NCIL) ● Phonological Awareness Overview (by AIM Institute for Learning) ● Onset-Rime vs. Phonological Awareness Handout (by UT) ● Spanish Phonological Awareness Lessons and Materials (by UT Building Capacity for RTI) ● Phonological Awareness Skills by Level
Online Courses	<ul style="list-style-type: none"> ● Foundational Skills Mini Course: Module 2- Phonological Awareness (by SAP)
Online Learning Modules	<ul style="list-style-type: none"> ● Phonological Awareness Research-Based Practices Online Module (by UT & TEA)

Resource Type	Links to Resources
Presentations & Videos	<ul style="list-style-type: none"> ● 5 Levels of Phonological Awareness Video (UT & TEA Kindergarten Teacher Reading Academy)
Virtual Manipulatives	<ul style="list-style-type: none"> ● UF Literacy Institute Virtual Teaching Resource Hub: <ul style="list-style-type: none"> ○ Phonemic Awareness Instructional Activities (Sorting Game, Elkonin Boxes, Phoneme Counting Bead String, Say It-Move It PA Practice) ○ Lesson Structure (Kindergarten through Fifth Grade)

Note. These resources are not endorsed by the Indiana Department of Education or the Indiana University system. UT = University of Texas; CRLA = Center for Reading and Language Arts; TEA = Texas Education Agency; UF= University of Florida; UO = University of Oregon; CTL = Center on Teaching and Learning; SAP = Student Achievement Partners; NCIL = National Center for Improving Literacy; TCLD = Texas Center for Learning Disabilities; RTI = Response to Intervention; COI = Center on Instruction; IES = Institute of Education Science (U.S. Department of Education); VU = Vanderbilt University; OSEP = Office of Special Education Programs (U.S. Department of Education); NCS = North Carolina State; NCII = National Center for Intensive Intervention

Alphabet Knowledge and Handwriting

Alphabet Knowledge and Handwriting

Alphabet Knowledge

Alphabet knowledge involves recognizing, naming, writing, and identifying the sounds of the letters in the English alphabet^{1,2}. Although various activities support the development of alphabet knowledge (e.g., story books, toys, games, TV shows, apps), handwriting instruction can also help students develop their alphabet knowledge³. Students should learn to fluently (i.e., automatically and accurately) recognize, name, and write letters because reading, writing, and spelling are all highly connected⁴. Learning to fluently recognize, name, and write letters can help students become better readers and spellers, and knowing letter names can help students learn the sounds that some letters make¹.

In the Indiana Dyslexia Screening and Intervention Act (2018)⁵, connecting the sounds of letters to their shapes and written forms is known as “sound-symbol recognition.” Other synonymous terms include *letter-sound recognition*, *letter-sound correspondences*, *phoneme-grapheme correspondences*. The understanding that letters represent speech sounds and is also referred to as the *alphabetic principle*, and it is necessary for proficient word-reading and spelling to occur⁶.

Key Elements of Alphabet Knowledge

There are several characteristics of letters that are important for teachers to know when teaching reading and spelling^{1,3,7}:

1. Letter Names – each of the 26 English letters of the alphabet has its own name
 - 25 letter names consist of one syllable (e.g., d is pronounced /d/ /ē/), except for the letter name for w (3 syllables; pronounced /d/ /ə/ • /b/ /ə/ /l/ • /yoo/)
 - 24 English letter names include the phoneme (sound) that the letter represents (also known as iconicity):
 - The name for the letter d is /d/ /ē/ (the name for the letter d begins with the sound that d makes)
 - The name for the letter s is /ě/ /s/ (the sound for the letter s is at the end of the letter’s name)
 - 2 letters are not iconic:
 - h (pronounced /ā/ /ch/)
 - w (pronounced /d/ /ə/ /b/ /ə/ /l/ /yoo/)
 - Many letter names are phonologically similar (i.e., they have the same phonemes in the same position)
 - b (/b/ /ē/) & c (/s/ /ē/); the /e/ phoneme is at the end of both letters’ names

- f (/e/ /f/) & s (/e/ /s/); the /e/ phoneme is at the beginning of both letters' names
2. Letter shapes – the visual form of the letter; each letter of the English alphabet has an uppercase and lowercase form
- Students commonly confuse letters that look similar, such as B & D or b & p.
 - Teachers should wait until students have mastered one of the visually similar letters, before introducing other similar letters.
 - Teachers should space out explicitly introducing letters that look visually similar (e.g., do not teach B & D in the same lesson, do not introduce D in the lesson right after introducing B).
 - Uppercase and lowercase letter pairs that look similar should be taught together, such as K & k, S & s, V & v.
 - For a list of visually similar letters and identical upper and lowercase letters, see the following 2 resources:
 - [Strategy for Students who Confuse Letter Shapes](#)
 - *Teaching Reading Sourcebook* (3rd edition) by Bill Honig, Linda Diamond, and Linda Gutlohn (2018)
 - Students are more likely to confuse letters when their shapes and names are similar
 - B (/b/ /e/) & P (/p/ /e/)
 - d (/d/ /e/) & g (/g/ /e/)
3. Letter sounds – the sounds (phonemes) that each letter or letter combination (grapheme) represents;
- Grapheme – a letter (e.g., a, b, k, m, n, p) or letter combination (e.g, ch, th, ck) used to represent a sound (phoneme)
 - Teach the most common/predictable sound for the letter first.
 - Example: When teaching the letter s, teach /s/ before teaching /z/.
 - [Click here to access a list of common letter-sound correspondences and their predictability.](#)
 - Additional information about the sounds/phonemes is located in the [Phonological Awareness section](#) of this toolkit.

Scope and Sequence for Alphabet Knowledge

There is no one agreed upon scope and sequence for teaching students to recognize, name, and write letters; however, there are several important ideas that should guide instruction³:

1. Alphabet knowledge instruction should always include the names and sounds of letters.

2. Once students know several consonants and vowel sounds, they can begin using this knowledge to decode regular words. All letter-sound associations do not need to be mastered before students begin reading words.
3. When the visual form is similar for an uppercase and lowercase letter, teach them together (Cc, Kk, Oo, Pp, Ss, Uu, Vv, Ww, Zz)
4. When two letters are visually similar (e.g., B & D, E & F, b & q, g & y), make sure students can consistently recognize, name, and produce one letter in the pair before introducing the other visually similar letter.
5. Explicitly teach alphabet knowledge and handwriting together. Incorporating handwriting helps students learn the shapes and names of letters.
 - Remember: Writing letters takes students longer to learn than identifying the letter's name, shape, and sound⁸.

Below are several sample scope and sequence documents for teaching letter-sound correspondences:

- [University of Florida Literacy Institute: Suggested Scope & Sequence for Teaching Phoneme-Grapheme Correspondences](#)
- [Keys to Literacy: Systematic Phonics Scope and Sequence](#)
- [University of Oregon: Letter-Sound Correspondence Sequence](#)

Handwriting Instruction to Support the Development of Alphabet Knowledge

Handwriting includes transcribing sounds, letters, words, sentences, and paragraphs into print^{9,10}. It requires individuals to remember the visual shapes of letters and use appropriate motor skills to form those letters¹¹. Handwriting instruction is important for several reasons:

1. Handwriting can help strengthen students' alphabet knowledge³.
2. Students with learning disabilities (LD) such as dyslexia have greater difficulty than their peers without LD with handwriting and spelling¹².
 - Dysfluent handwriting can lead to difficulties with spelling and higher-level writing skills such as planning compositions and generating content^{10,13,14}.
3. Handwriting instruction can improve students' ability to write legibly and fluently, in addition to increasing the length and quality of their compositions¹⁵.

Connecting Assessment to Instruction/Intervention

Students should be able to automatically and accurately name uppercase and lowercase letters out of sequence (in other words, not in the order of the ABC song). Letter-naming assessments can be timed or untimed. Timed tests measure students' knowledge of the letter names in addition to how quickly they can accurately name the letters, while untimed tests only measure automaticity, not accuracy. An example of a timed assessment is the *DIBELS Letter Naming Fluency subtest*¹⁶ and an example of

an untimed assessment is the *CORE Phonics Survey Part A: Letter Names – Uppercase and Part B: Letter Names – Lowercase*¹⁷. Teachers can also develop informal assessments on their own or with tools such as Intervention Central’s [Letter Name Fluency Generator](#). Letter-sound correspondences can also be assessed through timed and untimed assessments. An example of a timed assessment of letter-sound correspondences is *AIMSweb Plus Letter Sound Fluency* subtest¹⁸. An example of an untimed assessment is the *CORE Phonics Survey Part C: Consonant Sounds and Part D: Vowel Sounds*¹⁷.

The information gathered during assessments of alphabet knowledge can be used to determine which letter-names and letter-sounds students already know and which letters students need to learn. When students know a letter’s name or sound, but do not say it automatically (within one second) then this may indicate that they still need additional practice with the letter.

Explicit Instruction in Alphabet Knowledge

This section provides a routine/approach that teachers can use to explicitly and systematically teach alphabet knowledge and handwriting without a pre-existing program or curriculum. It also addresses how to incorporate adequate practice, cumulative review, and multisensory approaches to maximize student engagement during alphabet knowledge instruction. The explicit instructional routine in *Table 1* can be used to teach students to recognize, name, pronounce, and write new letters of the alphabet.

Table 1. Sample Explicit Alphabet Knowledge Lesson Segment for New Letter

Alphabet Knowledge Lesson Segment: New Skill Introduction and Practice	
Skill	new letter: name, visual form, written form, sound
Prerequisite Skills	<ul style="list-style-type: none"> • correct pencil grip
Materials	<ul style="list-style-type: none"> • letter tiles (one for each student) • lined tracing paper or individual whiteboards with tracing lines • teacher whiteboard (one side blank, one side lined)
Introduction & Purpose	<i>Today, we’re going to be learning about a new letter, A. We will see this new letter when reading and spelling so it is important that we learn its name, shape, sound, and how to write it.</i>

Explicit Instruction	<u>Step 1:</u> <u>Modeling</u> <u>(I Do) for</u> <u>Letter Name</u> <u>& Shape</u>	<p><i>Everyone, look at this letter I have written on my whiteboard. The name of this is A. The teacher points to the letter A.</i></p> <p><i>What name? The students repeat, "A."</i></p> <p><i>This is an uppercase or capital letter A. Is this an uppercase or lowercase letter A? Students say, "uppercase."</i></p> <p><i>This letter makes the sound /ă/ like in apple. What sound? Students say, "/ă/."</i></p> <p><i>It has a slant, another slant, and then a line across. The teacher traces his/her finger on the letter while describing it. Slant. Slant. Line Across. How is it made?</i></p> <p><i>Students repeat, "Slant, Slant, Line Across."</i></p>
	<u>Step 2:</u> <u>Guided</u> <u>Practice</u> <u>(We Do) for</u> <u>Letter Name</u> <u>& Shape</u>	<p><i>Everyone, look at your letter tile. Let's say this letter's name together. What letter? Students say, "A."</i></p> <p><i>Yes. This letter is A.</i></p> <p><i>Is this an uppercase or lowercase letter A? Teacher and students say, "uppercase."</i></p> <p><i>What sound does the letter A make? Teacher and students say, "/ă/."</i></p> <p><i>Yes. This is an uppercase letter A. Letter A has a slant, another slant, and then a line across. Slant. Slant. Line Across. Can you all say that with me? Teacher and students say, "Slant. Slant. Line Across."</i></p> <p><i>Now, with our fingers, let's trace the letter A. Slant. Teacher and students trace the first slant. Slant. Teacher and students trace the second slant. Line across. Teacher and students trace the line across.</i></p>
	<u>Step 3:</u> <u>Independent</u> <u>Practice</u>	<p><i>Your turn. What letter is this? Teacher points to the letter "A." The students say, "A."</i></p> <p><i>Is this an uppercase or lowercase A? Students say, "uppercase."</i></p>

<p><u>(You Do) for Letter Name & Shape</u></p>	<p><i>What sound does the letter A make? Students say, “/ă/.”</i></p> <p><i>How is the letter A made? The students respond, “Slant. Slant. Line Across.”</i></p> <p><i>Yes! Now, say slant, slant, line across while tracing your letter. Students say, “Slant. Slant. Line Across,” while tracing the letter.</i></p>
<p><u>Step 4: Modeling (I Do) for Handwriting</u></p>	<p><i>Now, we’re going to practice writing the letter A. Watch me. Slant. Slant. Line Across. The teacher says these words while modeling on a lined whiteboard.</i></p>
<p><u>Step 5: Guided Practice (We Do) for Handwriting</u></p>	<p><i>Pick up your pencils. Let’s write the letter A. How is the letter A made? Students respond, “Slant. Slant. Line Across.” Excellent. Let’s all write the letter A on our whiteboards. Students and teacher write the letter A on their whiteboards. Teacher provides corrective feedback as necessary.</i></p>
<p><u>Step 6: Independent Practice (You Do) for Handwriting</u></p>	<p><i>Now, I want you to write an A on your own. Write an A on your whiteboard. Students write the letter A. What sound does the letter A make? Students say, “/ă/.”</i></p>
<p><u>Step 7: Cumulative Review of Alphabet Knowledge and Handwriting</u></p>	<p><i>Now, let’s review all of the letters we’ve learned so far. The teacher mixes up a set of previously learned letter tiles (or has them preprinted on the board or chart-paper).</i></p> <p><i>The teacher points to each letter while saying, What letter? What sound? Students say each letter’s name and sound.</i></p> <p><i>Next, let’s practice writing all of the letters we’ve learned so far. On your lined paper (or whiteboard with tracing lines), write the letter [insert review letter name here].</i></p> <p><i>Students write each previously learned letter.</i></p>

Lesson Segment Notes	<ul style="list-style-type: none">• During guided practice, independent practice, and cumulative review, provide immediate corrective feedback when students make an error. Return to modeling (step 1) and then have students practice again:<ul style="list-style-type: none">○ <u>Corrective feedback</u>: If students incorrectly say the letter's name, the teacher should say: <i>This letter is (letter name). What letter?</i> Students should repeat the letter's name. If students incorrectly say the letter's sound, the teacher should say: <i>The letter A makes /ă/. What sound? /ă/.</i>• Lessons can be adapted to include any kind of multisensory movement, such as magnet letter tiles, blocks, etc. Remember to clearly explain and demonstrate how to use the multisensory procedure before expecting students to use it independently.• Through the entire lesson segment, all students should have frequent and multiple opportunities to respond. Teachers should use procedures that engage all students, such as choral responses, and should limit calling on individual students.
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Practice

Practice is an important component of all explicit, instructional approaches. Without appropriate guided practice, independent practice, and cumulative review, students will not be able to acquire skills to mastery-level and they will not be able to retain those skills over time¹⁹. Practice should be provided AFTER a skill has been modeled/demonstrated (I Do) and teachers should provide affirmative or corrective feedback during practice activities. Practice activities and materials are available in the [Alphabet Knowledge and Handwriting Resources section](#) of this toolkit.

Resources for Teaching Alphabet Knowledge and Handwriting

Additional resources for teaching Alphabet Knowledge and Handwriting are available in the [Alphabet Knowledge and Handwriting Resources section](#) of this toolkit.

Indiana English/Language Arts Standards that Correspond to Alphabet Knowledge and Handwriting

1. Reading Foundations (RF)

- RF.2 Print Concepts: Demonstrate understanding of the organization and basic features of print, including that printed materials provide information and tell stories

2. Writing (W)

- W.2 Handwriting: Demonstrate the ability to write legibly.

Grade	Standard	Description
K	K.RF.2.4	Identify and name all uppercase (capital) and lowercase letters of the alphabet.
K	K.W.2.1	Write most uppercase (capital) and lowercase letters of the alphabet, correctly shaping and spacing the letters of the words.
1	1.RF.2.4	Learn and apply knowledge of alphabetical order.
1	1.W.2.1	Write all uppercase (capital) and lowercase letters legibly, and space letters, words, and sentences appropriately.
2	2.W.2.1	Form letters correctly and space words and sentences properly so that writing can be read easily by another person.
3	3.W.2.1	Write legibly in print or cursive, leaving space between letters in a word, words, in a sentence, and words and the edges of the paper.
4	4.W.2.1	Write legibly in print or cursive, forming letters and words that can be read by others.

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Alphabet Knowledge and Handwriting Resources

The resources and programs listed in this document were reviewed and compiled by specialists at the Indiana Department of Education (IDOE) and faculty at Indiana University (IU); however, these resources are not endorsed by the IDOE or IU system.

[The online Google doc version of this document](#) is “live”, which means that resources will be added frequently. If you have found or created resources that you think should be listed in this document, [please click here to submit them for review](#).

Alphabet Recognition and Naming

Resource Type	Links to Resources
Guides, Articles, & Handouts	<ul style="list-style-type: none"> ● Alphabet Matching ● Letter Names Can Cause Confusion and Other Things to Know About Letter-Sound Relationships
Videos	<ul style="list-style-type: none"> ● Letter Names with Reese, Kindergartener ● FCRR: Letter Names Activity ● FCRR: Letter Tap Stack Activity
Apps and Virtual Resources	<ul style="list-style-type: none"> ● UFLI Virtual Teaching Resources: Alphabet Drills (Visual Drill Slides, ABC Order Slides, Grapheme Introduction Slides)

Resource Type	Links to Resources
Practice Activities	<ul style="list-style-type: none"> ● FCRR Student Center Activities: Letter Recognition (Pre-K - Grade 1) <ul style="list-style-type: none"> ○ Teacher Resource Guide (Pre-K) ○ Teacher Resource Guide (Grades K-1) ○ Letter Arc ○ Letter Sort ○ Letter Border ○ Letter Critter ○ Letter Tap Stack ○ Letter Tree ○ Alphabet Borders ○ Clip-A-Letter ○ Poetry Pen ○ Venn Diagram Letter Name Sort ○ Letter Cards ○ Sorting Letters ○ Alphabet Memory Game ○ Alphabet Arc ○ Pasta Names ○ Alphabet Tiles Name Sort ○ Speedy Alphabet Arc (fluency) ○ Hungry Letter Mouse (fluency) ○ Tap Stack (fluency) ● Alphabet Matching (Mama and Me) ● Alphabet Bingo ● Letter Recognition Fluency ● Highway ABCs
Other Resources	<ul style="list-style-type: none"> ● Alphabet Flash Cards ● Customizable ABC Cards ● Alphabet Strips and Mats ● ABC Flash Cards ● Matching Alphabet Pictures, Words, and Letters ● Customizable Letter Search ● Customizable Find the Letter ● Lowercase Flash Cards ● Mixed Case Flash Cards ● Uppercase Flash Cards

Sound-Symbol Recognition

Resource Type	Links to Resources
Guides, Articles, & Handouts	<ul style="list-style-type: none"> ● Common Letter-Sound Correspondences and their Predictability ● The Alphabetic Principle: From Phonological Awareness to Reading Words ● Alphabetic Principle: Concepts and Research ● Sequencing Alphabetic Principle Skills ● Teaching Strategies and Examples: Letter-Sound Correspondence ● Alphabetic Principle: Student Benchmarks ● What Works Clearinghouse: Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade (Practice Guide) <ul style="list-style-type: none"> ○ Recommendation 2: Develop awareness of the segments of sound in speech and how they link to letters. ● AIM Institute on Learning: Decoding ● Regional Educational Laboratory at Florida State University: Recommendation 2: Linking Sounds to Letters ● The Balanced Literacy Diet: Letter-Sounds and Phonics ● Texas Center for Learning Disabilities: Alphabetic Understanding Sample Lessons (Letter Sounds) ● Guidelines for Teaching Letter-Sound Correspondences ● NCII: What’s the Best Way to Teach the Alphabetic Principle ● UFLI: Suggested Scope & Sequence for Teaching Phoneme-Grapheme Correspondences ● University of Oregon’s Letter-Sound Correspondence Scope & Sequence ● Keys to Literacy: Systematic Phonics Scope and Sequence ● Reading Rockets: Alphabetic Principle
Videos	<ul style="list-style-type: none"> ● University of Oregon’s Center on Teaching and Learning: Big Ideas in Beginning Reading <ul style="list-style-type: none"> ○ Video Clip Examples of Instruction (Letter-Sound Correspondence, Fluency with Known Letter-Sound Correspondences, Letter Formation, Letter-Sound Correspondence with Common Letter Combinations) ● IES: Video 15: Phonemes Linked to Letters

Resource Type	Links to Resources
	<ul style="list-style-type: none"> ● IES: Video 17: Letter Sounds ● IES: Letter-Sound Practice and Building Words ● IES: Video 19: Letter-Sound to Phonemic Awareness Link: CVCe ● IES: 2.2 Letter Sound Practice Using a Letter Arc ● IES: 2.2 Letter Sound Writing (Humpty Dumpty) ● FCRR: Letter-Sound Dominoes Activity ● FCRR: Brown Bag It Activity
<p>Apps and Virtual Resources</p>	<ul style="list-style-type: none"> ● UFLI Virtual Teaching Resources: Phoneme Grapheme Correspondences <ul style="list-style-type: none"> ○ Consonant Digraphs ○ Consonant Blends ○ Other Graphemes ○ R-Controlled Vowels ○ Vowel Teams ● Starfall Website <ul style="list-style-type: none"> ○ ABCs
<p>Practice Activities</p>	<ul style="list-style-type: none"> ● FCRR Student Center Activities (K-1) <ul style="list-style-type: none"> ○ Teacher Resource Guide (K-1) ○ Brown Bag it ○ Words Around Us Memory Game ○ Letter-Sound Pyramid ○ Letter-Sound Mobile ○ Where's That Sound? ○ Photo Chart ○ Letter-Sound Dominoes ○ Letter-Sound Folder Sort ○ Letter-Sound Bingo ○ Letter-Sound Match ○ Letter-Sound Place Mats ○ Letter Bag ○ Letter-Sound Train ○ Medial Phoneme Spin ○ Make a Match (fluency) ○ Fluency Letter Wheel (fluency) ○ Letter Flash (fluency) ● FCRR Student Center Activities (Grades 2-3)

Resource Type	Links to Resources
	<ul style="list-style-type: none"> ○ Teacher Resource Guide (Grades 2-3) ○ Letter-Sound Match ○ Digraph Bingo ○ Word Spinners ○ Word Blender ○ Change My Word ○ Digraph Roll-A-Word ○ Map-A-Word ○ Letter-Sound Mix-Up (fluency) ○ Digraph and Diphthong Dash (fluency)

Handwriting

Resource Type	Links to Resources
Guides, Articles, & Handouts	<ul style="list-style-type: none"> ● 6 Multisensory Techniques for Teaching Handwriting ● How to Teach Handwriting ● Stroke Descriptions for Lowercase Letters ● Stroke Descriptions for Uppercase Letters ● Graham, S. (2009). Want to improve children' writing? Don't neglect their handwriting. American Federation of Teachers. ● CASL Handwriting Program (Grade 1) by Steve Graham and Karen Harris ● The OT Toolbox: A Complete Guide to Handwriting ● Developmental Progression of Handwriting Skills ● Handwriting Development: Sizing, Spacing, Alignment, and More!
Videos	<ul style="list-style-type: none"> ● Pencil Grip Video
Apps and Virtual Resources	<ul style="list-style-type: none"> ● Cursive Writing Wizard ● Wet Dry Try app (iPads only) ● UFLI Virtual Teaching Resources: Writing (Sentence Writing, Writing Paper, and Letter Formation) ● Handwriting Form ● Amazing Handwriting Worksheet Maker

Resource Type	Links to Resources
Programs	<ul style="list-style-type: none">• CASL Handwriting Program (Grade 1) by Steve Graham and Karen Harris (free)• Handwriting Without Tears• Zaner-Blosser Handwriting• D'Nealian Manuscript
Practice Activities	<ul style="list-style-type: none">• Starfall ABC Handwriting Practice Worksheets• Starfall Letter Formation Worksheets

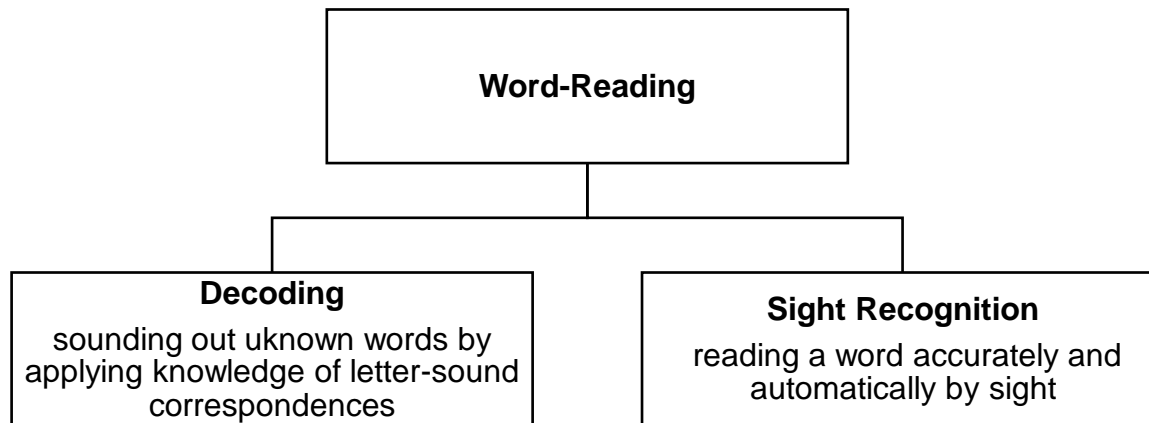
Word-Reading

Word-Reading

Word-Reading

Word-reading (also known as word-recognition or word-identification) is the ability to read real words accurately and automatically by sight or through the process of decoding¹ (See Figure 1). *Decoding* occurs when individuals apply their knowledge of the alphabetic principle (i.e., sound-symbol relationships) to read words². It is also used to describe how individuals read words by using other types of orthographic knowledge such as syllabication rules, position constraints, morphology, syntax, etc.^{2,3}

Figure 1. Two Ways Individuals Read Words



Note. Adapted from Kearns et al. (2019)¹

When individuals are first learning to read, they use decoding to sound out new words^{1,4}. Decoding is less efficient than recognizing words by sight (i.e., it is slower and uses more cognitive resources); however, repeated decoding practice is necessary for individuals to recognize words by sight (a more efficient process that uses fewer cognitive resources).

Key Word-Reading Terminology

Reading teachers should know the following terminology^{2,3,5}:

- **6 Syllable Types** – there are six types of syllables in words
 - **Open** – syllable that has a short vowel sound and ends with a consonant sound (e.g., cat, top, crab)
 - **Closed** – syllable that ends in a long vowel sounds spelled with a single letter (e.g., me, go, mi in mi-grate)

- **Silent e** – a syllable where a vowel is followed by a consonant and then an e, the e indicates that the vowel makes its long sound (e.g., make, plane, theme)
- **Vowel Team** – a syllable that includes two adjacent letters (i.e., a vowel digraph) that represent a vowel sound (e.g., team, pain, clown)
- **R-Controlled Vowel** – a syllable that includes a vowel that is controlled by r (e.g., car, fort, her, bird, turn)
- **Consonant-le** – a syllable that includes a consonant and is followed by the letters le (e.g., ble in bubble, ple in purple)
- **Blend** – two adjacent letters in a word that each retain their own sound (e.g., the fr in frog /f/ /r/ /ɔ/ /g/, or the mp in camp /c/ /ă/ /m/ /p/)
- **Blending** – putting individual sounds together from left to right to make a whole word (e.g., /k/ /ă/ /t/ → cat)
- **Chunking** – blending words by putting chunks of words together (e.g., /k/ + /ăt/ → cat)
- **Digraph** – two adjacent letters that represent one phoneme
- **Grapheme** – a single letter (e.g., a, c, k) or combination of letters (e.g., ch, sh, ay, ow, igh) that represents a phoneme
- **High-Frequency Word** – word that appears most commonly in the English language; two common high-frequency words lists are the Dolch Word List⁶ and Fry Word List⁷.
- **Irregular Word** – a word that does not adhere to the common or predictable phoneme-grapheme correspondences or syllable types (e.g., was, one, said, have)
- **Orthography** – a system for written language
- **Phoneme** – the smallest unit of sound in spoken language
- **Phonics** – a method for teaching students the relationships between phonemes and graphemes
 - **Vowel Digraphs** – represent vowel sounds (e.g., ai represents /ā/, ew represents /ū/)
 - **Consonant Digraphs** – represent consonant sounds (e.g., ch represents /ch/, ff represents /f/)
- **Position Constraints** – when the spelling of a phoneme is constrained or governed by its position in a word
 - **Example:** ai is typically used to spell /ā/ in the middle of words (e.g., rain, main) and ay is typically used to spell /ā/ at the end of words (e.g., tray, may)
- **Regular/Decodable Words** – words that have the most common or predictable phoneme-grapheme correspondences (e.g., at, dog, bug, chip, tree)
- **Sight Word** – a word that an individual can read accurately and automatically

Suggested Scope and Sequence

There is no one agreed upon scope and sequence for word-reading instruction and intervention; however, word-reading instruction can begin once students have mastered with several consonant and vowel letter-sound correspondences⁵. Instruction should begin with words that have one-to-one phoneme-grapheme correspondences (words without digraphs or more complex syllable types such as silent e). Additionally, students should first read words in isolation (e.g., lists), before they read words in sentences and text⁵.

Tier 1 (General Education/Core Instruction) should include approximately 30-40 minutes of word-reading instruction daily during the mandated 90-minute core reading block. Tiers 2-3 (Supplemental Intervention) should be provided during the school day and should be **in addition to** the mandated 90-minute core reading block. Supplemental reading intervention lessons typically include several different lesson segments that address multiple components of reading (e.g., phonological awareness, letter-sound correspondences, decoding, spelling). Decoding instruction should be one of the segments included in a supplemental reading intervention.

To determine a starting point for instruction/intervention in decoding, analyze assessment data from reading measures that assess both real and nonsense (pseudo) words. Nonsense word assessments help educators identify the letter-sound correspondences students know and do not know automatically; however, they nonsense words should not be included in instructional activities. For additional information about how to analyze errors from assessments to guide instruction, see the NCII's training module on [Informal Academic Assessment: Using Data to Guide Intensive Instruction](#).

Once assessment data has been analyzed, a starting point for instruction should be determined. Schools/educators that do not already have a pre-existing program that adequately covers decoding skills or those that want to supplement their pre-existing programs can view the sample the suggested scope and sequence guides listed below:

- [UFLI Suggested Scope and Sequence](#)
- [Keys to Literacy Systematic Scope and Sequence](#)
- [UO CTL Curriculum Maps \(See Alphabetic Principle\)](#)

Explicit, Systematic Instruction in Word-Reading Skills

To develop accurate and automatic word-reading skills, students need explicit, systematic instruction in reading regular words, irregular words, high-frequency words, and other orthographic patterns (e.g., position constraints, syllable types)³. In this section, we briefly describe each skill and provide a routine that teachers can use to

explicitly and systematically teach word-reading without a pre-existing program or curriculum. It also addresses how to incorporate adequate practice, cumulative review, and multisensory approaches to maximize student engagement during word-reading instruction. Throughout each lesson, students should have frequent and multiple opportunities to respond and teachers should use procedures that engage all students, such as choral responses, and should limit calling on individual students. Lessons should include multisensory elements, such as letter tiles, virtual manipulatives, etc. It is important to clearly explain and demonstrate how to use the multisensory procedure before expecting students to use it independently. Additional examples of explicit, systematic word-reading instruction can be found on the [Word-Reading Resources section](#) of this toolkit.

Regular Word-Reading

Regular word reading involves teaching students to read words that incorporate their most common letter-sound correspondences. Teachers should begin by teaching students to read simple regular words (e.g., VC and CVC words that begin with continuous sounds) and then progress to more difficult single-syllable regular words (e.g., CCVCC, CCCVC). [Click here to view a basic progression for regular word-reading skills](#). Students should be able to read simple, regular words before moving on to words with consonant and vowel digraphs or other orthographic conventions.

Table 1. Sample Explicit Regular Word-Reading Lesson Segment

Regular Word-Reading Lesson Segment: New Skill Introduction and Practice		
Skill	decoding regular VC and CVC words with the letters m, a, t, p, n	
Prerequisite Skills	blending VC and CVC words orally; recognition of m, a, t, p, n letter-sound correspondences	
Materials	letter tiles for each student; sound boxes for each student ; whiteboard, dry erase markers	
Introduction & Purpose	<i>Today, we're going to practice reading words with letters and sounds we've already learned. This is going to help us become better readers and spellers.</i>	
Explicit Instruction	<u>Step 1:</u> <u>Modeling</u> <u>(I Do)</u>	<i>Look at this word. Teacher points to the word mat that has been formed with letter tiles. Each letter tile is in a sound box. I'm going to show you how to sound out this word. Watch me. /m/ /ă/ /t/. The</i>

		teacher touches each letter as the sound is said. <i>What word? Mat.</i>
	<u>Step 2:</u> <u>Guided</u> <u>Practice</u> <u>(We Do)</u>	<i>Let's sound out this word all together. Touch each letter as you say the sounds. Teacher and students touch each letter and say each sound, /m/ /ă/ /t/. What word? Mat.</i>
	<u>Step 3:</u> <u>Independent</u> <u>Practice</u> <u>(You Do)</u>	<i>Your turn. Touch each letter as you say the sounds. Students touch each letter as they say each sound, /m/ /ă/ /t/. What word? Students say, 'mat.'</i>
	<u>Repeat Steps</u> <u>1-3</u>	Repeat steps 1-3 for 3-4 additional one syllable words (e.g., tap, pat, tan, man, map). Once students begin to demonstrate they understand the skill and require less scaffolding, move to additional independent practice.
	<u>Step 4:</u> <u>Independent</u> <u>Practice</u> <u>(You Do)</u>	<i>Now that I've shown you how to read some new words and we've practiced reading these words, it's your turn to practice reading some of these words on your own.</i> The teacher writes the previously practiced words on the board or on flash cards. The teacher points to each word and says, "What word?" or provides a similar cue/signal.
Lesson Segment Notes	<ul style="list-style-type: none"> • During guided and independent practice, provide immediate corrective feedback when students make an error. Return to modeling (step 1) and then have students practice again: <ul style="list-style-type: none"> ○ <i>Let's try that again. My turn. Listen to me say each sound and then blend the sounds together. The teacher touches each letter while saying each sound and then repeats the whole word. Your turn. Say each sound. Students say each sound. What word? Students say the word.</i> 	

Irregular, High-Frequency Words

Some common high-frequency words are irregular, meaning that their letters do not match their sounds. Teachers can support students' word-reading skills by teaching common irregular words by using strategies that incorporate repeated practice reading and spelling the word⁸. Table 2 below provides a sample of how irregular, high-frequency words can be taught explicitly using the spell-out strategy.

Table 2. Sample Explicit Irregular, High-Frequency Word-Read Lesson Segment

Irregular High-Frequency Word-Reading Lesson Segment: New Skill Introduction and Practice	
Skill	Reading irregular, high-frequency words: one, are, your
Prerequisite Skills	N/A
Materials	irregular word list for beginning readers ; dry erase boards; dry erase markers
Introduction & Purpose	<i>Today, we're going to practice reading words some new words that we see every day. These words are tricky words because their letters don't always match their sounds. Learning these words will help us become better readers and spellers.</i>
Explicit Instruction	<p><u>Step 1:</u> <u>Modeling</u> <u>(I Do)</u></p> <p><i>Look at this word. Teacher points to the word one written on the whiteboard. This word is 'one.' It is spelled O. N. E.</i></p>
	<p><u>Step 2:</u> <u>Guided Practice</u> <u>(We Do)</u></p> <p><i>Let's say it all together. What word? Teacher and students say, "one." Let's spell one. Teacher and students say, "O. N. E."</i></p>
	<p><u>Step 3:</u> <u>Independent Practice</u> <u>(You Do)</u></p> <p><i>Your turn. What word? Students say, "one." Spell one. Students spell one.</i></p>
	<p><u>Step 4:</u> <u>Multisensory Practice</u></p> <p><i>Now, let's practicing spelling one on our whiteboards. Everyone, spell one on your whiteboard.</i></p>

	<p><u>Repeat Steps 1-3</u></p>	<p>Repeat steps 1-3 for 2-3 additional irregular, high-frequency words.</p>
	<p><u>Step 5: Independent Practice (You Do)</u></p>	<p><i>Now that I've shown you how to read some new words and we've practiced reading these words, it's your turn to practice reading some of these words on your own.</i></p> <p>The teacher writes the previously practiced words on the board or on flash cards.</p> <p>The teacher points to each word and says, "What word?" or provides a similar cue/signal.</p>
<p>Lesson Segment Notes</p>	<ul style="list-style-type: none"> • During guided and independent practice, provide immediate corrective feedback when students make an error. Return to modeling (step 1) and then have students practice again: <ul style="list-style-type: none"> ○ <i>Let's try that again. This word is [say word]. Your turn. What word?</i> Students say the word. • Lessons can be adapted to include any kind of multisensory element, such as letter tiles, virtual manipulatives, etc. It is important to clearly explain and demonstrate how to use the multisensory procedure before expecting students to use it independently. 	

Other Orthographic Patterns

Students also benefit from being explicitly taught common orthographic patterns, such as the six syllable types^{3,5,8}. Table 3 below provides an example of how to teach the CVCe syllable type.

Table 3. Sample Explicit Silent-e Syllable Type Lesson Segment

<p>Silent e Syllable Type Lesson Segment: New Skill Introduction and Practice</p>	
<p>Skill</p>	<p>Decoding silent-e words with the long a vowel sound</p>
<p>Prerequisite Skills</p>	<p>Decoding regular CVC words</p>
<p>Materials</p>	<p>Dry erase boards, dry erase markers, letter tiles</p>

<p>Introduction & Purpose</p>	<p><i>Today, we're going to practice reading words some new words have a pattern. The new pattern is called silent e. Learning this pattern will help us become better readers and spellers.</i></p>	
<p>Explicit Instruction</p>	<p><u>Step 1:</u> <u>Modeling</u> <u>(I Do)</u></p>	<p><i>Look at this word. Teacher points to the word can written on the whiteboard. Let's sound this out. Students and teacher sound out, "can." Yes. This word is can.</i></p> <p><i>Now, I'm going to add an e to the end of can. Teacher writes an e at the end of can to form the word cane. This is a silent e. When we see words that have a consonant, then a vowel, another consonant and then an e, the e tells us that the vowel makes its long sound or name. The teacher writes CVCe over top of the word cane.</i></p> <p><i>What happens to the vowel when there's an e at the end of a CVC word? Students and teacher say, "it makes its long sound or name."</i></p> <p><i>Watch me sound this word out. /k/ /ā/ /n/. cane. I don't say the sound for e because it's silent.</i></p>
	<p><u>Step 2:</u> <u>Guided Practice</u> <u>(We Do)</u></p>	<p><i>Let's try this together. Look at this word. Teacher points to 'cane.'</i></p> <p><i>Does it have a consonant, vowel, consonant, and silent e? Teacher and students say, "yes." So, what sound does the letter a make? Students and teacher say, "/ā/." Yes. /ā/.</i></p> <p><i>Let's sound it out. Students and teacher say, "/k/ /ā/ /n/." What word? Students and teacher say, "cane."</i></p>
	<p><u>Step 3:</u> <u>Independent Practice</u> <u>(You Do)</u></p>	<p><i>Your turn. Does this word have a consonant, vowel, consonant, and silent e? Students say, "yes." What sound does the letter a make? Students say, "/ā/."</i></p> <p><i>Sound it out. Students say, "/k/ /ā/ /n/." What word? Students say, "cane."</i></p>

	<p><u>Repeat Steps 1-3</u></p>	<p>Repeat steps 1-3 with 2-3 additional CVCe words (e.g., tap → tape, cap → cape, fat → fate) with the silent e pattern and long a vowel sound.</p>
	<p><u>Step 4: Independent Practice (You Do)</u></p>	<p><i>Now that I've shown you how to read some new words and we've practiced reading these words, it's your turn to practice reading some of these words on your own.</i></p> <p>The teacher writes the previously practiced words on the board or on flash cards.</p> <p>The teacher points to each word and says, "What word?" or provides a similar cue/signal.</p>
<p>Lesson Segment Notes</p>	<ul style="list-style-type: none"> • During guided and independent practice, provide immediate corrective feedback when students make an error. Return to modeling (step 1) and then have students practice again: <ul style="list-style-type: none"> ○ <i>Let's try that again. Does this word have a consonant, vowel, consonant, and silent e? Students say, "yes." What sound does the vowel make? Students say the long vowel sound. Good. What word? Students say the word.</i> 	

Multisyllabic Word Reading

Once students have begun to develop proficiency with reading single-syllable words, instruction should focus on teaching students to read multisyllable words. There are several key features for effective multisyllabic word reading instruction, which include teaching⁸:

- common affixes (prefixes, suffixes) in isolation, before having students read those affixes in whole words. Click here for a list of the most common prefixes and suffixes.
- students to divide words into their syllables by identifying vowel sounds; each syllable of a word has a vowel sound (e.g., pro – tec – tion).
- strategies for decoding multisyllable words (e.g. structural analysis, syllable division principles, flexible strategy for reading big words)

Additional information and resources for multisyllabic word reading are available in the [Word-Reading Resources section](#) of this toolkit.

Word-Reading Extension and Practice Activities

A crucial element of all word-reading instruction is providing students with multiple opportunities to extend their learning and practice previously learned skills. Practice and extension activities help students become more automatic with their word-reading, which is necessary for text comprehension. Without appropriate guided and independent practice, students will not be able to acquire skills to mastery-level and they will not be able to retain those skills over time.⁹ Practice should be provided AFTER a skill has been modeled/demonstrated (I Do) and teachers should provide affirmative or corrective feedback during practice activities. The following sections describe various extension and practice opportunities that should be included in supplemental reading instruction and intervention. Additional extension and practice activities are provided in the [Word-Reading Resources section](#) of this toolkit.

Remember:

- These practice activities are useful for warm-up, cumulative review, or during student centers.
- These activities do NOT explicitly model word-reading skills.
- Teachers may have to model/demonstrate how to complete these activities, before allowing students to use them during guided or independent practice.

Decodable Text Reading

Once students have begun reading words in isolation, they need opportunities to apply their decoding skills to sentences and passages^{3,5,8}. Decodable texts differ from other types of text (e.g., leveled text, predictable text) because the majority of words in the text can be sounded out if students know the letter-sound correspondences. For example, students who have learned how to decode CVC words with short vowel sounds would benefit from reading decodable texts that incorporate CVC words with short vowel sounds. Students should read decodable text with feedback from a teacher or more proficient peer. When students do not know how to read a word, they should be prompted to “sound it out” if the word is decodable. Click here to view a list of [Decodable Text Sources](#) from the Reading League¹⁰.

Word Work

Students can also practice their word-reading skills with various word work activities such as sorting, word-building, word chains, etc.^{3,5} A sample word-building activity is located in Table 4 below.

Table 4. Sample Word-Building Activity

<p><u>Word Building</u></p>	<p>Now, let’s use our letter tiles and sound boxes to make some of the words we practiced reading today. <i>Watch me. The first word is mat. As I say each sound, I’m going to move a letter tile into each sound box.</i> The teacher says, /m/ /ă/ /t/ and moves the m, a, and t into each sound box.</p> <p><i>Everyone, let’s do this all together.</i> The teacher and students say ‘mat’ and move one letter for each sound into their sound boxes.</p> <p><i>Now, let’s turn mat into pat. Watch me.</i> The teacher replaces the m with the p.</p> <p><i>Your turn. Turn mat into pat.</i> Students replace the m with the p.</p> <p>Continue with other words: pat → pan → man → map → nap → tap</p>
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Dictation

Teachers should provide multiple opportunities for students to practice spelling the patterns and words learned during word-reading instruction³. Spelling helps strengthen the connections between letters and their sounds and leads to more automatic word-recognition skills. Teachers should have students write words in isolation and in sentences. This can be done on paper, dry erase boards, with technology, etc.

Additional Word-Reading Resources

Additional resources such as video clips, commercial word-reading programs, practice activities, books, articles, etc., are available in the [Word-Reading Resources section](#) of this toolkit.

Commercial Word-Reading Programs

The resources listed below are examples of commercial programs that address word-reading skills. These programs are not endorsed by the Indiana Department of Education nor the Indiana University system.

- [Road to Reading](#)
- [Sound Partners](#)
- [Lindamood Phoneme Sequencing \(LiPS\)](#)
- [Reading Mastery](#)
- [Early Intervention in Reading \(EIR\)](#)
- [Wilson Language Basics: Foundations](#)
- [Enhanced Core Reading Instruction](#)

- [Targeted Reading Intervention \(TRI\)](#)
- [Leveled Literacy Intervention](#)
- [mClass Intervention \(formerly Burst Reading\)](#)

Indiana English/Language Arts Standards that Correspond to Word-Reading

1. Reading Foundations (RF)
 - RF.4: Phonics – Decode and read words by applying phonics and word analysis skills.
2. Writing (W)
 - W.6: Conventions of Standard English – Demonstrate command of the conventions of standard English.

Grade	Standard	Description
K	K.RF.4.1	Use letter-sound knowledge to decode the sound of each consonant (e.g., dog = /d/ /g/; soap = /s/ /p/).
K	K.RF.4.2	Blend consonant-vowel-consonant (CVC) sounds to make words.
K	K.RF.4.3	Recognize the long and short sounds for the five major vowels.
K	K.RF.4.4	Read common high-frequency words by sight (e.g., a, my).
K	K.RF.4.5	Identify similarities and differences in words (e.g., word endings, onset and rime) when spoken or written.
1	1.RF.4.1	Use letter-sound knowledge of single consonants (hard and soft sounds), short and long vowels, consonant blends and digraphs, vowel teams (e.g., ai) and digraphs, and r-controlled vowels to decode phonetically regular words (e.g., cat, go, black, boat, her), independent of context.
1	1.RF.4.2	Decode one-syllable words in the major syllable patterns (CVC, CVr, V, VV, VCe), independent of context.
1	1.RF.4.3	Apply knowledge of final –e and common vowel teams (vowel digraphs) representing long vowel sounds.
1	1.RF.4.4	Recognize and read common and irregularly spelled high-frequency words by sight (e.g., have, said).
1	1.RF.4.5	Read words in common word families (e.g., -at, -ate).
1	1.RF.4.6	Read grade appropriate root words and affixes including plurals, verb tense, comparatives (e.g., look, -ed, -ing, -s, -er, -est), and simple compound words (e.g., cupcake) and contractions (e.g., isn't).
2	2.RF.4.1	Students are expected to build upon and continue applying concepts learned previously.

Grade	Standard	Description
2	2.RF.4.2	Use knowledge of the six major syllable patterns (CVC, CVr, V, VV, VCe, Cle) to decode two-syllable words, independent of context.
2	2.RF.4.3	Apply knowledge of short and long vowels (including vowel teams) when reading regularly spelled one-syllable words.
2	2.RF.4.4	Recognize and read common and irregularly spelled high-frequency words and abbreviations by sight (e.g., through, tough; Jan., Fri.).
2	2.RF.4.5	Know and use common word families when reading unfamiliar words (e.g., -ale, -est, -ine, -ock).
2	2.RF.4.6	Read multisyllabic words composed of roots, prefixes, and suffixes; read contractions, possessives (e.g., kitten's, sisters'), and compound words.

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Word-Reading Resources

The resources and programs listed in this document were reviewed and compiled by specialists at the Indiana Department of Education (IDOE) and faculty at Indiana University (IU); however, these resources are not endorsed by the IDOE or IU system.

[The online Google doc version of this document](#) is “live”, which means that resources will be added frequently. If you have found or created resources that you think should be listed in this document, [please click here to submit them for review](#).

Explicit Word-Reading Routines and Lesson Plans

Skill	Link to Routine or Lesson Plan
Decoding Regular Words	<ul style="list-style-type: none"> ● FCRR: Blending Sounds in Short Words ● FCRR: Segmenting Sounds in Short Words ● FCRR: Decode & Write Words ● FCRR: Decode & Write Words with Blends ● FCRR: Digraphs and Consonant Blends (2nd) ● FCRR: Digraphs and Consonant Blends (3rd) ● TCRLA: Reading Strategies and Activities for Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Alphabetic Understanding: Letter Sounds (pgs 87-96), Decoding Regular Words (pgs. 97-106), Spelling Regular Words (pgs. 107-118) ○ Fluency: Letter Sounds (pgs. 143-166), Regular Word Reading (pgs. 167-178) ● NCII: Phonics Sample Lessons
Irregular & High-Frequency Words	<ul style="list-style-type: none"> ● FCRR: Irregularly Spelled Words ● TCRLA: Reading Strategies and Activities for Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Alphabetic Understanding: Reading Irregular Words (pgs. 119-127) ○ Fluency: Irregular Word Reading (pgs. 179-193)
Other Orthographic Patterns	<ul style="list-style-type: none"> ● FCRR: Decode and Write Words with the “silent e”

Skill	Link to Routine or Lesson Plan
Multisyllabic Word-Reading	<ul style="list-style-type: none"> ● FCRR: Decode and Write Words with more than one syllable ● FCRR: Words with More than One Syllable (2nd) ● FCRR: Words with More than One Syllable (3rd) ● FCRR: Base Words and Affixes #1 ● FCRR: Base Words and Affixes #2
Other	<ul style="list-style-type: none"> ● FCRR: Writing Simple Words ● FCRR: Decode Words in Connected Text (K) ● FCRR: Decode Words in Connected Text (1st) ● TCRLA: Reading Strategies and Activities for Students at Risk for Reading Difficulties, Including Dyslexia <ul style="list-style-type: none"> ○ Alphabetic Understanding: Sentence Reading with Regular Words and one Irregular Word (pgs. 128-141) ○ Fluency: Fluency in Connected Text (pgs. 194-216) ● SAP: Decodable Readers Protocol

Note. FCRR = Florida Center for Reading Research; TCRLA = Texas Center for Reading and Language Arts; SAP = Student Achievement Partners; (K) = Kindergarten; (1) = 1st Grade & Above

Word-Reading Extension and Practice Activities

Skill	Link
Decoding Regular Words	<ul style="list-style-type: none"> ● FCRR: Phonics Center Activities (K-1) <ul style="list-style-type: none"> ○ Encoding and Decoding ○ Variant Correspondences ● FCRR: Phonics Center Activities (2-3) <ul style="list-style-type: none"> ○ Letter-Sound Correspondence ○ Variant Correspondences
Irregular & High Frequency Words	<ul style="list-style-type: none"> ● FCRR: Phonics Center Activities (K-1) <ul style="list-style-type: none"> ○ High Frequency Words ● FCRR: Phonics Center Activities (2-3) <ul style="list-style-type: none"> ○ High Frequency Words ● TCLD: Sight Word Fluency Lists
Other Orthographic Patterns	<ul style="list-style-type: none"> ● FCRR: Phonics Center Activities (K-1)

Skill	Link
	<ul style="list-style-type: none"> ○ Variant Correspondences ○ Syllable Patterns ● FCRR: Phonics Center Activities (2-3) <ul style="list-style-type: none"> ○ Syllable Patterns
Multisyllabic Word-Reading	<ul style="list-style-type: none"> ● FCRR: Phonics Center Activities (K-1) <ul style="list-style-type: none"> ○ Morpheme Structures ● FCRR: Phonics Center Activities (2-3) <ul style="list-style-type: none"> ○ Morpheme Structures
Other	<ul style="list-style-type: none"> ● FCRR: Fluency Center Activities (K-1) <ul style="list-style-type: none"> ○ Words ○ Connected Text ● FCRR: Fluency Center Activities (2-3) <ul style="list-style-type: none"> ○ Word Parts ○ Words ○ Phrases ○ Chunked Text ○ Connected Text

Note. FCRR = Florida Center for Reading Research; TCLD = Texas Center for Learning Disabilities

Video Examples of Word-Reading Instruction and Practice

Skill	Link to Video Example
Decoding Regular Words	<ul style="list-style-type: none"> ● CORE: Blending Long E spelled ee (1st Grade) ● UO CTL: Video Examples for Decoding and Word Recognition ● IES: Letter Sounds ● IES: Word-Reading Strategies ● Anita Archer: Decoding Instruction (K) ● Anita Archer: Decoding Instruction (1) ● Modeling Initial Sounds in Tier 3
Irregular & High Frequency Words	<ul style="list-style-type: none"> ● Really Great Reading: Heart Word Magic ● IES: High Frequency Words ● IES: Non-Decodable Words
Other Orthographic Patterns	<ul style="list-style-type: none"> ● CORE: Introducing Open and Closed Syllables
Multisyllabic Word-Reading	<ul style="list-style-type: none"> ● CORE: Syllable Division Strategy - VC/CV ● CORE: Syllable Division Strategy - VCV ● CORE: Introducing Affixes ● CORE: Flexible Strategy for Reading Big Words
Other	<ul style="list-style-type: none"> ● CORE: Reading Words for Automaticity ● CORE: Reading Decodable Text (1st Grade) ● CORE: Reading Decodable Text (4th and 5th Grade) ● CORE: Word Work ● IES: Word-Building ● IES: Decodable Words in Isolation and in Text

Note. IES = Institute of Education Sciences; UO CTL = University of Oregon Center for Teaching and Learning; CORE = Consortium on Reaching Excellence in Education

Additional Resources for Word-Reading Instruction and Intervention

Resource Type	Links to Resources
<p>Guides & Handouts</p>	<ul style="list-style-type: none"> ● UT CRLA: Word Study for Students with Learning Disabilities and English Learners ● UT: Daily Sample Lessons & Activities for Phonics/Word Study (K-5) ● Reading Rockets: A New Model for Teaching High Frequency Words ● Teaching Irregular Words ● Student Achievement Partners: Early Reading Acceleration Practice Phonics Activities (K-1) ● The Reading League: Decodable Text Sources ● Student Achievement Partners: Foundational Skills Practice Strategies ● UO CTL: Alphabetic Principle Instruction Materials ● UO CTL: Sequencing Alphabetic Principle Skills ● IES Practice Guide: Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade: <ul style="list-style-type: none"> ○ Recommendation 3: Teach students to decode words, analyze word parts, and write and recognize words ● UT MCPER: Word Analysis: Principles for Instruction and Progress Monitoring ● Wanzek et al. (2010). Word Recognition and Fluency: Effective Upper Elementary Interventions for Students with Reading Difficulties ● West Virginia Read First Explicit Phonics Lessons ● COI: Building the Foundation: A Suggestion Progression of Subskills to Achieve the Reading Standards ● Reading Horizons: What is Decoding [website] ● Tennessee Center for the Study and Treatment of Dyslexia: Letter Knowledge and Phonics Instruction Guide
<p>Online Courses and Learning Modules</p>	<ul style="list-style-type: none"> ● Student Achievement Partners: Foundational Skills Mini-Course <ul style="list-style-type: none"> ○ Module 3: Phonics Part 1 ○ Module 4: Phonics Part 2 ○ Module 5: Early Reading ○ Module 6: Practice, Practice, Practice

Resource Type	Links to Resources
	<ul style="list-style-type: none"> ● AIM Pathways: Sight Recognition ● AIM Pathways: Decoding ● Reading Rockets & CERI: Reading 101: A Guide to Teaching Reading and Writing <ul style="list-style-type: none"> ○ Phonics Module ● Teaching Foundational Reading Skills <ul style="list-style-type: none"> ○ Unit 3: Word Decoding, Recognition, and Writing ● NCII: K-3 Reading Practice Guide Video Recommendation 3: Teach students to decode words, analyze word parts, and write and recognize words
<p>Digital Resources</p>	<ul style="list-style-type: none"> ● UFLI Virtual Teaching Resource Hub: <ul style="list-style-type: none"> ○ Phoneme-Grapheme Correspondences (Alphabet, Consonant Digraphs, Consonant Blends, Other Graphemes, R-Controlled Vowels, & Vowel Teams) ○ Decoding and Encoding (Word Work, Big Words, Word Cards and Lists, Games and Printables) ○ Irregular and High Frequency Words ○ Connected Text ● UFLI Blendable Sounds: A Quick Review (video) ● UFLI: Manipulative Letters Demonstration (video) ● UFLI: Teaching Multisyllabic Words (video) ● Graphogame App ● Phinder: Phonics Pattern Finder ● Haskins Global Literacy Hub ● IES: Letter-Sound to Phonemic Awareness Link: CVCe (video) ● IES: Advanced Word Building (video) ● IES: Blending by Chunking & Sounding Out (video) ● IES: Building Words with Sound Boxes ● IES: Vowel Pattern Word Sort ● IES: Base Word, Prefix, Suffix ● IES: Word Analysis Strategy ● CEEDAR: Alphabetic Understanding and Phonics (video) ● CEEDAR: Letter Recognition Activities (video) ● NCII: Alphabetic Principle and Phonics Toolkit

Resource Type	Links to Resources
Books	<ul style="list-style-type: none"> ● <u>Teach Your Child to Read in 100 Easy Lessons</u> ● <u>Unlocking Literacy: Effective Decoding & Spelling Instruction</u> ● <u>Teaching Word Recognition: Effective Strategies for Students with Learning Difficulties</u> ● <u>Teaching Reading Sourcebook (3rd ed)</u>
Articles	<ul style="list-style-type: none"> ● <u>Reading Big Words: Instructional Practices to Promote Multisyllabic Word Reading Fluency</u> ● <u>Helping Students with Dyslexia Read Long Words: Using Syllables and Morphemes</u> ● <u>Reading Rockets: Matching Books to Phonics Features</u> ● <u>Systematic Instruction in Phoneme-Grapheme Correspondence for Students with Reading Disabilities</u>

Note. UT = University of Texas; CRLA = Center for Reading and Language Arts; MCPER = Meadows Center for Preventing Educational Risk; UFLI= University of Florida Literacy Institute; UO = University of Oregon; CTL = Center on Teaching and Learning; SAP = Student Achievement Partners; TCLD = Texas Center for Learning Disabilities; COI = Center on Instruction; IES = Institute of Education Science (U.S. Department of Education); NCII = National Center for Intensive Intervention

Dyslexia Intervention Lesson Plan Template

Dyslexia Intervention Lesson Plan Template

Directions: This lesson plan template is designed to provide an overall guide to the sequential implementation of skills within a succinct lesson. The purpose of the lesson plan is to ensure that all recommended approaches are covered and all aspects of structured literacy are reviewed or taught during the lesson. This is a template, not a cookbook. Instruction should always be individualized to meet students’ needs (including prior/prerequisite knowledge and skills), so it is vital that lessons are designed and adapted based on progress monitoring and/or diagnostic assessment data. Refer to the Scope and Sequence section of each corresponding dyslexia toolkit section (e.g., phonological awareness, alphabet knowledge, decoding, encoding) for additional information about the order in which to teach new skills.

Lesson Segment	Instructional Routines and Approaches	~Time
Review	Review previously learned skills/concepts (phonological awareness, sound-symbol relationships, decoding, encoding, etc.). Every lesson should include a phonological awareness (PA) review until PA blending, segmenting, and manipulation are mastered. Reviews can be: <ul style="list-style-type: none"> ● Cumulative - most/all previously learned skills/concepts ● Targeted - one or two new skills/concepts from a previous lesson 	<i>5-8 minutes</i>
Lesson Opening: Goal and Relevance	Tell students the goal of the day’s lesson and the reason why it is important for students to learn this skill/concept. Include when and where students might use this skill/concept as appropriate.	<i>2-3 minutes</i>
New Skill: Modeling and Practice	Explicitly teach new skill(s) for the day (incorporating multisensory engagement strategies as appropriate): <ul style="list-style-type: none"> ● Phonological Awareness ● Alphabet Knowledge (including sound-symbol relationships) ● Decoding (including irregular and high-frequency word-reading) ● Encoding <p><i>Note:</i> Most lessons will include multiple components (e.g., phonological awareness and alphabet knowledge; alphabet knowledge, decoding, and encoding). Refer to the sample lesson segments and skill-specific resources from the corresponding Dyslexia Toolkit sections and to guide new skill instruction (modeling and guided practice).</p>	<i>15 minutes</i>

Extended Practice	Practice activities to help students develop automaticity (fluency) with previously taught skills. See the practice resources in each dyslexia toolkit resource section .	<i>5 minutes</i>
Spelling (Encoding)	Practice writing/spelling sound-symbol relationships in isolation (e.g., a, e, t, k, ai, ea, ch, sh, igh) and decodable words (i.e., words in which the sound-symbol relationships necessary to sound out the word have been explicitly taught to students).	<i>5 minutes</i>
Sentence or Text Reading	Practice reading decodable sentences and texts in which a student can sound out the majority of words (~70-85%).	<i>5-8 minutes</i>
Lesson Closing	Interactive/multisensory review of the new skill(s) taught during the lesson. Preview of next lesson skill/concept.	<i>2-3 minutes</i>
Total Time		<i>35-45 minutes</i>
Additional Notes	<ul style="list-style-type: none"> ● Progress monitoring can occur before, during, or after an intervention lesson. Instructional leader must collect data about which skills students have learned/mastered (for cumulative review or extended practice), which need additional review (for extended practice), and which have not yet been mastered and require explicit instruction (new skill modeling and practice). ● Lessons should include multisensory components (e.g., visual, auditory, kinesthetic, tactile) as necessary. Multisensory inclusion guiding questions: <ul style="list-style-type: none"> ○ Is there a song, mnemonic device that the students can say while looking at a visual of the rule? ○ Can the student tap, stomp, or clap out a pattern that goes along with the rule? ○ Are there visuals that help explain how this skill builds on and connects to previously taught skills? 	

Note. This template was adapted from the explicit instruction framework (Archer & Hughes, 2010) and Language Essentials for Teachers of Reading and Spelling (LETRS; Moats & Tolman, 2019).

Considerations for Remote Learning or Distance Education

Below are some considerations when implementing explicit and direct instruction via remote learning or hybrid learning.

- Always follow or adhere to scope and sequence of skill development.
- Be deliberate with your time when students are in school.
- Explicitly teach and purposefully practice at school or during video conferencing.
- Record your explicit instruction for multiple views or downloading.
- Provide manipulatives for home practice of skills.
- Make directions, videos, and word lists for families to practice at home.
- Use technology to reinforce skills, not teach skills.
- Use data from assessment to pinpoint student needs and evaluate student mastery.

General Links and Resources:

- [Hickman Phonics Scope and Sequence](#)
- [MA Rooney Foundation Sound Card for sound isolation practice](#)
- [Building RTI Capacity Explicit Instruction Scope and Sequence](#)
- [FRCC Family Activity Videos](#)
- [University of Florida Literacy Institute Remote Reading Instruction Webinars](#)

Hybrid and Remote Instructional Resources	
Handwriting	<ul style="list-style-type: none"> • Cursive Writing Wizard • Handwriting Without Tears
Phonemic Awareness and Phonics	<ul style="list-style-type: none"> • OG Card Deck • ABC Magic Series • Phonics Genius • Starfall • Soundliteracy
High Frequency Words	<ul style="list-style-type: none"> • Phonics Genius • Starfall • Soundliteracy
Vocabulary	<ul style="list-style-type: none"> • Lars and Friends • Word Hippo

Hybrid and Remote Instructional Resources	
	<ul style="list-style-type: none"> • Irregular Verbs
Multiple Resources	<ul style="list-style-type: none"> • University of Florida Online Instructional Activities
Fluency	<ul style="list-style-type: none"> • Rainbow Sentence Fluency • Sentence Reading Magic Series • Phrasal Verbs • Mind The Gap
Online Manipulatives	<ul style="list-style-type: none"> • Word Work Resources • Online Word Work Mat- Beginner Intermediate
Homophones	<ul style="list-style-type: none"> • Seven Different Games
Morphology	<ul style="list-style-type: none"> • Root to Words • Word Building and Spelling
Instructional Tools	<ul style="list-style-type: none"> • Digital Whiteboard

Video Examples

- Video Examples of Structured Literacy Instruction: <https://www.youtube.com/watch?v=cciMpUePOV0>
- Explicit Instruction: https://www.youtube.com/watch?v=9pExdvYNE_s

Instructional Resources

- [The Meadows Center for Preventing Educational Risk](#)
- [Florida Center for Reading Research Student Center Activities](#)
[VPK Learning Center Activities \(Alphabet Knowledge, PA, and Language & Vocabulary\)](#)
- [Reading Strategies and Activities for Students At Risk for Reading Difficulties, Including Dyslexia](#)
- [Word recognition and fluency: Effective upper-elementary interventions for students with reading difficulties](#)
- [Literacy Center Ideas \(K-5\)](#)
- [University of Florida Teaching Reading Online](#)

Other Resources

- [What does dyslexia look like in Middle School and what you can do to help your child](#)
- [Adolescent Literacy Resource Menu](#)
- [Research-based reading instruction for students with learning disabilities](#)
- [K-3 Reading Instruction Handouts](#)