

HIGH SCHOOL STEM

High-Quality Instructional Materials Review Rubric

Grade Range: 9-12

Evaluator		Rating Committee	
Publisher			
Title of Textbook Series/Instructional Program			
Grade Range of Textbook Series/Instructional Program		Specific Grade Evaluated	

This evaluation rubric is designed to offer an evaluation to determine how well instructional materials align to the National Standards for Career and Technical Education and other criteria for high-quality instructional materials for high school stem. The evaluation rubric includes key considerations for high-quality instructional materials and outlines three **Gateways** for consideration when evaluating materials. Within each Gateway, **Criterion** and related **Indicators** are provided along with **Guiding/Key Questions**.



The evaluation rubric is designed to allow reviewers to determine a threshold for quality for each gateway. Remember to focus on what is present in the instructional materials and any supplemental resources rather than what might be inferred. All scores should be based on evidence observed from the instructional materials themselves.

Scoring Protocol and Criteria:

- **No evidence (0):** No correlation between the standards and lessons, a logical sequence of content cannot be identified and/or there appear to be significant content inaccuracies, essential understandings, knowledge, or skills are not addressed, and opportunities to practice essential skills are not included.
- **Limited (1 or 2):** Limited connections between the standards and the lessons are noted, content appears to contain some inaccuracies or is not always clear, essential understandings, knowledge, or skills are not sufficiently addressed, and there is limited opportunity for students to practice essential skills.
- **Adequate (2 or 4):** Lessons are aligned with the standards, content appears accurate clear, and in sequential order, most of the essential understandings, knowledge, and skills are supported, and many opportunities are provided for students to practice essential skills.

The High-Quality Instructional Materials Review Rubric is comprised of three sections:

Gateway 1: Alignment to Standards - **This is a requirement for submission.**

→ Advance to Gateway 2 only if Gateway 1 has a score of at least 9 points.

Gateway 2: Instructional Support and Usability for Students - **This is a requirement for submission.**

→ Advance to Gateway 3 only if Gateway 2 has a score of at least 9 points.

Gateway 3: Instructional Support, Usability, and Assessment

GATEWAY 1

Alignment to Standards - This is a requirement for submission.

High-quality high school stem materials are coherent and aligned to the National Standards for Career and Technical Education to support student learning. To determine the Gateway rating, educators use evidence gathered from the instructional materials to score indicators related to each criterion.

- Criterion 1.1 (1a – 1d): Alignment and Coherence**
 Materials adequately address the National Standards for Career and Technical Education

Criterion 1.1: ALIGNMENT AND COHERENCE			
CRITERIA	INDICATORS OF SUPERIOR QUALITY	Guiding/Key Questions	SCORE
Materials are aligned closely to the National Standards for Career and Technical Education. 16 possible points	1a. Instructional materials align with the High School Stem curricula listed in the Mississippi High School STEM Frameworks. (4 points)	Do the materials align with the content and skills associated with the applicable National Standards for Career and Technical Education Standards?	0 2 4
	1b. Instructional materials have appropriate content related to high school stem. (4 points)		0 2 4
	1c. Organization is appropriate within and among units of study. (4 points)	Is the amount of time for content and skills explicitly and consistently identified and coherent?	0 2 4
	1d. Formatting and design includes titles, subheadings, and appropriate cross-referencing for ease of use. (4 points)	Do the materials include features that aid students in using the resources effectively?	0 2 4
TOTAL SCORE CRITERION 1.1 [16 possible points]			

Gateway 1 Points AVAILABLE	Gateway 1 Points ACHIEVED	GATEWAY 1 RATING
16	Sum of Criterion 1.1 points	<input type="checkbox"/> Meets (score of 13-16 points) PROCEED TO GATEWAY 2 <input type="checkbox"/> Partially Meets (score of 9-12 points) PROCEED TO GATEWAY 2 <input type="checkbox"/> Does Not Meet (score of 0-8 points) STOP REVIEW
GATEWAY COMMENTS		

GATEWAY 2

Instructional Support and Usability for Students - This is a requirement for submission.

Gateway 2 examines the way materials support teachers to fully utilize the curriculum and understand the skills and learning of their students. To determine the Gateway rating, educators use evidence gathered from the instructional materials to score indicators related to each criterion.

- **Criterion 2.1 (2a – 2d): Student Learning**

Materials identify ways in which materials are designed for each student’s regular and active participation in grade-level/grade band/series content.

Criterion 2.1: STUDENT LEARNING			
CRITERIA	INDICATORS OF SUPERIOR QUALITY	Guiding/Key Questions	SCORE
Materials identify ways in which materials are designed for each student’s regular and active participation in grade-level/grade band/series content. 16 possible points	2a. Instructional materials include explanations that are understandable/usable for students. (4 points)		0 2 4
	2b. Instructional materials include examples that are understandable/usable for students. (4 points)		0 2 4
	2c. Instructional materials include activities that are appropriate for all students. (4 points)		0 2 4
	2d. Instructional materials include content that is understandable and culturally appropriate. (4 points)		0 2 4
TOTAL SCORE CRITERION 2.1 [16 possible points]			

Gateway 2 Points AVAILABLE	Gateway 2 Points ACHIEVED	GATEWAY 2 RATING
16	Sum of Criterion 2.1 points	<input type="checkbox"/> Meets (score of 13-16 points) PROCEED TO GATEWAY 3 <input type="checkbox"/> Partially Meets (score of 9-12 points) PROCEED TO GATEWAY 3 <input type="checkbox"/> Does Not Meet (score of 0-8 points) STOP REVIEW
GATEWAY COMMENTS		

TOTAL SCORE (Gateway 1 and 2)		
GATEWAY 1	GATEWAY 2	GRAND TOTAL
of 16 points	of 16 points	of 32 points
RATING	RATING	

GATEWAY 3

Instructional Support, Usability, and Assessment

Schools can use digital resources in a variety of ways to support teaching and learning. To determine the Gateway rating, educators use evidence gathered from the instructional materials to score indicators related to each criterion.

- Criterion 3.1 (3a-3d)**
Teacher Planning and Learning for Success with the National Standards for Career and Technical Education - Do materials support teacher planning, learning, and understanding of the National Standards for Career and Technical Education? Do materials provide teachers with guidance to build their own knowledge of high school stem and to give all students extensive opportunities and support to explore key concepts?
- Criterion 3.2 (3e)**
Assessment - Do materials offer teachers resources and tools to collect ongoing data about student progress on the Standards? Do materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed standards?
- Criterion 3.2 (3f)**
Effective Use of Technology - Do materials support effective use of technology to enhance student learning? Are digital materials accessible and available in multiple platforms?

Criterion 3.1: TEACHER PLANNING AND LEARNING FOR SUCCESS with the National Standards for Career and Technical Education			
CRITERIA	INDICATORS OF SUPERIOR QUALITY	Guiding/Key Questions	SCORE
Materials support teacher planning, learning, and understanding of the Standards. Materials provide teachers with guidance to build their own knowledge and to give all students extensive opportunities and support to explore key concepts.	3a. Instructional materials provide explanations usable by teachers. (4 points)		0 2 4
	3b. Instructional materials provide examples that are usable and expandable by teachers. (4 points)		0 2 4
	3c. Instructional materials fit the needs and preferences of teachers. (4 points)		0 2 4
	3d. Teachers are provided in-book or		0 2 4

16 possible points	instructor manuals to support planning and learning. (4 points)		
Criterion 3.2: ASSESSMENT			
CRITERIA	INDICATORS OF SUPERIOR QUALITY	Guiding/Key Questions	SCORE
<p>Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed standards.</p> <p>4 possible points</p>	<p>3e. Instructional materials provide example quizzes/assessments that are usable and expandable by teachers. (4 points)</p>		0 2 4
Criterion 3.3: EFFECTIVE USE OF TECHNOLOGY			
CRITERIA	INDICATORS OF SUPERIOR QUALITY	Guiding/Key Questions	SCORE
<p>Materials support effective use of technology to enhance student learning. Digital materials are accessible and available in multiple platforms.</p> <p>4 possible points</p>	<p>3f. Instructional materials provide technological support such as websites, interactive tools, etc. (4 points)</p>		0 2 4

Gateway 3 Points AVAILABLE	Gateway 3 Points ACHIEVED	GATEWAY 3 RATING
24	Sum of points from Criterion 3.1, 3.2, and 3.3	<input type="checkbox"/> Meets (score of 20-24 points) <input type="checkbox"/> Partially Meets (score of 13-19 points) <input type="checkbox"/> Does Not Meet (score of 0-12 points)
GATEWAY COMMENTS		

TOTAL SCORE (Gateway 1, 2, and 3)			
GATEWAY 1	GATEWAY 2	GATEWAY 3	GRAND TOTAL
of 16 points	of 16 points	of 24 points	of 56 points
RATING	RATING	RATING	

ADDITIONAL NOTES