Module Description

We begin this module by introducing the science of reading and why understanding the science matters. We’ll introduce the various bodies of evidence that inform effective reading instruction. We will also become familiar with how reading develops, spanning from children’s earliest alphabetic skills through the continuum of fluent word recognition and the skilled text comprehension characteristics of expert readers. We will consider the relationship between decoding skills and language skills through the Simple View of Reading. We will learn the elements necessary for automatic word recognition through examination of Scarborough’s Reading Rope Model. Through the Four-Part Processing Model of Word Recognition, we will learn how reading is an integrated system that engages four processing systems simultaneously and why reading instruction should target all of the processing systems and enable them to work together. We will also become familiar with how the brain processes language. We will review the five components of reading identified by the National Reading Panel report, as well as challenges that English Learners may face and strategies for their instruction. We will explore factors that contribute to reading difficulties, types of reading disabilities, and the differences in how good readers and struggling readers utilize their brains. We will learn the importance of explicit, systematic instruction and the elements of effective instruction that build upon previously taught skills in a logical sequence. Finally, we will have an introduction to assessments for planning instruction including the differences between screening, diagnostic, progress monitoring, and outcome assessments.

By the end of this module, participants will:

- Understand and explain the language processing requirements of proficient reading and writing including phonological (speech sound) processing; orthographic (print) processing; semantic (meaning) processing; syntactic (sentence-level) processing; and discourse (connected text-level) processing.
- Understand and explain other aspects of cognition and behavior that affect reading and writing, including attention, executive function, memory, processing speed, and graphomotor control.
- Define and identify environmental, cultural, and social factors that contribute to literacy development (e.g., language spoken at home, language and literacy experiences, cultural values).
- Know and identify phases in the typical developmental progression of oral language (semantic, syntactic, pragmatic); phonological skills; printed word recognition; spelling; reading fluency; reading comprehension; and written expression.
- Understand and explain the known causal relationship among phonological skills, phonetic decoding, spelling, accurate and automatic word recognition, text reading fluency, background knowledge, verbal reasoning skill, vocabulary, reading comprehension, and writing.
- Know and explain how the relationships among the major components of research-based literacy development change with reading development (i.e., changes in oral language, including phonological
awareness; phonics and word recognition; spelling; reading and writing fluency; vocabulary; reading comprehension skills and strategies; and written expression).

• Know reasonable goals and expectations for learners at various stages of reading and writing development.

Educator Standards addressed in Module 1:

4.02(5) The elementary educator is highly knowledgeable about research-based literacy development, is able to develop oral and written learning, as well as:

• 4.02(5)(a) understand and explain the language processing requirements of proficient reading and writing including phonological (speech sound) processing; orthographic (print) processing; semantic (meaning) processing; syntactic (sentence level) processing; discourse (connected text level) processing.

• 4.02(5)(b) understand and explain other aspects of cognition and behavior that affect reading and writing including attention, executive function, memory, processing speed and graphomotor control.

• 4.02(5)(c) define and identify environmental, cultural and social factors that contribute to literacy development (e.g., language spoken at home, language and literacy experiences, cultural values).

• 4.02(5)(d) know and identify phases in the typical developmental progression of oral language (semantic, syntactic, pragmatic); phonological skill; printed word recognition; spelling; reading fluency; reading comprehension; and written expression.

• 4.02(5)(e) understand and explain the known causal relationship among phonological skill, phonic decoding, spelling, accurate and automatic word recognition, text reading fluency, background knowledge, verbal reasoning skill, vocabulary, reading comprehension and writing.

• 4.02(5)(f) know and explain how the relationships among the major components of research-based literacy development change with reading development (i.e., changes in oral language, including phonological awareness; phonics and word recognition; spelling; reading and writing fluency; vocabulary; reading comprehension skills and strategies; written expression).

• 4.02(5)(g) know reasonable goals and expectations for learners at various stages of reading and writing development.

4.02(7) The elementary educator is knowledgeable about the administration and interpretation of assessments for planning instruction, including:

• 4.02(7)(a) understanding the differences among screening, diagnostic, outcome and progress monitoring assessments.

• 4.02(7)(b) understanding basic principles of test construction including reliability, validity, norm-referencing and criterion-referencing.

• 4.02(7)(c) understanding the principles of progress monitoring and the use of graphs to indicate progress.

• 4.02(7)(d) knowing the range of skills typically assessed in terms of phonological skills, decoding skills, oral reading skills, spelling and writing.

• 4.02(7)(e) recognizing the content and purposes of the most common diagnostic tests used by psychologists and educational evaluators.
Module Outline

Section 1: Introduction

Welcome

Welcome! You are about to embark on a comprehensive professional learning series focused on the foundational reading skills and based on the Science of Reading. This course will take you through six sequential modules. It is recommended that you take these modules in order as the information from one module is often the foundation for the next.

- Module 1: Introduction to the Science of Reading
- Module 2: Oral Language and Phonology
- Module 3: Phonics and Word Study
- Module 4: Creating Fluent Readers
- Module 5: Developing Vocabulary
- Module 6: Increasing Reading Comprehension

Pre-Assessment

Section 2: Scientific Approach to Reading Instruction

Section Overview

What is the Science of Reading?
In this activity, you will write down what you already know about the science of reading and then review a well-vetted definition.

What Does Research Say About Reading
In this section you will read two articles, “Toward a Curriculum for Teacher Preparation and In-Service Professional Development” and “Six Reasons to Use the Science of Reading in Schools,” and reflect on why teacher knowledge about reading instruction is so essential.

How Reading Develops
In this section, you will learn about the development of early foundational skills and identify the typical development in reading by grade level for kindergarten through third grade.

The Science of Learning to Read
In this section, you will consider what reading is and how students learn to read. You will read an article, “Ending the Reading Wars: Reading Acquisition from Novice to Expert”; watch a video; and read its accompanying article, “How do Kids Learn to Read?” in order to understand the nature of learning to read and the need for explicit instruction.

The Colorado Academic Standards for Foundational Reading Skills
This brief presentation reviews the basic foundational skills in the Colorado Academic Standards.

Check for Understanding
Section 3: Introduction to Reading Research

Section Overview

The Simple View of Reading

In this section, you will take a deep dive into the Simple View of Reading (SVR) by unpacking the model and reviewing a handout.

Scarborough’s Reading Rope Model

In this section, you will view a multimedia presentation on the Scarborough Reading Rope model and its graphic representation.

The Four-Part Processing Model of Word Recognition

The last mental model we will explore is the Four-Part Processing Model for Word Recognition. This model explains reading as an integrated system that engages four processing systems simultaneously. You will learn about these four systems and participate in an activity that will help you to see this model in action.

What the Brain Does When It Reads

Brain research is an area of scientific investigation looking for the best ways to teach children how to read. In this section, you will learn and identify the parts of the brain that are involved in the reading process and view a video, “How the Brain Learns to Read,” with Dr. Dehaene, a leading researcher on learning and the brain.

The Five Components of Reading

In this section, you will review each of the five components, what they are, and the types of instruction needed in each area with adjustments for ELs. You will read an article and take note of all of the research-based strategies included to address challenges when teaching ELs.

Types of Reading Difficulties

In this section, you will explore factors that contribute to reading difficulties. You will also use the Simple View of Reading to learn about two distinct forms of reading difficulties in children: word reading or dyslexia (difficulty in learning to translate print to speech) and reading comprehension difficulties (Hulm & Snowling, 2016). You will view a video, "Expert Minute with Dr. Tim Odegard," and review resources for helping to address dyslexia. You will also explore language comprehension difficulties by listening to Dr. Dorothy Bishop, a seminal researcher in this field. You will explore additional resources for students with developmental language disorders. Finally, you will explore the differences in how good readers and poor readers utilize their brains.

Check for Understanding

Section 4: Effective Instructional Practices

Section Overview
Features of Effective Instruction

In this multimedia presentation, you will explore the five areas of effective instruction, including instruction that is systematic and explicit, provides multiple models, and offers multiple opportunities for students to practice along with explicit correction procedures and scaffolds.

Watch and Learn: Explicit Instruction

In this activity, you will watch a video describing explicit instruction and complete an activity to further understand and reinforce the information.

Watch, Read, and Learn: Where Are the Features?

In this activity you will view a video and complete a checklist, looking for the features of effective instruction.

Check for Understanding

Section 5: Understanding Reading Assessment

Section Overview

Understanding Reading Assessment

In this section of the module you will explore reading assessment and why early diagnosis and intervention is essential. You will be viewing a video, “Can Science Help Bridge the Classroom Gap?” and participate in an activity on how to select effective classroom tools, considering its validity, reliability, sensitivity, and specificity.

Types of Reading Assessments

In this section, you will learn the differences between four types of assessments- namely, screening, diagnostic, outcome, and progress monitoring. You will read an article about assessment types and fill in a chart.

Check for Understanding

Section 6: Closing Activities

Section Overview

Put it into Practice

Post-Assessment

Module Feedback

Module Completion