The Science of Reading

Nevada Department of Education Microcredential Pathway

Pathway Information

The NDE Science of Reading Microcredential Pathway provides rigorous, practice-based opportunities for educators to demonstrate deep knowledge and application of the five pillars of the Science of Reading: phonemic awareness, phonics, fluency, vocabulary, and reading comprehension. Each pillar-specific microcredential requires teachers to move beyond theory by designing and teaching an interactive lesson aligned to the targeted skill.

Educators must submit authentic evidence of implementation demonstrating their command of the skill and showing that students were actively engaged and learned the content. Required evidence includes a detailed lesson plan, a video recording or administrative observation of the lesson, and student work artifacts. Structured reflection is embedded throughout the process to promote continuous professional growth.

In alignment with Section 39 of SB460, each microcredential requires educators to intentionally incorporate foundational literacy connections, including the use of high-quality, research-aligned literacy materials; differentiated literacy supports; a supportive literacy learning environment; and pupil literacy data-informed instruction. This ensures that teacher practice reflects not only content knowledge, but also evidence-based instructional decision-making.

The pathway culminates in a comprehensive microcredential in which educators explicitly articulate and analyze how each foundational literacy connection informs and strengthens their literacy instruction across all five pillars. The structure of the pathway emphasizes rigor, authenticity, and quality of teacher work, requiring educators to demonstrate applied expertise, reflective practice, and measurable impact on student learning.

Each microcredential course also includes a skill overview, a detailed task list, clear guidance explaining why educators must refrain from using generative AI to write or paraphrase responses, a curated list of resources, and a course evaluation.

Review Process

All submissions are reviewed by a member of the NDE Microcredential Review Team which is composed of former educators and school administrators. Reviewers evaluate submissions using established rubrics and regularly calibrate through shared review processes to ensure evaluations are expert, fair, and unbiased.

Review team members work collaboratively with educators to support successful completion while maintaining the rigor and integrity of each task. Participants who do not earn a microcredential on their first submission receive specific feedback and comments to guide improvement and support a successful resubmission. This process ensures that every educator who earns a microcredential has provided clear and convincing evidence of skill mastery.

Microcredentials

A basic outline of each microcredential is provided below. Most tasks have minimum word counts to ensure that educators fully engage with the content. All templates are linked on the associated task page along with detailed directions for each task.

The microcredentials are available free of charge in the Canvas LMS to all licensed Nevada educators, counselors, and administrators.

The Science of Reading: Phonemic Awareness Microcredential Tasks

Task 1: Student Data
- Use the Phonemic Awareness Student Data Chart template to submit a sample of current student data that will inform the lesson you provide in Task 2. Include data from at least five current students.

Task 2: Lesson Plan
- Use the NDE SoR Microcredential Lesson Plan template.
- Submit a detailed lesson plan with a hands-on or interactive activity focused on phonemic awareness that supports students in learning this foundational reading skill.
- The lesson should target one or more subskills: isolation, identification, categorization, blending, segmentation, deletion, substitution, or addition.

Task 3: Lesson Plan Written Response
- Describe the phonemic awareness subskill(s) in your lesson, the interactive activity, and how the opening/closing activities align with NEPF Standards 1 (New learning is connected to prior learning and experience) and 4 (Students engage in metacognitive activity to increase understanding of and responsibility for their own learning. Include specific examples from your lesson plan.

Task 4: Video or Observation Notes

- Record and submit a 5-minute video (minimum 3 minutes, maximum 5 minutes) OR submit signed observation notes (template provided) from a supervising administrator of your implementation of a portion of the lesson plan you created that demonstrates your process for teaching phonemic awareness as the foundation for high-quality reading instruction.

Task 5: Video or Observation Written Response
- Use the provided template to explain your video or observation segment. Include context from before and after the observed portion.
- Identify phonemic awareness skills students demonstrated successfully and areas needing development.
- Use specific lesson examples.

Task 6: Student Work Artifact
- Submit genuine student work linked to your lesson activity.
- The artifact must reflect learning, demonstrate outcomes, and show that students applied phonemic awareness skills. Examples: photos, digital student samples, video clips.

Task 7: Student Work Artifact Written Response
- Describe the artifact using the template and explain how it demonstrates student learning in phonemic awareness.

Task 8: Reflection
- Discuss the most impactful strategies, methods, and activities in your lesson.
- Explain what made the instruction engaging, meaningful, and relevant, using specific lesson examples.

Task 9: Reflection
- Reflect on a current area of phonemic awareness instruction to improve.
- Outline steps for improvement and identify needed resources or supports, with specific examples from your practice.

The Science of Reading: Phonics Microcredential Tasks

Task 1: Student Data
- Use the Phonics Student Data Chart template to submit a sample of current student data that will inform the lesson you provide in Task 2. Include data from at least five current students.

Task 2: Lesson Plan
- Use the NDE SoR Microcredential Lesson Plan template.
- Submit a detailed lesson plan with a hands-on or interactive activity focused on phonics that supports students in learning this essential building block of reading.
- The lesson should target one or more subskills: Grapheme-phoneme mapping, decoding, encoding, blending sounds to read words, segmenting sounds to spell words, digraphs (sh, th, ch, wh), consonant blends (bl, str, mp), short and long vowels, silent-e patterns, r-controlled vowels (ar, er, ir, or, ur), vowel teams (ai, ea, oa, ee), diphthongs (oi, ou), multisyllabic decoding, syllable types (closed, open, VCe, r-controlled, vowel team, consonant-le), or morphological phonics (prefixes, suffixes, roots).

Task 3: Lesson Plan Written Response
- Describe the phonics subskill(s) in your lesson, the interactive activity, and how the opening/closing activities align with NEPF Standards 1 (New learning is connected to prior learning and experience) and 4 (Students engage in metacognitive activity to increase understanding of and responsibility for their own learning). Include specific examples from your lesson plan.

Task 4: Video or Observation Notes
- Record and submit a 5-minute video (minimum 3 minutes, maximum 5 minutes) OR submit signed observation notes (template provided) from a supervising administrator of your implementation of a portion of the lesson plan you created that demonstrates your process for teaching phonics as a step in high-quality reading instruction.

Task 5: Video or Observation Written Response
- Use the provided template to explain your video or observation segment. Include context from before and after the observed portion.
- Identify the phonics skills students demonstrated successfully and areas needing development.
- Use specific lesson examples.

Task 6: Student Work Artifact
- Submit genuine student work linked to your lesson activity.
- The artifact must reflect learning, demonstrate outcomes, and show that students applied phonics skills. Examples: photos, digital student samples, video clips.

Task 7: Student Work Artifact Written Response
- Describe the artifact using the template and explain how it demonstrates student learning in phonics.

Task 8: Reflection
- Discuss the most impactful strategies, methods, and activities in your lesson.
- Explain what made the instruction engaging, meaningful, and relevant, using specific lesson examples.

Task 9: Reflection
- Reflect on a current area of phonics instruction to improve.
- Outline steps for improvement and identify needed resources or supports, with specific examples from your practice.

The Science of Reading: Fluency Microcredential Tasks

Task 1: Student Data
- Use the Fluency Student Data Chart template to submit a sample of current student data that will inform the lesson you provide in Task 2. Include data from at least five current students.

Task 2: Lesson Plan
- Use the NDE SoR Microcredential Lesson Plan template.
- Submit a detailed lesson plan with a hands-on or interactive activity focused on fluency that supports students in learning this essential building block of reading.
- The lesson should target one or more subskills: accuracy, automaticity, reading rate, prosody, sight word recognition, repeated reading skills, or phrasing/chunking words meaningfully.

Task 3: Lesson Plan Written Response
- Describe the fluency subskill(s) in your lesson, the interactive activity, and how the opening/closing activities align with NEPF Standards 1 (New learning is connected to prior learning and experience) and 4 (Students engage in metacognitive activity to increase understanding of and responsibility for their own learning.
- Include specific examples from your lesson plan.

Task 4: Video or Observation Notes

- Record and submit a 5-minute video (minimum 3 minutes, maximum 5 minutes) OR submit signed observation notes (template provided) from a supervising administrator of your implementation of a portion of the lesson plan you created that demonstrates your process for teaching fluency skills as a step in high-quality reading instruction.

Task 5: Video or Observation Written Response
- Use the provided template to explain your video or observation segment.
- Include context from before and after the observed portion.
- Identify fluency skills students demonstrated successfully and areas needing development.
- Use specific lesson examples.

Task 6: Student Work Artifact
- Submit genuine student work linked to your lesson activity.
- The artifact must reflect learning, demonstrate outcomes, and show that students applied fluency skills.
- Examples: photos, digital student samples, video clips.

Task 7: Student Work Artifact Written Response
- Describe the artifact using the template and explain how it demonstrates student learning in fluency.

Task 8: Reflection
- Discuss the most impactful strategies, methods, and activities in your lesson.
- Explain what made the instruction engaging, meaningful, and relevant, using specific lesson examples.

Task 9: Reflection
- Reflect on a current area of fluency instruction to improve.
- Outline steps for improvement and identify needed resources or supports, with specific examples from your practice.

The Science of Reading: Vocabulary Microcredential Tasks

Task 1: Student Data
- Use the Vocabulary Student Data Chart template to submit a sample of current student data that will inform the lesson you provide in Task 2. Include data from at least five current students.

Task 2: Lesson Plan
- Use the NDE SoR Microcredential Lesson Plan template.
- Submit a detailed lesson plan with a hands-on or interactive activity focused on vocabulary that supports students in learning this essential building block of reading.
- The lesson should target one or more subskills: receptive vocabulary, expressive vocabulary, context clue use, multiple meaning words, morphology, synonyms/antonyms, semantic relationships, academic vocabulary, domain-specific vocabulary, figurative language, or word-learning strategies.

Task 3: Lesson Plan Written Response
- Describe the vocabulary subskill(s) in your lesson, the interactive activity, and how the opening/closing activities align with NEPF Standards 1 (New learning is connected to prior learning and experience) and 4 (Students engage in metacognitive activity to increase understanding of and responsibility for their own learning.
- Include specific examples from your lesson plan.

Task 4: Video or Observation Notes

- Record and submit a 5-minute video (minimum 3 minutes, maximum 5 minutes) OR submit signed observation notes (template provided) from a supervising administrator of your implementation of a portion of the lesson plan you created that demonstrates your process for teaching vocabulary acquisition for early readers.

Task 5: Video or Observation Written Response
- Use the provided template to explain your video or observation segment.
- Include context from before and after the observed portion.
- Identify vocabulary skills students demonstrated successfully and areas needing development.
- Use specific lesson examples.

Task 6: Student Work Artifact
- Submit genuine student work linked to your lesson activity.
- The artifact must reflect learning, demonstrate outcomes, and show that students applied vocabulary skills appropriately.
- Examples: photos, digital student samples, video clips.

Task 7: Student Work Artifact Written Response
- Describe the artifact using the template and explain how it demonstrates student learning in vocabulary.

Task 8: Reflection
- Discuss the most impactful strategies, methods, and activities in your lesson.
- Explain what made the instruction engaging, meaningful, and relevant, using specific lesson examples.

Task 9: Reflection
- Reflect on a current area of vocabulary instruction to improve.
- Outline steps for improvement and identify needed resources or supports, with specific examples from your practice.

The Science of Reading: Reading Comprehension Microcredential Tasks

Task 1: Student Data
- Use the Reading Comprehension Student Data Chart template to submit a sample of current student data that will inform the lesson you provide in Task 2. Include data from at least five current students.

Task 2: Lesson Plan
- Use the NDE SoR Microcredential Lesson Plan template.
- Submit a detailed lesson plan with a hands-on or interactive activity focused on reading comprehension that supports students in learning this foundational reading skill.
- The lesson should target one or more subskills: sentence comprehension, paragraph comprehension, monitoring for understanding, retelling/ summarizing, identifying main idea and key details, sequencing events, making inferences, predicting, question answering, text structure awareness (cause/effect, compare/contrast, etc.), author's purpose, point of view, synthesizing information, critical thinking about text, or connecting text to background knowledge.

Task 3: Lesson Plan Written Response
- Describe the reading comprehension subskill(s) in your lesson, the interactive activity, and how the opening/closing activities align with NEPF Standards 1 (New learning is connected to prior learning and experience) and 4 (Students engage in metacognitive activity to increase understanding of and responsibility for their own learning.
- Include specific examples from your lesson plan.

Task 4: Video or Observation Notes
- Record and submit a 5-minute video (minimum 3 minutes, maximum 5 minutes) OR submit signed observation notes (template provided) from a supervising administrator of your implementation of a portion of the lesson plan you created that demonstrate(s) your process for teaching students strategies that improve reading comprehension.

Task 5: Video or Observation Written Response
- Use the provided template to explain your video or observation segment.
- Include context from before and after the observed portion.
- Identify reading comprehension skills students demonstrated successfully and areas needing development.
- Use specific lesson examples.

Task 6: Student Work Artifact
- Submit genuine student work linked to your lesson activity.
- The artifact must reflect learning, demonstrate outcomes, and show that students applied reading comprehension skills.
- Examples: photos, digital student samples, video clips.

Task 7: Student Work Artifact Written Response
- Describe the artifact using the template and explain how it demonstrates student learning in reading comprehension.

Task 8: Reflection
- Discuss the most impactful strategies, methods, and activities in your lesson.
- Explain what made the instruction engaging, meaningful, and relevant using specific lesson examples.

Task 9: Reflection
- Reflect on a current area of reading comprehension instruction to improve.
- Outline steps for improvement and identify needed resources or supports, with specific examples from your practice.

The Science of Reading: Foundational Literacy Connections Microcredential Tasks

All templates are linked on the associated task page along with specific directions for each task.
Include specific examples from your classroom experience with the materials in your responses.

Task 1: Use of High-Quality, Research-Aligned Literacy Materials
- Use the provided template to write and submit a detailed response that:
    - identifies and describes the high-quality instructional materials used in one of your completed SoR microcredentials (Phonemic Awareness, Phonics, Fluency, Vocabulary, or Reading Comprehension);
    - explains how the materials align with current Science of Reading research and support explicit, systematic literacy instruction; and
    - describes how the materials promote skill development, provide appropriate scaffolding, and reflect evidence-based practices.

Task 2: Differentiated Literacy Supports
- Use the provided template to write and submit a detailed response that:
    - describes the differentiated instructional supports you implemented during one of the SoR microcredentials (You must reference a different microcredential from the one selected for Task 1),
    - explains how the supports were designed to meet the needs of at least two groups of students, those with advanced literacy skills and those with identified reading deficiencies, and
    - describes how each support aligns with the selected microcredential lesson and addresses specific literacy needs of your students.

Task 3: Supportive Learning Environment
- Use the provided template to write and submit a detailed response that:
    - describes an example of each area - classroom behavior management strategies, trauma-informed practices, and developmentally appropriate supports - that you used while implementing instruction aligned to a Science of Reading microcredential. You may pull from one or more of the five microcredentials (Phonemic Awareness, Phonics, Fluency, Vocabulary, and Reading Comprehension) to address this task.
    - Explain how these practices support student engagement, emotional safety, and productive participation during literacy instruction, and how they contribute to an environment conducive to learning the targeted literacy skill.

Task 4: Pupil Literacy Data Informed Instruction
- Use the provided template to write and submit a detailed response that:
    - describes the pupil literacy data you used to inform future instructional decisions (specific learning products, formative/ summative assessments, etc.),
    - explains how the data helped you identify student strengths and shares the strengths you observed,
    - describes the targeted interventions you will you adopt to address the areas of need, and
    - describes how data from multiple Science of Reading literacy domains (Phonemic Awareness, Phonics, Fluency, Vocabulary, and Reading Comprehension) were considered collectively to improve overall reading instruction.

Task 5: Reflection
- Reflect on the most impactful elements of your reading instruction. Discuss the evidence you see that foundational literacy instruction is improving student outcomes, and explain your understanding of how the combined elements of the Science of Reading methodology and your understanding of foundational literacy constructs help children learn to read. Include specific examples from your practice to support the reflection.

Task 6: Reflection
- Reflect on an aspect of your current practice related to the Science of Reading that could be improved. Outline steps for improvement and identify needed resources or supports, with specific examples from your practice.

Addendum

Submission Requirements

- Submissions should demonstrate clear communication and attention to spelling, grammar, punctuation, and sentence structure. Educators are not expected to submit perfect writing. Some errors in writing are acceptable, provided they don't make it difficult for the reviewer to understand and fairly evaluate the content. Authentic educator writing and voice is valued; the focus is on clarity of thinking and demonstrated content knowledge, not flawless writing.

- Submissions must be the original work of the educator.

- All information gleaned from other resources must be attributed to the author or website via in-text citations.

- Student privacy laws require personally identifiable information (PII) to be redacted from submitted documents to protect students' privacy. For photo or video evidence, ensure that students have provided appropriate documentation based on your district's policy. Student work, photos, videos, or any other material containing PII for adults or students is used for evidence only; evidence is not published.

- All criteria must be met to earn this microcredential. Check *Review Criteria* and rubrics before submitting work to ensure that all components of each evidence task are completed.

Generative AI and Integrity Statements

The microcredential will be reviewed once all evidence tasks, reflection tasks, and the *Submit for Review* section have been submitted.

Generative AI Statement: This course requires you to complete tasks that illuminate your understanding and application of the required microcredential knowledge and skills. All work submitted for microcredentials must be original to the participant. While we acknowledge that AI technologies can help with some aspects of the writing process (e.g., grammar, punctuation, spelling), the participant must craft the final product to guarantee original content. Participants may not use AI to generate or paraphrase text.

Integrity Statement: The foundation of the microcredential program is the reliance of Nevada educators to meet their professional responsibilities and engage in professional development with

integrity. In fulfilling NDE Microcredential course requirements, participants must complete all tasks as described, submit their own work, and demonstrate mastery of content and skills. Participants who copy the work of another and submit it as their own and participants who use artificial intelligence to generate or paraphrase their work have violated academic integrity and professional ethics expectations and will be disqualified from earning the microcredential.

Lesson Plan Template

Note: This tool is designed to help educators develop lessons using the high-leverage NEPF Instructional Practice Standards. Teachers may isolate the microcredential skill(s) in this lesson or embed them into content area learning. All components of this tool are required.

Lesson Activities

Grade Level/Subject Area	
Date of Lesson	
Lesson Topic	
Standard(s)	
Materials/Resources	
Learning Objectives	
Vocabulary	

Consider the following topics when crafting your lesson plan:

 1) Implementation of effective literacy instruction using high-quality instructional materials aligned with current research on the science of reading;

2) Techniques for differentiating literacy instruction to meet the needs of pupils with advanced skills and those with deficiencies;

3) Classroom behavior management, trauma-informed practices, and developmentally appropriate supports for a conducive literacy environment; and

4) Use of pupil data, including literacy assessments, to make instructional decisions and improve classroom reading instruction and interventions.

Lesson Introduction: What will students be learning (microcredential skill and/or content area knowledge)?
- NEPF Standard 1: New Learning is Connected to Prior Learning and Experience

Lesson Introduction Notes/Actions

Lesson Activities: What will students be doing, and how will students be engaged in their learning (microcredential skill and/or content area knowledge)?

- NEPF Instructional Standard 2: Learning Tasks Have High Cognitive Demand for Diverse Learners.
- NEPF Instructional Standard 3: Students Engage in Meaning-Making Through Discourse and Other Strategies.

Learning Activities Notes/Actions

Differentiated Instructional Supports

Lesson Wrap-Up: How will students reflect on their learning?

- NEPF Instructional Standard 4: Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning.

Lesson Wrap-Up Notes/Actions

Lesson Assessment: How will student progress be assessed?

- NEPF Instructional Standard 5: Assessment is Integrated into Instruction

Lesson Assessment Notes/Actions

Lesson Extension: How will you extend the skills related to this microcredential in future lessons?

Lesson Extension Notes/Actions