Scaffolding Instruction to Elevate Rigor

Earner implements scaffolding strategies to support more rigorous learning for all students.

Key Method

The earner demonstrates the use of scaffolds to provide students with access to rigorous content and incorporates varying levels of support to engage all students in learning.

Method Components

The Connection Between Scaffolding and Rigor

Just as scaffolds for commercial use help builders access hard-to-reach places, scaffolds in education help students gain access to rigorous content that otherwise might be inaccessible to them. Since the definition of scaffolding differs from one educational expert to another, for the purpose of this micro-credential, scaffolding is defined as *providing any temporary tool, strategy, or assistance to support the student in moving closer to mastery of the standard or reaching a learning or behavior goal.*

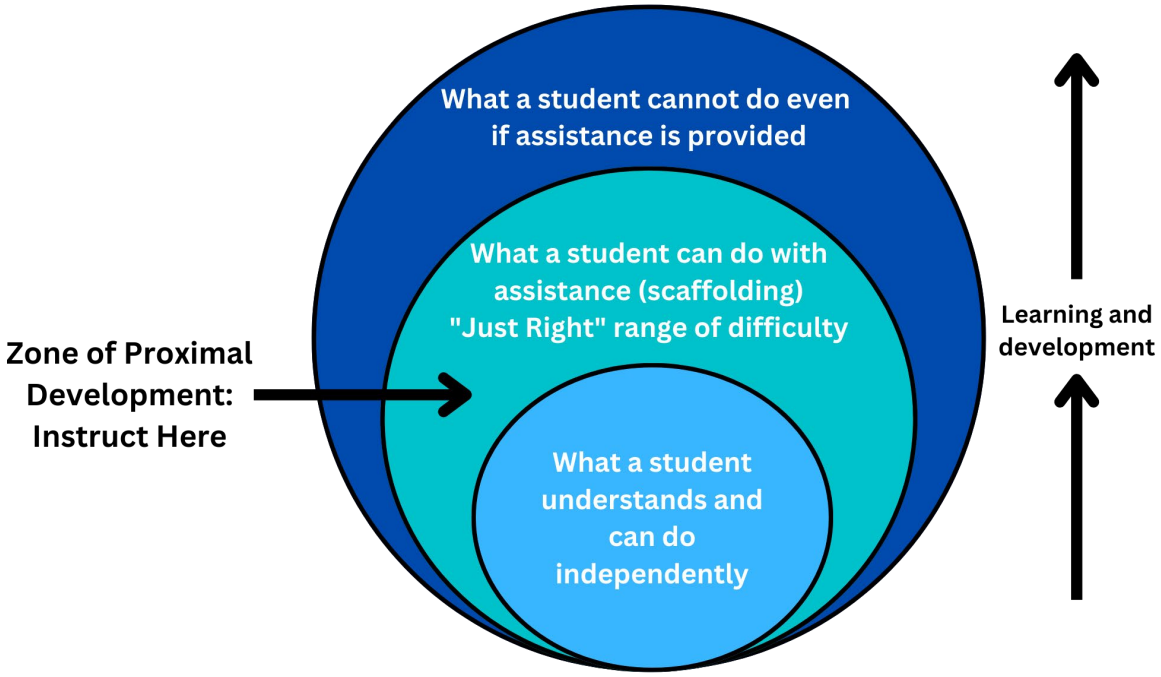
If educators are to move students toward mastery of a standard, they must first determine the starting point. Determining when to provide scaffolded supports and what types of scaffolded supports to provide requires educators to have accurate knowledge of the following:

- what students can understand and do independently
- what students can do with assistance
- what students are unable to do even if assistance is provided

The area between what the student can do independently and what the student cannot do is known as the zone of proximal development (ZPD). The most effective use of scaffolding occurs within the ZPD when students receive scaffolded supports that provide a “just-right” range of difficulty.

Because educators work with learners of diverse abilities and backgrounds, identifying the right amount of scaffolding is critical in helping students be successful on grade-level tasks or meet the rigorous standards of advanced academics. Barbara Blackburn, the author of 18 books on rigor, explains that "rigor is creating an environment where each student is expected to learn at high levels, each student is supported so he or she can learn at high levels, and each

student demonstrates learning at high levels."(2013). Scaffolded supports help reduce the cognitive load rigorous material places on students' working memory so they can focus their efforts on learning and demonstrating new skills and content at high levels.



Characteristics and Types of Scaffolding

To provide the appropriate scaffolds, educators need to be both intentional in planning for scaffolded supports and flexible to provide on-the-spot scaffolded supports during the delivery of a lesson or guided practice. Based on a synthesis of literature (Van de Pol, et al.), all types of scaffolding share three key characteristics:

- contingency—the support is responsive and adaptive to students' ability levels
- fading—the support is gradually lessened or removed over time
- transfer of responsibility—the student assumes ownership of the new learning

In some instances, the educator can provide scaffolded support through direct interaction with students or by having the student interact with a more knowledgeable peer. By carefully planning instruction, educators may anticipate places in the lesson where students might have misconceptions or learning gaps and provide additional materials to serve as scaffolded supports. In other instances, educators break large tasks into smaller steps for students to follow or create checkpoints to guide students toward completion of larger projects. In one final type of scaffolding, the educator uses a familiar text or one readily accessible to students to introduce a new skill. After students gain proficiency in the skill, the educator then asks students to apply the skill to more complex texts.

Table 1: The table contains examples of scaffolding strategies. More information about each teacher-student scaffolding strategy is provided in the Resource section of this micro-credential.

Teacher-Student/Student-Student Scaffolds	Material Scaffolds
Gradual Release Model (I do, we do, you do)	Rubrics for self-assessment
Questioning techniques	Graphic organizers
Prompting, cues, gestures	Laminated templates or formula sheets
Modeling Metacognition (Think Aloud)	Sentence starters/Frame statements
Think, Pair, Share	Word lists/definitions/formulas
Jig Saw	Anchor charts/Cue Cards
Reciprocal teaching	Sample problems or exemplars
Hanger Diagram	Chunking the text/task into smaller increments
	Math manipulatives/syllable dots

Supporting Rationale and Research

Blackburn, Barbara. (2017). *The beginner's guide to understanding rigor*. (p. 1). https://www.barbarablackburnonline.com/rigor

Frey, N., & Fisher, D. (2010). Identifying instructional moves during guided learning. *The Reading Teacher*, *64*(2), 84–95. https://doi.org/10.1598/rt.64.2.1

Mariage, T., Winn, J., & Dabo, A. (2018). Provide scaffolded supports. In J. McLeskey, L. Maheady, B. Billingsley, M. T. Brownell, & T. J. Lewis (Eds.), *High leverage practices for inclusive classrooms* (pp. 197–214). Routledge.

Martin, N. D., Tissenbaum, C. D., Gnesdilow, D., & Puntambekar, S. (2019). Fading distributed scaffolds: The importance of complementarity between teacher and material scaffolds. *Instructional Science, 47*(1), 69–98. https://doi.org/10.1007/s11251-018-9474-0

Oktaviani, K.N., & Retnowati, E. (2018). Faded-examples for learning contextual mathematics problem solving. *Journal of physics: conference series*, 1097 012114. https://iopscience.iop.org/article/10.1088/1742-6596/1097/1/012114/pdf

van de Pol, J., Mercer, N., & Volman, M. (2019). Scaffolding student understanding in small-group work: Students' uptake of teacher support in subsequent small-group interaction. *Journal of the Learning Sciences, 28*(2), 206–239. https://doi.org/10.1080/10508406.2018.1522258

van de Pol, J., Volman, M. & Beishuizen, J.(2010). Scaffolding in teacher–student interaction: A decade of research. *Educational Psychology Review,* 22, 271–296. https://doi.org/10.1007/s10648-010-9127-6

Zucker, T. A., Cabell, S. Q., Oh, Y., & Wang, X. (2020). Asking questions is just the first step: Using upward and downward scaffolds. *The Reading Teacher*, *74*(3), 275–283. https://doi.org/10.1002/trtr.1943

Resources

HLP 15: Provide Scaffolded Supports. This video highlights key elements of high-leverage practice (HLP) 15 and provides tips for educators who are supporting the implementation of this HLP. https://highleveragepractices.org/hlp-15-use-scaffolded-supports

6 Scaffolding Strategies to Use with Your Students. This article from *Edutopia* offers teachers 6 Scaffolding Strategies to Use with Students by Rebecca Alber. Updated January 24, 2014.

Vygotsky Scaffolding: What It Is and How to Use It. This blog, Vygotsky Scaffolding, provides the history behind Vygotsky's scaffolding model and includes tips for using scaffolding in the classroom.

The Zone of Proximal Development. This resource elaborates on Vygotsky's Zone of Proximal Development and how the Think-Pair-Share strategy can be a scaffolded support for learners, especially English Language Learners

Teaching Matters: Scaffolding. This video by Teaching Matters provides an overview of scaffolding, how to plan scaffolding for lessons, and examples of commonly used scaffolds.

18 Ways to Scaffold Learning in the Classroom. This website provides a list of 18 effective ways to scaffold learning and includes descriptions on teacher-tested ways to support students.

Scaffolding Children's Learning. Pre-K and early elementary teachers can view this video for helpful scaffolding strategies to use with young learners.

Just-in-Time Support. According to this ASCD resource Just-in-Time Support, preparation for scaffolded instruction begins during the lesson planning process so all students can be in the learning game; the article also includes practical ways to scaffold instruction.

IRIS module. These resources from the IRIS module: *Providing Instructional Supports: Facilitating Mastery of New Skills* provides explanations and examples of three approaches to scaffolding (content, task, and materials).

Scaffolding Literacy Instruction. In this video, Scaffolding Literacy Instruction for English Language Learners, a 7th grade social studies teacher implements scaffolding strategies to support students as they read complex fiction and nonfiction texts.

Specific Types of Scaffolding Strategies

Gradual Release of Responsibility Instructional Framework,

Questioning Cues and Prompting

Learning from Gesture: How our hands change our minds

Think-alouds (Classroom Strategies)

Think-Pair-Share

How-To: The Jigsaw Method

Cooperative Learning: Jigsaw Method (Video)

Using Reciprocal Teaching (Video)

Reciprocal Teaching

Reciprocal Teaching in High School (Video)

Hanger Diagram for Solving Algebraic Equations

Attack Strategies for Word Problems

Submission Guidelines and Evaluation Criteria

This micro-credential is divided into three areas: Overview, Work Examples and Artifacts, and Reflection. To earn this micro-credential, you must receive "Passing" on Part 1 and Part 3, and "Yes" on all criteria in Part 2.

Part One. Overview

In a written response, describe a time when you presented a lesson to students with skills or content that was too easy or too difficult. Your response should include:

- a description of your school setting, the grade level and content you teach, and your context for earning this micro-credential.

- a description of a lesson too difficult or too easy (This is *different than* the lesson you teach in Task 1.)
- specific behaviors your students demonstrated as a result of the lesson being too difficult or too easy.

This submission is scored either "passing" or "not passing."

Passing: *The response includes a discussion of each bulleted prompt; total response should be a minimum of 250-words and provide adequate detail to help the assessor understand the lesson, your students' behavior, and the context for your submission.*

Please submit this document with the title "Overview_Last Name."

Part Two. Artifacts and Evidence

Task 1: Teaching Rigorous Standards

Select a rigorous Arkansas academic learning standard for the content you teach. In a written response:

- Include the exact wording for the standard as it appears in the Arkansas State Standards and a student learning objective related to the standard.
- Provide a brief description of the skills or knowledge students need to demonstrate before you teach the standard.
- Describe the assessment method (e.g., formative assessment, summative assessment, independent practice, student interview, teacher observation) used to determine the students' current level of performance with the skills related to the standard.
- Explain the assessment results and how the data indicates which students will benefit from scaffolded support for this standard.

As evidence of this task, you will upload your written response (300-word minimum) and the student work sample(s) for the assessment method you used. If you used oral questioning, teacher observation, or a class discussion as the assessment method, please include a link to an audio or video recording as evidence.

Note: Please remove any personally identifiable information from student samples or assessments.

Please save the artifacts for Task 1 with the titles "Task 1 Written Response_Last Name" and "Task 1 Assessment Evidence_Last Name."

Task 2: Providing Teacher to Student or Student to Student Scaffolds

Select a minimum of **two** scaffolding strategies from **Teacher-Student/Student- Student Scaffolds** from Table 1 in the Method Components to support students as they work toward mastery of **the standard you selected for Task 1**. In a written response:

- Explain what makes this standard rigorous.
- Describe how the selected strategy scaffolds the learning objective or standard for certain students **based on your assessment from Task 1.**
- Provide your rationale for selecting these scaffolding strategies as a "just-right" temporary support for the learners.
- Explain how specific students responded to the scaffolded supports you provided.
- Explain how you plan to gradually fade these strategies as students become independent learners and master the standard.

As evidence of this task, upload your written response and an audio or video recording that shows you or the students **implementing two scaffolding strategies to support the standard from Task 1.** Please include any additional documentation that provides evidence of implementation with students.

Please save the artifacts for Task 2 with the titles "Task 2 Written Response_Last Name" and "Task 2 Video_Last Name."

Task 3: Providing Material Scaffolds

Select **three** scaffolding strategies from the **Material Scaffolds** column from Table 1 included in the Method Components to support mastery of **the standard you selected in Task 1**. In a written response:

- Describe how each of the selected material scaffolds is used within the context of this lesson to support students as they work toward the learning objective **and** how the assessment data from Task 1 influenced your choice of scaffolding strategies.
- Describe in detail how particular students responded to the material scaffolds.
- Explain how you plan to gradually fade these strategies as students become independent learners and master the standard.

*As evidence of this task, upload your written response and a student work sample for each of the material scaffolding documents you provided to students as temporary support to meet **the standard you selected in Task 1.***

Please save the artifacts for Task 3 with the titles "Task 3 Written Response_Last Name" and "Task 3 Material Scaffolds_Last Name."

Artifacts and Evidence Scoring Guide

Tasks	"Not Yet"	"Almost"	"Yes"
Task 1: Teaching Rigorous Standards	The written response does not address all bulleted items in the prompt and/or does not submit the assessment artifacts.	The response *only partially* • references the standard. • describes the skills to demonstrate the standard. • describes the assessment method and how it was used to determine students' performance level. • explains the assessment and how results were used to select scaffolding students for specific students. • provides evidence of the assessment through student work samples.	The response *thoroughly* • provides verbatim the Arkansas the learning standard. • describes the skills students need to be successful with the standard. • describes the assessment method to determine students' performance level. • explains how the assessment results were used to select the scaffolding strategies for specific students or groups of students. • provides evidence of the assessment method in an audio or video recording and/or student work samples.
Task 2: Providing Teacher-Student Scaffolds	The response does not address all bulleted items in the prompt and/or does not submit the required artifacts.	The response *only partially* • explains why this is a rigorous lesson • describes how the selected strategies from Table 1 Column 1 support the learning target • provides a rationale for selection. • explains how specific students responded to the scaffolds. • explains plan for fading as students gain proficiency. The earner submits only some of the required artifacts.	The written response *thoroughly* • explains why this is a rigorous lesson • describes ***how*** 2 selected strategies from Table 1 Column 1 support the learning target from Task 1. • provides rationale for selection. • includes specific examples of how students responded to the selected scaffolds. • explains plan for fading as students gain proficiency. The earner submits a video or audio recording of scaffolding interactions and other supporting artifacts.

Task 3: Providing Material Scaffolds	The response does not address all bulleted items in the prompt and/or does not submit the required artifacts.	The response *only partially* • explains why the strategies from Table 1 Column 2 were selected to support specific students • explains student response to scaffolds, • explains plan for fading as students gain proficiency. The earner submits only one material scaffold or no student work samples.	The response *thoroughly* • explains the why the 3 strategies from Table 1 Column 2 were selected to support specific students • explains student response to scaffolds. • explains plan for fading as students gain proficiency. The earner submits copies of the material scaffolds and student work samples.

Part Three: Reflection

In a written response, reflect on your learning from this micro-credential to answer the following questions:

- If you were to reteach this lesson, what might you do differently and why? Explain any additional scaffolded supports you would use and any you would omit.
- What are some of the ways implementing scaffolded supports helped students meet the rigorous expectations of the standard?

This submission is scored either "passing" or "not passing."

Passing: *The response includes a discussion of each bulleted prompt; total response should be a minimum of 250-words and provides a detailed explanation of changes you might make in the scaffolding supports and how the scaffolded supports helped increase the level of rigor for all students.*

Please save this document with the title "Reflection_Last Name."