



BUILDING A STRONG FOUNDATION FOR LIFELONG LITERACY SUCCESS

MODULE 1: UNDERSTANDING THE SCIENCE OF READING— FACILITATOR'S GUIDE

PUBLIC CONSULTING GROUP

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Module 1: Understanding the Science of Reading

Understanding the Science of Reading

Module 1, Understanding the Science of Reading, introduces the science of reading and explains the importance of understanding the science. Table 1.1 provides an overview of each section and its key content.

Introduction: Section overview and pre-assessment	
Scientific Approach to Literacy Instruction	Participants are introduced to the science of reading, guided through a synthesis of the research on how students learn to read and how they can best be taught, and provided with information on how reading develops. Additionally, this section provides participants with a review of the Colorado Academic Foundational Reading Skills Standards.
Introduction to Reading Research	Participants learn about major conceptual models within reading research, what the brain does when it reads and the five components of reading. This section of the module also dives into the types of reading difficulties.
Effective Instructional Practices	This section of the module focuses on the elements of effective instruction in five key areas. Highlighted instructional practices include systematic and explicit instruction, multiple models provided to students, and multiple opportunities to practice with explicit correction procedures and scaffolds.
Understanding Reading Assessment	Participants are introduced to different types of assessments for planning instruction and the purposes of each. This section also explores root cause analysis and the use of diagnostic data to provide intervention to struggling readers.
Closing: Section summary and post-assessment	

Table 1.1 *Understanding the Science of Reading Overview*

A complete list of learning objectives for this module can be found in [Appendix A](#), as referenced in the Detailed Module Outline within the Resource Library of the Learning Management System (LMS).

[Appendix B](#) includes the bibliography for Module 1 content.

Facilitation/coaching ideas for each section follow. Note that introductory and closing sections are not included as these are best done asynchronously.

Supporting Alignment Across Classrooms and Tiers of Instruction

The online coursework introduces a large amount of vocabulary and terminology to be used during instruction with students. To support students as they move across grade levels and across settings (e.g., services for English Learners, services across MTSS provided by other professional support staff, specially designed instruction provided outside of the general education classroom), facilitators are

encouraged to create a common language for terminology introduced across all modules to create a consistent vocabulary across all classrooms and settings as it relates to literacy instruction. Facilitators are encouraged to begin this discussion and activity early within course content and add to the local “glossary” as new terminology is encountered. During sessions, as terminology is encountered, facilitators can pause to record and have brief discussions related to the common language that will be used.

This practice will benefit all students but is critical for those students who may receive services across settings. For example, a student may receive direct services from an interventionist or special education teacher to support the development of phonological awareness and hear two different sets of language for specific tasks. Another student may receive additional phonics instruction through an interventionist or literacy specialist using the term *vowel digraph* while the general education teacher uses the term *vowel team*. Collaborative conversations across classroom teachers and other providers related to this common language can occur through in-person sessions, at grade-level planning meetings, or during other conversations facilitated by instructional leaders in the school.

Scientific Approach to Literacy Instruction

Overview

Participants are introduced to the science of reading, guided through a synthesis of the research on how students learn to read and how they can best be taught, and provided with information on how reading develops. Additionally, this section provides participants with a review of the Colorado Academic Foundational Reading Skills Standards. This section of Module 1 is broken into several distinct subsections:

- What Is the Science of Reading?
- What Does Research Say About Reading?
- How Reading Develops
- The Science of Learning to Read
- The Colorado Academic Standards Related to Foundational Reading Skills



Learning Objectives

- Understand what research says about reading and how it develops.



Essential Questions

- What is the science of reading?
- Why is it critical to be grounded in an understanding of the science of reading?
- Why is teacher preparation during preservice and inservice in the science of reading necessary?

Before

Activities and actions that facilitators can take to support planning and build background knowledge prior to the in-person session might include the following:

- Poll participants on their level of understanding of reading science, including self-reporting their level of understanding of key terms related to this science, previous training related to literacy instruction, current curriculum being used or other information that will assist in understanding the prior learning and experiences of participants.
- Gather data related to student demographics, overall student performance in literacy in the district/region/school of participants or other information that will assist in understanding the current landscape.

During

Learning Activities



Activating Prior Knowledge: Quick Write Collaboration

Materials/Resources

- Lined paper for each participant
- Pen/pencil for each participant

Directions

1. Form groups of three to five people.
2. Set a timer for 1 minute, and have each group member quickly jot down ideas from module 1 that they held onto. This might include new information they learned, big ideas, relationship of key ideas to their classroom practices, or any other range of items.
3. At the end of 1 minute, have participants pass their paper to the left. Set another 1-minute timer, and have participants read the new paper and add any additional ideas.
4. Repeat the process until each participant receives back their own paper.
5. Debrief with the group: What key ideas did everyone identify? What key ideas and takeaways were different for participants? Are there any key takeaways others identified on your paper that you want to learn more about?



Building Content Knowledge: Teaching Reading Is Rocket Science



Materials/Resources

- Article: "[Teaching Reading Is Rocket Science](#)" (excerpt *Toward a Curriculum for Teacher Preparation and In-Service Professional Development*, pages 14–21)
- Read and Reflect: Teaching Reading reflection (within Learning Management System (LMS))
- [Jigsaw](#) protocol for facilitator reference

Directions



1. Direct all participants to What Does Research Say About Reading? (Read and Reflect: Teaching Reading) within the Learning Management System (LMS).
2. Have participants pull up their completed reflection in the Learning Management System (LMS).

-----OR-----



1. Divide participants into three groups. Assign expert groups (see recommendations below).
 - a. Group 1: Reading Psychology and Development (pages 14–17)
 - b. Group 2: Language Structure (pages 17–19)
 - c. Group 3: Best Practices and Assessment That Informs Teaching (pages 20–21)

Give groups 10–12 minutes to become “experts” on their assigned section. As they read their assigned section, they can answer and reflect on any of the five questions within the Learning Management System (LMS) within the reflection box addressed within their expert area. (They will answer the other questions as they learn from the other expert groups.) At the end of 10–12 minutes, create groups with one expert from each area. Have each expert summarize their section and review the reflection questions addressed. Ensure participants are completing each reflection and response to the prompts addressed as each expert presents in their group.

2. Review prompts quickly as a group, and answer any clarifying questions.



Building Content Knowledge: How Do Kids Learn to Read?

Materials

- Article: “[How Do Kids Learn to Read? What the Science Says](#)”
- Video: “How Do Kids Learn to Read? What the Science Says”
- Handout: [How Do Kids Learn to Read? What the Science Says](#)



Directions

1. Direct participants to the subsection The Science of Learning to Read within the Learning Management System (LMS), and locate the handout.



Have participants pull up their completed [How Do Kids Learn to Read? What the Science Says](#) handout.

-----OR-----



Give participants 10 minutes to read the article and jot any responses/ideas on their handout. Watch the “How ” video as a group. Have participants add any additional responses/ideas on their [How Do Kids Learn to Read? What the Science Says](#) handout as they watch.

2. Debrief and review responses with the group.



Reflection: Think-Pair-Share

Materials

- n/a

Directions

Facilitate discussion with participants related to the alignment of their own current instructional materials with the science of reading, anchoring to the content within the online coursework using a Think-Pair-Share model. Alternatively, you might choose to build in these application prompts throughout the session following a content-building activity. This activity is not meant to be an in-depth look at every component of literacy instruction but a starting point for participants to begin to think about the “why” behind current practices and teaching materials that they might use. As the course progresses, participants will have the opportunity to take a more in-depth look at each specific component. Sample discussion prompts include the following. Text in parentheses following each prompt provides the anchoring online course work that can be referenced as needed.

- What past professional learning opportunities have been offered to support my deep understanding of the English language? (What Does Research Say About Teaching Reading, “Teaching Reading Is Rocket Science”)
- How do my current materials, including the local curriculum scope and sequence, align with how we know reading develops? (How Reading Develops, Typical Accomplishments for Foundational Reading Skills)
- How do curriculum materials or planning tools take into account cultural factors impacting my students? (How Reading Develops, Typical Accomplishments for Foundational Reading Skills)
- In what areas do my current instructional materials include systematic, explicit instruction? (The Science of Learning to Read, “How Do Kids Learn to Read?, What the Science Says”)
- Do my current instructional materials include a cueing system? (The Science of Learning to Read, “How Do Kids Learn to Read?, What the Science Says”)

NOTE: It is important to facilitate this discussion with a safe, non-judgmental tone. The purpose of this activity is to build a level of safety for participants in identifying and reflecting on strengths and opportunities for growth with the materials and practices in place.

What's Next?

- Upcoming Course Content
 - Introduction to Reading Research
 - The Simple View of Reading
 - Scarborough's Reading Rope Model
 - The Four-Part Processing Model of Word Recognition
 - What the Brain Does When It Reads
 - The Five Components of Reading
 - Types of Reading Difficulties
- Coaching Opportunities (see "After" options below)

After

- Coaching
 - Collaborate with individual(s)/groups who may have set a goal to extend any learning from this section through discussion and providing additional resources to support additional learning.
 - Support participants in finalizing selection of students for their case study.

Introduction to Reading Research

In this section of Module 1, participants learn about major conceptual models within reading research, what the brain does when it reads and the five components of reading. This section of the module will also dive into the types of reading difficulties and is divided into the following subsections:

- The Simple View of Reading
- Scarborough's Reading Rope Model
- The Four-Part Processing Model of Word Recognition
- What the Brain Does When It Reads
- The Five Components of Reading
- Types of Reading Difficulties



Learning Objectives

- Apply the three conceptual models that define reading development.
- Understand how the brain learns to read.
- Describe the five components of reading and their role in reading development.
- Identify factors contributing to reading difficulties.



Essential Questions

- What are the three conceptual frameworks/models that define reading development?
- How can the conceptual frameworks/models be applied in your teaching practice?
- How does understanding brain research affect your teaching practice?

Before

Activities and actions that facilitators can take to support planning and build background knowledge prior to the in-person session might include the following:

- Facilitate online discussion as participants complete online coursework with prompts and questions related to how each of the conceptual models is related to one another.
- Review and provide feedback for any submitted work.

During

Learning Activities



Building Content Knowledge: Unraveling the Reading Rope

Materials/Resources

- Multicolored pipe cleaners (8 per individual/group)
- Small sticky notes
- Pens or markers
- Copies of the Reading Rope Model (or projected image)

Directions

1. Provide individuals or pairs with eight pipe cleaners. Ask participants to braid together the ends of three of the pipe cleaners.
2. Explain that these three strands represent the Word Recognition side of the Reading Rope. As you review each component, have participants fold a sticky note over each strand and label the strands as you discuss them. Set aside.
3. Have participants twist together the ends of the remaining five pipe cleaners. These strands represent the language comprehension side of the reading rope. Review the components that make up language comprehension, and have participants fold sticky notes over each strand and label the strands as you discuss each.
4. Ask participants to wrap the ends of the word recognition group of strands and the language comprehension strands together to form one connected “rope.” Remind participants that fluency is needed to bridge the two sides of the rope to result in skilled reading.
5. Debrief. How does the Simple View of Reading overlay onto the Reading Rope Model?

NOTE: You can have participants bring their Reading Rope back to each subsequent session for reference throughout the duration of coursework to support connections across module content.



Building Content Knowledge: Apply Scarborough's Reading Rope



Materials/Resources

- Apply Scarborough's Reading Rope Framework activity (within the Learning Management System (LMS))

Directions

1. Direct participants to the Apply the Scarborough Reading Rope Model activity within the Scarborough's Reading Rope Model for Reading Instruction subsection.



Have participants pull up their completed Apply the Scarborough Reading Rope Model activity within the Learning Management System (LMS).

-----OR-----



Break participants into three groups, and have each group focus on an assigned scenario. Give each group 3–5 minutes to identify the correct response and be prepared to explain their reasoning.

2. Have each group or individuals present one of the three instructional scenarios, the correct response, and explain their thinking.

NOTE: The Apply the Scarborough Reading Rope Activity is the final activity in the Scarborough's Reading Rope Model subsection of the LMS (immediately before The Four-Part Processing Model of Word Recognition).



Building Content Knowledge: Reconstructing the Four-Part Processor

Materials/Resources

- Set of Four-Part Processing Model cutouts from [Appendix F](#) (one per team)
- Butcher paper or poster paper
- Tape or glue sticks

Directions

1. Review the Four-Part Processing Model, reminding participants that this model demonstrates how a written word is processed in the brain. If it is helpful, show a blank copy of the model.
2. Tell participants they will use the cutouts to replicate the Four-Part Processing Model, including examples of the word "cap," that demonstrate the job of each processor.
3. Place participants in teams of 2–4, with one set of cutouts per team.
4. Allow participants to use their notes or handouts, but encourage them to talk through the model together. The goal is to build the model and be able to speak to the work of each processor using the examples provided in the cutouts.
5. Once teams have completed their model, have one group walk through the model with the group.
6. Debrief. How does the Simple View of Reading overlay onto this theoretical model?



Curriculum Application: Activating the Processors

Materials

- Index cards with literacy activities related to word recognition (1 per card; see sample activities/responses below)
- Four-Part Processing Model for Word Recognition (for participant reference during activity)

Directions

1. Give participants (or each small group of participants) one set of cards that have one literacy activity related to word recognition listed on each card.
2. As a whole group or within small groups, have participants group each activity that activate and strengthen the same processor(s). Remind participants that some activities may activate multiple (or even all) processors and others may focus on strengthening only one.

Sample activities for cards (responses in parentheses):

- Identify the vowel sound in the first syllable of the spoken word *banana*. (phonological)
- Identify different meanings of the word *bark*. (meaning)
- Tell me a word that is a synonym for *happy*. (meaning)
- Write the word *subtract* from a visual model on the board. (orthographic)
- Spell the dictated word *craft* (phonological and orthographic).
- Say *draft*, but instead of /ă/ say /ī/. (phonological)
- Write the dictated sentence "She passed the salt to the other end of the table." (phonological, orthographic, meaning, context)
- Match each uppercase letter to its lowercase partner. (orthographic)
- Tell me the meaning of the word *run* in the sentence "She plans to run for class president." (context)



Building Content Knowledge: The Five Components Described in Brief



Materials/Resources

- Handout: [The Five Components of Reading—Video Viewing Tool](#)
- Video: "Five Components of Reading" (within the Learning Management System (LMS))

Directions

1. Direct participants to the subsection Watch and Learn: The Five Components within the Learning Management System (LMS).

Have participants pull up their completed [The Five Components of Reading—Video Viewing Tool](#) handout.

-----OR-----



Watch the “Five Components of Reading” video as a group. Have participants complete [The Five Components of Reading—Video Viewing Tool](#) handout as they watch.

2. Debrief with participants on any additional information learned about the five components of reading instruction.



Curriculum Application: The Five Key Components in Context

Materials

- Group recording tool
- Handout: [The Five Components Described in Brief](#)

Directions

1. Direct participants to the handout [The Five Components Described in Brief](#) (The Five Components of Reading).
2. In small groups of three to five people, have participants identify the instructional materials and activities they use and the key component that is the focus of each.
3. Debrief as a group, and record group-identified materials and activities that address each component. This display can be kept for reference at future sessions for participants to add research-based materials and activities they add throughout future sessions. Additionally, materials and activities reported that may not be in alignment with the content of later modules can be identified and removed by participants.



Action Planning: Literacy Instruction for English Learners



Materials

- Handout: [The Five Components Described in Brief](#)
- [Action planning](#) protocol (one for each participant)

Directions

1. Direct participants to the handout [The Five Components Described in Brief](#) (The Five Components of Reading).
2. Review the EL Adjustments column. Have participants work with partners to each identify at

least one of the identified strategies that they would like to implement.

3. Have partners identify action steps and resources needed for participants to implement the identified strategy, completing the [action planning](#) protocol to identify goal(s), key tasks and dates for completion. (If applicable, remind participants that they can identify steps that the facilitator/coach will support within their plan.)

NOTE: Some of the strategies identified by participants will be covered in depth in later modules (e.g., partner reading). Have participants consider course content and timelines as they develop their action planning and steps. This plan can be brought back to following sessions for reference throughout the course.

What's Next?

- Upcoming Course Content
 - Effective Instructional Practices
 - Features of Effective Instruction
 - Watch and Learn: Explicit Instruction
 - Watch, Read, and Learn: Where Are the Features?
- Coaching Opportunities (see "After" options below)

After

- Support participants with any identified action steps in their goals related to Literacy Instruction for English Learners.
- Highlight and recognize participants for successful completion of action steps and student successes resulting from the application of new content knowledge and practices.

Effective Instructional Practices

This section of the module is focused on the elements of effective instruction and the elements of effective instruction that build upon previously taught skills in a logical sequence. Participants will engage with content in the following subsections:

- Features of Effective Instruction
- Watch and Learn: Explicit Instruction
- Watch, Read and Learn: Where Are the Features?



Learning Objectives

- Analyze the features of effective instruction in a lesson.



Essential Questions

- What are examples of each feature of effective instruction?
- Why is explicit instruction a critical factor in the delivery of evidence-based reading instruction?

Before

- Gather baseline data using the [Features of Effective Instruction Checklist](#) using a random sample of lesson plans and/or instructional observations.
- Support participants in selecting one lesson plan they will bring to the in-person session if planning for the curriculum application activity.
- Review the instructional strategies in [Appendix E](#) that will be introduced in this section of the module.

During

Learning Activities



Activating Strategy: Free Recall

Materials

- Paper and pen/pencil for each participant
- Group recording tool (e.g., whiteboard, chart paper)

Directions

1. Set a timer for 2 minutes.
2. Have participants write out everything they remember related to what they have learned about

effective instructional practices.

3. Debrief as a group by having participants shout out words, phrases, and statements related to what they learned. Have one to two participants record the words, phrases, or statements on the group recording tool.



Building Content Knowledge: Explicit Instruction



Materials

- Video: "Expert Minute with Dr. Anita Archer"
- Handout: [Expert Minute with Dr. Anita Archer](#)

Directions

1. Direct participants to the subsection Watch and Learn: Explicit Instruction within the Learning Management System (LMS).



Have participants pull up their completed [Expert Minute with Dr. Anita Archer](#) handout.

-----OR-----



Watch the "Expert Minute with Dr. Anita Archer" video as a group. Have participants complete the [Expert Minute with Dr. Anita Archer](#) handout as they watch the video with the group.

2. Review and discuss responses as a group.



Building Content Knowledge: Where Are the Features?



Materials

- Video: "First Grade: Consonant Digraphs," "Third Grade: Main Idea," "Eighth Grade: Activating Background Knowledge," or "Tenth Grade: Close Reading"
- Handout: [Features of Effective Instruction Checklist](#)

Directions

1. Direct participants to the subsection Watch, Read and Learn: Where Are the Features? within the Learning Management System (LMS).



Have participants pull up their [Features of Effective Instruction Checklist](#) which they completed as they watched the lesson.

-----OR-----



Watch the “First Grade: Consonant Digraphs,” “Third Grade: Main Idea,” “Eighth Grade: Activating Background Knowledge,” or “Tenth Grade: Close Reading” video as a group. Have participants complete [Features of Effective Instruction Checklist](#) “T” column and record evidence and recommendations as they watch.

2. Debrief with participants, having them note strengths, weaknesses and evidence and recommendations they recorded.



Curriculum Application: Where Are the Features?

Materials

- Lesson plan for an upcoming literacy lesson (each participant to provide one)
- [Features of Effective Instruction Checklist](#)

Directions

1. Provide participants with a blank copy of the [Features of Effective Instruction Checklist](#) .
2. Have participants work individually or within small groups to use the checklist to examine their lesson plan, record strong and weak features in the “Lesson Plan” column and record any evidence or recommendations on their [Features of Effective Instruction Checklist](#) .
3. Have participants identify and record changes to their lesson plan based on the recommendations.
4. Debrief as a group, having participants share the strengths identified in their plans, identified opportunities for growth and any changes to the lesson plan to address growth areas.

NOTE: You have the option to then use this lesson plan following the session as a model of effective instruction with the changes identified by the group.



Action Planning: Continue, Start, Stop

Materials

- Group or individual recording form
- [Continue, Start, Stop](#) protocol (for reference)

Directions

1. Using the [Continue, Start, Stop](#) protocol, give participants 5 minutes to brainstorm instructional practices that they will continue, start and stop related to the features of effective instruction identified in the section content.
2. Have participants share out responses. If time permits, have participants identify any action

steps needed for any identified practices.

What's Next?

- Upcoming Course Content
 - Understanding Reading Assessment
 - Why Reading Assessment Is Necessary
 - Types of Reading Assessments
 - Planning for Assessment
 - Case Study work (If facilitating the case study portion, inform participants that they will need to select one to three students for their case study, and they will bring all assessment data for each student to the next session related to reading assessment.)
- Coaching Opportunities (see "After" options below)

After

- Model the features of effective instruction in a model lesson using the lesson plan, including any changes made, used in the Where Are the Features? curriculum application activity. Prior to the model, have participants reference the strengths, weaknesses and changes to the lesson plan from the curriculum application activity. As you model the lesson, participants can complete the "Teacher" column of the [Features of Effective Instruction Checklist](#). Following the lesson, debrief with observation participants. Review participants' lesson plans using the [Features of Effective Instruction Checklist](#). Following the review, identify strengths, needs and any recommendations noted by participants.
- Observe participants as they implement the lesson plans reviewed during the curriculum application activity. Note that there is an alternate observation document for instructional leaders to use during observations. Following observation, you can use the coaching guide supports found in [Appendix C](#).
- Identify model teachers, and schedule peer observations of a lesson using the [Features of Effective Instruction Checklist](#). If possible, have the model teacher provide the lesson plan to peer observers prior to the lesson to examine. Debrief with the group following the lesson, identifying specific strengths and areas for growth.

Understanding Reading Assessment

Participants are introduced to different types of assessments for planning instruction and the purposes of each. This section also explores root cause analysis and the use of diagnostic data to provide intervention to struggling readers. Participants will complete the following subsections:

- Why Reading Assessment Is Necessary
- Types of Reading Assessments
- Planning for Assessment



Learning Objectives

- Explain the importance of reading assessment and its role in preventing reading failure.
- Understand the assessment cycle.
- Summarize how reading assessments are currently used in your practice.



Essential Questions

- Why is reading assessment necessary?
- What is the role of each type of reading assessment in the assessment cycle?
- How do valid and reliable assessments inform scientifically based reading instruction?
- How are reading assessments used in your school?

Before

- If facilitating the case study activity, support participants in gathering all of the needed information related to the case study activity. Participants should bring any student performance data related to literacy (e.g., screening data, diagnostic assessment data, progress monitoring data, classroom performance data). Participants should select students that have had some difficulty in acquiring the skills necessary for proficient reading.
- Poll participants related to the literacy assessments used in their district/school/classroom and the purpose of each. Research any unfamiliar assessments.
- Model the use of key vocabulary in discourse with staff, colleagues and participants. Specifically, model referencing the types of assessment in appropriate contexts and attached to the local context (e.g., "Let's look at our universal screening data to see what students might require some additional instructional support.").
- Review and provide feedback on any submitted work.

During

Learning Activities



Building Content Knowledge: Causes of Reading Difficulties

Materials

- Article: "[Genetics, the Environment, and Poor Instruction as Contributors to Word-Level Reading Difficulties: Does It Matter for Early Identification and Instruction?](#)"

Directions

1. Direct participants to the subsection Why Reading Assessment Is Necessary within the Learning Management System (LMS).



Have participants pull up the Kilpatrick article they read in this section. Give participants 5 minutes to review the article.

-----OR-----



Give participants 15 minutes to read the article.

2. Debrief with participants by reflecting on the final sections on early identification and intervention.



Curriculum Application: Assessment Types

Materials

- Handout: [Assessments for an Effective, Comprehensive Reading Program](#)

Directions

1. Direct participants to the [Assessments for an Effective, Comprehensive Reading Program](#) handout (Types of Reading Assessments).
2. Review and discuss each type of assessment, and identify examples of each specific to the local context (if not done in the previous activity). Discuss each of the following questions as a group:
 - What is your school's screening tool (sometimes called a benchmark or interim

assessment)?

- What is the protocol your school uses to determine the students who are at risk?
- What is the diagnostic tool your school uses to determine the root cause for the risk?
- What does intervention look like to students who have a reading delay?
- What is the progress monitoring tool you use to determine if students are responding to the intervention?

(NOTE: You can also choose to embed this activity as you view/review the videos of Dr. Nadine Gaab as she speaks about the need to shift to preventative models.)



Case Study: Reading Assessment

Materials/Resources

- Case study folder(s) for each participant (digital or physical)
- Assessment data for each student selected for the case study (participants provide)

Directions

1. Review the focus and purpose of the case study component of the coursework with participants.
2. Provide participants with a folder for each selected student (or direct them to their digital case study file).
3. Have participants review the assessment data for each student that will be a part of their case study work and consider the following questions:
 - What does the screening data for the student I have selected tell me?
 - Have any diagnostic assessments been completed for the student?
 - What type of progress monitoring has been done?
 - What additional information do I think I might need?



Reflection: I thought, I think

Materials/Resources

- Group recording space (e.g., whiteboard, chart paper)

Directions

1. Give participants time to think about the prompt “I thought, I think ...” to reflect on any perceptions or ideas that have changed over the first module of coursework.

2. At the end of the think time, have participants record what they thought prior to beginning the course and what they now think on the group recording space.
3. Debrief as a group and highlight some of the key ideas shared.

What's Next?

- Upcoming Course Content
 - Building Oral Language and Phonology (Module 2)
 - Language Foundations of Reading
 - Review of Conceptual Models
 - The Role of Early Oral Language in Literacy Development
 - The Importance of Oral Language
 - Oral Language and the Adolescent Learner
 - The Language Foundations of Reading
 - Exploring the Oral Language Systems and Literacy
 - Connections Between Language, Literacy, and Instruction
 - Case Study Activities: Oral Language and Phonology
- Coaching Opportunities (see "After" options below)

After

- Support participants in finalizing any case study selections and organizing to prepare for the more in-depth work that will take place in the next modules.
- Continue activities (e.g., modeling, observation and coaching, lesson plan review, peer observations) related to the features of effective instruction from the previous section as this lays the foundation for the practices in the remaining modules.

Appendix A: Module 1 Objectives

In this module, participants will learn the following:

- 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, phonic 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.

Appendix B: Module 1 Bibliography

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. MIT Press.
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Appendix C: Walk-Through Look-Fors and Coaching Guide

Example Literacy Leader Walk-Through Tool: Effective Instruction

Purpose: Either individually or with your literacy leadership team, leverage this walk-through tool to collect observations and data related to the science of reading and effective literacy instruction. Carefully consider each indicator. If you or your team feel the indicator is observed, consider what evidence you have to support this indicator and document it in the notes section. Following the walk-through and use of tools, consider patterns and trends observed and/or not observed.

User: School leader, principal, assistant principal, literacy specialist/coach and designated literacy leaders

Literacy Instruction

The guiding principle for all science of literacy is effective instruction. While inquiry-based methods can be used, direct instruction must always be present. Much of what students need to understand about linguistics is not discoverable through inquiry-based instruction and must be taught directly/explicitly. Effective instruction comes from what we know about brain science and how new neural networks are developed in the brain through sequential and systematic instruction. Those networks are further developed with repetition and corrective feedback. These elements of effective instruction apply to all parts of literacy instruction, including phonemic awareness, phonics/spelling, fluency, vocabulary and reading comprehension. These elements should be used during any observation or literacy walk-through.

Look-Fors	Notes	Observed (Y/N)
Instruction was presented in a systematic manner. This means the teacher established a system for teaching (e.g., state objectives, review previous learning and teach new concepts).		
All tasks were planned out following a system that is logical and sequential.		
Sequential segments focused on the 5 domains of literacy are well-timed or "quick and perky," without taking too long (laborious, reducing energy level of learners) or rushing through each section (frustrating, students cannot keep up).		
Instruction is explicit.		
There is overt teaching of concepts/skills.		

Look-Fors	Notes	Observed (Y/N)
Explicit instruction often follows an I Do, We Do, You Do protocol. Inquiry method may be employed but only if it is followed up by direct instruction (e.g., word sorts to determine an orthographic convention but direct instruction is immediately followed so students do not leave with a misconception).		
Instruction follows a sequential scope and sequence.		
No evidence of random skills and concepts taught.		
Students are building upon a skills/concept trajectory.		
Multiple means of instruction are used, including multi-sensory inputs. This might include a verbal explanation, a written explanation, multiple examples, and use of manipulatives to deepen a learner's understanding of the skill or concept.		
There are multiple means of expression of learning that includes multiple opportunities to practice.		

Look-Fors	Notes	Observed (Y/N)
Practices might be guided, independent, or peer-assisted.		
Multiple opportunities for practice are as authentic as possible.		
Corrective feedback is provided.		
Feedback is immediate.		
Scaffolding is provided to support all learners (e.g., breaking down the task, providing prompts, reminders, cues and examples).		
Scaffolds match the needs of the learners, including exceptional learners.		
Multiple means of student engagement are employed in the classroom.		

Look-Fors	Notes	Observed (Y/N)
Students are actually engaged in learning through multiple means.		
Students demonstrate engagement by explaining what they are working on.		
Total number of indicators observed out of 20:		

Example Coaching Guide for Effective Practices

Purpose: A tool designed to support school leaders in their instructional coaching as it relates to ensuring practices connected to the science of reading are observed and implemented.

User: School leaders, principals, assistant principals, literacy coaches/interventionists and any designated literacy leader

Step 1

- What went very well during the observation?
- What evidence will you cite to support the effectiveness of the instruction?
 - Systematic instruction
 - Explicit instruction
 - Sequential instruction
 - Multiple means of instruction
 - Students demonstrated multiple means of expression
 - Corrective feedback
 - Use of scaffolding
 - Multiple means of student engagement

Step 2: Identify areas you observed that you would like to expand on with the instructor. This coaching conversation is intended to improve practice in a non-judgmental manner, allowing the instructor to reach conclusions through effective question stems and clear observations. Consider the following stems:

- Give me more information about . . .
- Tell me if this captures your . . .
- Is that idea different from . . .
- I'd be interested in hearing more about . . .
- Give me an example of . . .
- What might you see happen if . . .

Step 3: Based on our conversation, what elements of effective instruction do you plan to work on for improvement?

- Collaboratively develop a goal that the educator is willing to work on to improve one element of effective instruction.
- When do you plan to start working on that goal? What support do you need to work on that goal?

Step 4: When do you think you will be ready for me to observe your goal in action? Establish the next coaching session with the intent to look at the goal the teacher is working on and provide feedback on the implementation of the goal.

Suggested Tools

Step 1

Coach's Evidence	Educator's Reaction (to praise)

Step 2: Notes of Educator’s Responses to Clarifying Questions

Step 3: SMART Goals (Specific, Measurable, Achievable, Relevant and Time-Bound)

Step 4: Action Plan

• What are the next steps needed for the educator to work on the goal?
• How much practice is needed to master the goal?
• What support is needed to master the goal?
• When does the educator feel they are ready to demonstrate achievement of the goal?

Appendix D: Facilitation Protocols and Activities

Jigsaw

A jigsaw is a cooperative learning strategy to support the development of content knowledge and improve listening and communication. While this activity is referenced once in the activities in this guide, jigsaws can be used with any other course reading that may need additional exploration.

Directions

1. Determine how and where you will break up content as equally as possible. This will determine how many expert groups are needed (e.g., three subtopics within the topic might need three expert groups).
2. Assign each participant to an expert group to form groups of equal sizes.
3. Give groups time to study their specific topic or section of reading and become experts in the assigned topic.
4. At the end of the assigned time, form new groups that contain one person from each expert group.
5. Have each expert within the new group teach their group about their assigned topic.
6. Repeat until each expert in the group has presented on their topic.

At the end of the jigsaw, each group will have learned about all content within the specific topic.

Action Planning

If your district or location does not already have one, facilitators can use the framework on the following page for goal-setting and action-planning activities throughout the coursework. This can be adapted to meet the needs of the participant group.

Action Planning Template

GOAL:					
Action Step	Begin Date	End Date	Support Needed	Notes	
					☐
					☐
					☐
					☐
					☐

Continue, Start, Stop

The Continue, Start, Stop framework is a reflective tool that can be useful for action planning as they internalize the new content being learned. The framework is specifically designed to first allow users to identify what is currently working well and aligned with science before identifying something new they will start. Additionally, it allows users to identify what the new practice might replace (e.g., stop). When paired with an action plan, this framework can also be useful in prioritizing actions if multiple new practices are identified. Many times closing activities include a continue-start-stop framework.

Continue	Start	Stop
What current practices are in place that align with the evidence-based practices identified in the course content? Are there any methods/practices that you currently implement but can enhance? If so, how?	What research-aligned practices will I introduce to support the development of proficient reading? Are there any methods/strategies that you plan to embed in your instruction? If so, which ones?	What current practices are not aligned with what reading science identifies as effective practice and need to be removed from my instructional routines and practice?

Think-Pair-Share

Think-Pair-Share is another cooperative learning activity. After posing a question or prompt, participants are given time to think before being paired with another participant to share out their own thoughts and discuss.

Free Recall

Free Recall is a retrieval practice that asks participants to recall information about a topic. In this guide, free recall is used as an activating strategy during in-person sessions to promote retrieval of information learned during the asynchronous portions of the online coursework.

I Thought, I Think

The I Thought, I Think routine supports participants in reflecting on their thinking on a topic and how it might have changed throughout the duration of a section of coursework as a result of the instruction.

Quick Write Collaboration

This cooperative learning activity is used as retrieval practice in this module but could be used in a variety of different ways. Participants are broken into small groups and given time to write everything they learned about a module, similar to the Free Recall strategy. However, at the end of the designated time, participants pass their paper to the left, read the information from the other participants and then are given additional time to add thoughts and information. This process is repeated until each

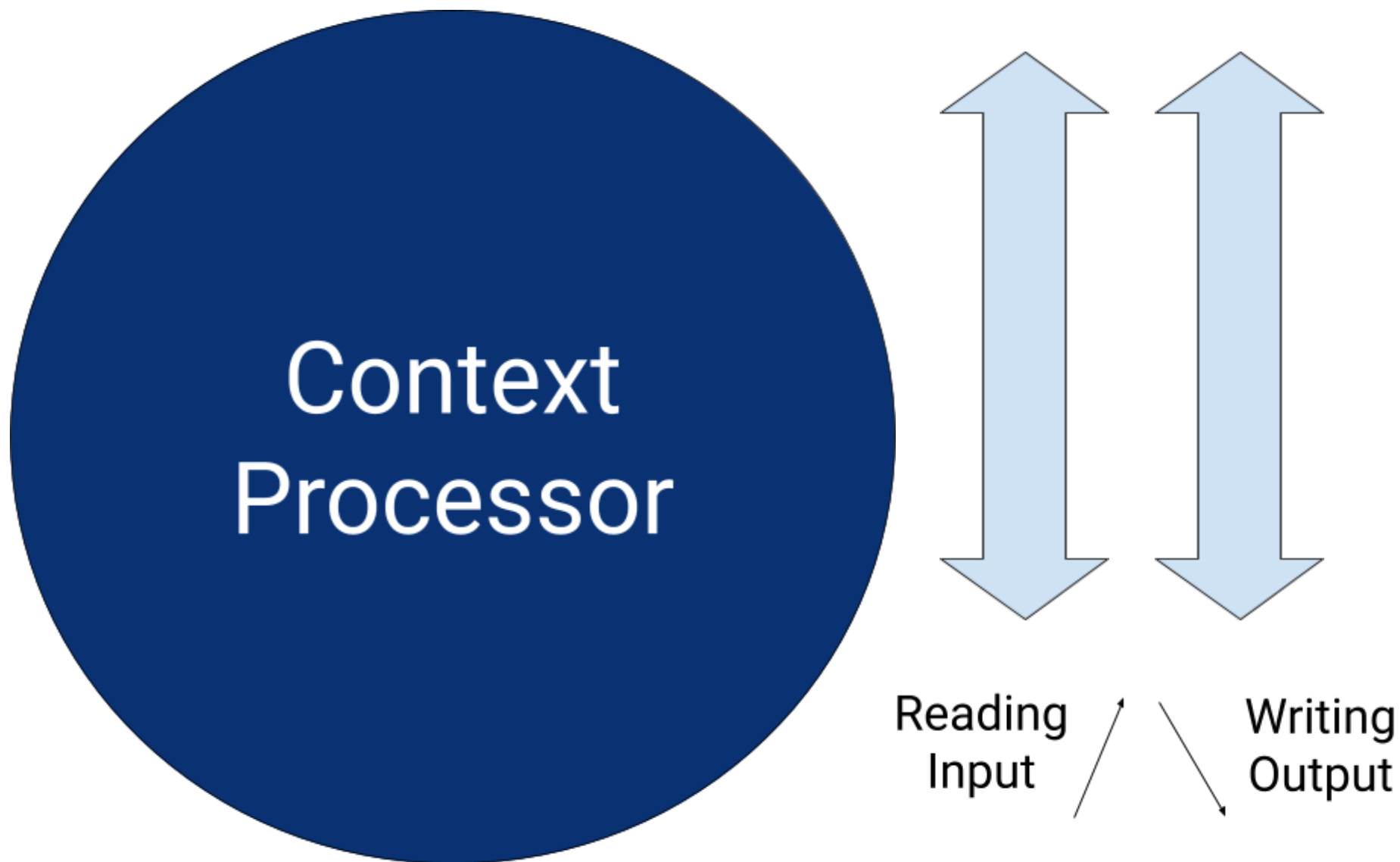
participant receives their own paper with input and thoughts from all group members.

Appendix E: Instructional Strategies

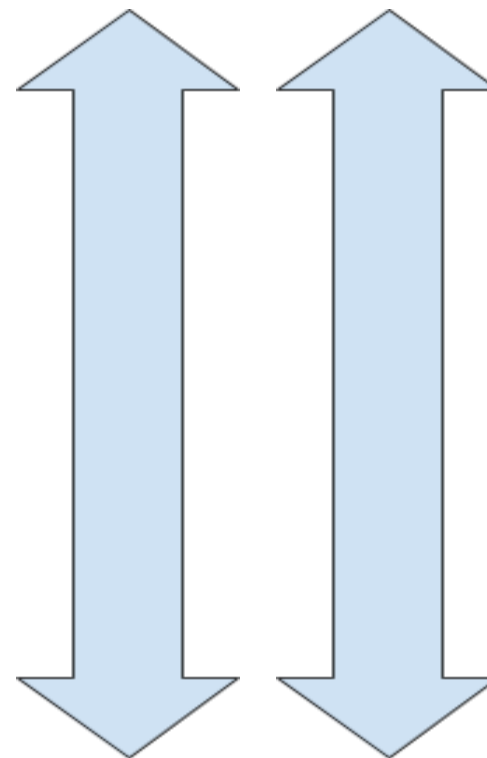
CDE Reviewers: The following instructional strategies can be found within this module

Instructional Strategy	Description	Location in Module
Corrective Feedback	Affirms correct responses and provides specific, corrective feedback for errors	Section 4: Features of Effective Instruction
Multiple Examples or Modes	Modeling and providing examples enables students to understand and visualize expectations	Section 4: Features of Effective Instruction
Repetitions	Repetition in teaching reinforces learning by providing multiple exposures to key concepts, helping students retain information, build fluency, and strengthen long-term comprehension.	Section 4: Features of Effective Instruction
Scaffolding	Students are provided all the support needed to arrive at the correct answer; ultimately, the intent is to remove a scaffold as students learn the skill and can perform it independently and automatically; scaffolded instruction affirms correct responses and provides students with specific, corrective feedback for errors	Section 4: Features of Effective Instruction
Sequential Instruction	A structured teaching approach that presents concepts and skills in a logical, step-by-step progression, ensuring that each new lesson builds on prior knowledge.	Section 4: Features of Effective Instruction
Systematic Instruction	Skills and concepts are presented logically and sequentially, building from simple to complex; instruction is broken down into manageable, step-by-step chunks that are appropriate to the instructional goals and include pacing that is appropriate	Section 4: Features of Effective Instruction
Direct Instruction	Overtly teaching the steps needed to understand a concept or skill or to complete a task	Section 4: Watch, Read, and Learn: Where Are the Features?

Appendix F: Reconstructing the Four-Part Processor



Orthographic Processor



/c/ /ă/ /p/

“The high school senior was excited to receive her *cap* in the mail for graduation.”



Phonological Processor

Phonics

Meaning
Processor

Listening
Input

Speaking
Output

c a p

Answer Key

