



# High-Quality Instructional Materials





OFFICE OF STANDARDS AND LEARNING  
PK-12 Computer Science



# Oklahoma Computer Science Instructional Materials Evaluation Rubric

Instructional materials selection is an important district decision, and conducting a thorough review of instructional materials at the local level is essential in ensuring the adoption of high-quality instructional materials that meet the needs of students within a district. This evaluation rubric is designed to offer an evaluation that districts can utilize to determine how well instructional materials align to the Oklahoma Academic Standards for Computer Science (OAS-CS) and other criteria for high-quality instructional materials for computer science. 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**. Additionally, **Priority Indicators** are indicated with an asterisk (\*) as they have been deemed most essential to a quality program. Each **indicator** is evaluated as Not Representing Quality, Approaching Quality, or Exemplifies Quality, using a 0-1-2 or 0-2-4 scale score.

All scores should be based on evidence observed from the instructional materials themselves, rather than what might be inferred. The evaluation rubric is designed to allow reviewers to determine a threshold for quality for each gateway. If instructional materials meet the thresholds for Exemplifies Quality or Approaching Quality expectations for a Gateway, reviewers are prompted to move forward with reviewing the next Gateway. If instructional materials do not meet the thresholds for Exemplifies Quality or Approaching Quality expectations for a Gateway, reviewers are prompted not to move forward with reviewing the next Gateway (☒).

<b>Gateway 1</b> Oklahoma Academic Standards-Alignment, Coherence, and Assessment	Exemplifies Quality 	<b>Gateway 2</b> Instructional Support	Exemplifies Quality 	<b>Gateway 3</b> Access and Technology
	Approaching Quality 		Approaching Quality 	
	Not Representing Quality ☒		Not Representing Quality ☒	

<b>Title of Material(s)</b>		<b>Grade(s) Evaluated</b>	
<b>Publisher</b>		<b>Reviewer</b>	

Review Summary				
Gateway		Criterion	Score	Rating
1	Oklahoma Academic Standards- Alignment, Coherence, and Assessment	1.1 Alignment and Accuracy	/8	
		1.2 Coherence	/8	
		1.3 Assessment	/8	
		Gateway 1 Sub-Total	/24	
2	Instructional Support	2.1 Student Learning	/10	
		2.2 Teacher Supports and Supplemental Materials	/8	
		2.3 Instructional Design	/8	
		Gateway 2 Sub-Total	/26	
3	Access and Technology	3.1 Access	/10	
		3.2 Technology	/6	
		Gateway 3 Sub-Total	/16	
4	Statutory and Regulatory Fidelity	4.1 70 O.S. 24-157	/8	
		4.2 OAC 720:10-5-3	/13	
		Gateway 4 Sub-Total	/21	
Overall Rating			Total Score	Final Rating
Exemplifies Quality: All Gateways are Exemplifies Quality.				
Approaching Quality: All Gateways are Approaching Quality or Better.				
Not Representing Quality: Any Gateway is Below Approaching Quality.			/87	

## Gateway 1: Academic Standards- Alignment, Coherence, and Assessment

High quality computer science materials are coherent and aligned to the Oklahoma Academic Standards for Computer Science (OAC-CS) to support student sensemaking of computer science concepts and practice through intentionally structured sequences of learning by leveraging real-world phenomena and/or problems to engage students. To determine the Gateway rating, educators use evidence gathered from the instructional materials to score indicators related to each criterion.

Gateway 1 Overview	Indicators	Available Points
<p><b>Criterion 1.1: Alignment and Accuracy</b></p> <p>The instructional materials are aligned to the Oklahoma Academic Standards for Computer Science.</p>	1a-1c	8
<p><b>Criterion 1.2: Coherence</b></p> <p>The instructional materials attend to the learning progressions emphasized in the standards so that the curriculum is coherent both within grades and across grade bands and is coherent and consistent with the progressions in the Oklahoma Academic Standards for Computer Science.</p>	1d-1g	8
<p><b>Criterion 1.3: Assessment</b></p> <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>	1h-1k	8
		<b>24</b>

<b>Criterion 1.1 Alignment and Accuracy</b>		The instructional materials are aligned closely to the Oklahoma Academic Standards for Computer Science.	
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>
<b>*1a. The instructional materials are aligned to the Oklahoma Academic Standards for Computer Science at grade-level.</b>	Are all of the Oklahoma Academic Standards for Computer Science covered in the curriculum for each grade-level?	0 2 4	
<b>1b. The instructional materials provide opportunities to interact with real-world computer science tools and their purposes.</b>	Do materials provide opportunities for students to engage directly with authentic computer science tools?	0 1 2	
<b>1c. The majority of time anticipated for the coverage of the instructional materials corresponds to standards for computer science.</b>	Does the majority of instructional time address the expected grade level learning outcomes?	0 1 2	
<b>Criterion 1.1 Summary</b>	<b>Rating Levels</b>	<b>Sub-Total</b>	<b>Rating</b>
	Exemplifies Quality: 7-8 Approaching Quality: 5-6 Not Representing Quality: 0-4	/8	

<b>Criterion 1.2 Coherence</b>		The instructional materials attend to the learning progressions emphasized in the standards, so that the curriculum is coherent both within a grade and across grade bands and are coherent and consistent with the progressions in the Oklahoma Academic Standards for Computer Science.		
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>	
<p><b>1d. The instructional materials are consistent with the progression of skills found in the Oklahoma Academic Standards for Computer Science</b></p> <p><b>The instructional materials provide a coherent sequence or collection of activities and texts that build content knowledge, vocabulary, and skills.</b></p>	<p>Do the materials provide a coherent sequence of lessons that follow the progression of grade-level standards?</p> <p>Do the materials provide a coherent sequence of collection of activities and texts that build content knowledge, vocabulary, and skills?</p>	0 1 2		
<p><b>1e. Materials make connections to computer science topics covered in past lessons so students connect new learning with background knowledge.</b></p>	<p>Are past grade-level topics and lessons referenced as new concepts are added?</p>	0 1 2		
<p><b>1f. Materials provide scaffolding or fading of support over time to promote student proficiency and independence with targeted computer science skills.</b></p>	<p>Is scaffolding present to promote understanding and independence in learners?</p>	0 1 2		
<p><b>1g. Content is appropriate to the grade-level and considers students' prior knowledge to incorporate this knowledge into the lesson and/or cover material not previously covered.</b></p>	<p>Is content grade-level appropriate?</p> <p>Does content incorporate student prior knowledge?</p>	0 1 2		

Criterion 1.2 Summary	Rating Levels	Sub-Total	Rating
		<b>Exemplifies Quality: 7-8</b> <b>Approaching Quality: 5-6</b> <b>Not Representing Quality: 0-4</b>	/8

<b>Criterion 1.3 Assessment</b>	The materials provide tools, guidance, and support for teachers to collect, interpret, and act on data regarding student progress toward the Oklahoma Academic Standards.		
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>
<b>1h. Materials provide strategies for gathering information on students' prior knowledge across grade levels.</b>	Do materials provide strategies to gather information on students' prior knowledge?	0 1 2	
<b>1i. Assessments clearly denote which standards are targeted.</b>	Do materials denote what cluster/standard is being assessed by each item?	0 1 2	
<b>1j. Assessments include aligned rubrics that provide sufficient guidance to teachers for interpreting student performance and suggestions for follow-up.</b>	Do materials include scoring guidance (rubrics, anchors, etc.)	0 1 2	
	Does the guidance include support for teachers to interpret student performance and suggestions for follow-up?		
<b>1k. Assessment methods are varied, making them accessible to all students and do not penalize or reward students due to exceptionalities.</b>	Are assessment methods varied to all accessibility for all types of students?	0 1 2	
<b>Criterion 1.3 Summary</b>	<b>Rating Levels</b>	<b>Sub-Total</b>	<b>Rating</b>
	Exemplifies Quality: 7-8 Approaching Quality: 5-6 Not Representing Quality: 0-4	/8	



Gateway 1 Points Available	Rating Levels	Gateway 1 Points Achieved	Gateway 1 Rating
<b>24</b>	Exemplifies Quality: 19 -24	<b>/24</b>	
	Approaching Quality: 13-18		
	Not Representing Quality: 0-12		
<b>Gateway 1 Comments</b>			

## Gateway 2: Instructional Support

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.

- ❑ **Materials must receive a score of Exemplifies Quality or Approaching Quality in Gateway 1 in order to be reviewed in Gateway 2.**

Gateway 2 Overview	Indicators	Available Points
<p><b>Criterion 2.1: Student Learning</b></p> <p>The materials identify ways in which the content is designed for each child's active participation in grade-level/grade band/series content.</p>	2a-2d	10
<p><b>Criterion 2.2: Teacher Supports and Supplemental Materials</b></p> <p>The materials allow teachers to effectively plan and implement content with integrity and to further develop their professional learning.</p>	2e-2h	8
<p><b>Criterion 2.3: Instructional Design</b></p> <p>Materials align with student-centered practices and allow opportunities for students to explore content.</p>	2i-2l	8
		26

<b>Criterion 2.1 Student Learning</b>		The materials identify ways in which materials are designed for each child’s regular and active participation in grade-level/grade band/series content.	
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>
<b>*2a. Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners.</b>	<p>Provides extra support for students working below grade level.</p> <p>Provides extensions for students with high interest or working above grade level.</p> <p>Provides instructional supports to accommodate English Learners (EL).</p>	0 2 4	
<b>2b. Materials within each lesson provide multiple representations by adapting for a variety of different types of learners using alternatives to reading, writing, listening, and speaking such as translations, pictures, or graphic organizers.</b>	Do materials provide multiple representations for different types of learners?	0 1 2	
<b>2c. Materials connect learning to students' homes, neighborhoods, and communities.</b>	Do materials provide or allow for possible connections from content to student homes, neighborhoods, and communities?	0 1 2	
<b>2d. Materials provide guidance and strategies that encourage and support students to draw upon their own cultural, linguistic, and social backgrounds to facilitate learning.</b>	Do the materials include content and questions that encourage students to draw upon their own backgrounds?	0 1 2	

	Rating Levels	Sub-Total	Rating
<b>Criterion 2.1 Summary</b>	Exemplifies Quality: 8-10		
	Approaching Quality: 6-7	/10	
Not Representing Quality: 0-5			

<b>Criterion 2.2 Teacher Supports and Supplemental Materials</b>		The materials allow teachers to effectively plan and implement content with integrity and to further develop their professional learning.	
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>
<b>2e. Materials are educative and accessible for teachers with differing computer science content knowledge (e.g., computer science definitions and examples of computer science concepts are offered to support teacher learning).</b>	Do the materials include features (glossaries, footnotes, recordings, pictures, etc.) that aid teachers in using them effectively?	0 1 2	
<b>2f. Materials provide teachers with common misconceptions and challenges that students have regarding computer science concepts and potential explanations or solutions associated with computer science.</b>	Are common misconceptions and challenges provided?  Are possible explanations or solutions shared to help students overcome these?	0 1 2	
<b>2g. Materials contain teacher' support materials with ample and useful annotations, and suggestions on how to present the content in the student edition and in the ancillary materials.</b>	Are there overview sections and/or annotations that contain narrative information about the computer application content and/or ancillary documents that will assist the teacher in presenting the student material?	0 1 2	
<b>2h. Materials provide an estimated instructional time for each lesson, chapter and unit (i.e., pacing guide).</b>	Do the materials incorporate estimated instructional time for individual lessons, chapters, and units, as reflected in a clear and comprehensive pacing guide?	0 1 2	

Criterion 2.2 Summary	Rating Levels	Sub-Total	Rating
		<b>Exemplifies Quality: 7-8</b> <b>Approaching Quality: 5-6</b> <b>Not Representing Quality: 0-4</b>	/8

<b>Criterion 2.3 Instructional Design</b>		The instructional materials align with student-centered practices and allow opportunities for students to explore content.		
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>	
<b>2i. Materials include a mixture of instructional strategies (e.g., discussions, modeling, student activities, projects).</b>	Do materials allow for a variety of instructional strategies within the lessons and across the curriculum?	0 1 2		
<b>2j. Students are provided with opportunities to collaborate.</b>	Do the materials include activities that allow students to work collaboratively?	0 1 2		
<b>2k. Students are provided with opportunities to explore, provide solutions to open-ended prompts, connect content with real-world applications, and reflect on their learning.</b>	Are students provided with opportunities to explore open-ended prompts and reflect on their own learning?	0 1 2		
<b>2l. Students are provided with opportunities to explore computer science career pathways.</b>	Do the materials showcase career options and pathways related to computer science?	0 1 2		
<b>Criterion 2.3 Summary</b>	<b>Rating Levels</b>	<b>Sub-Total</b>	<b>Rating</b>	
	Exemplifies Quality: 7-8 Approaching Quality: 5-6 Not Representing Quality: 0-4	/8		

Gateway 2 Points Available	Rating Levels	Gateway 2 Points Achieved	Gateway 2 Rating
<b>26</b>	Exemplifies Quality: 20-26	<b>/26</b>	
	Approaching Quality: 14-19		
	Not Representing Quality: 0-13		
Gateway 2 Comments			



## Gateway 3: Access and Technology

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.

- ❑ **Materials must receive a score of Exemplifies Quality or Approaching Quality in Gateway 2 in order to be reviewed in Gateway 3.**

Gateway 3 Overview	Indicators	Available Points
<p><b>Criterion 3.1: Access</b></p> <p>Materials meet technical requirements and design standards to ensure accessibility, compatibility, and ease of use.</p>	3a-3e	10
<p><b>Criterion 3.2: Technology</b></p> <p>Materials integrate digital technology and interactive tools, when appropriate, in ways that support student engagement.</p>	3f-3h	6
		16

<b>Criterion 3.1 Access</b>		Materials meet technical requirements and design standards to ensure accessibility, compatibility, and ease of use.	
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>
<b>3a. Digital materials (either included as part of the core materials or as part of a digital curriculum) are web-based and compatible with multiple internet browsers (e.g., Internet Explorer, Firefox, Google Chrome).</b>	Are materials accessible on a variety of web browsers?	0 1 2	
<b>3b. Digital materials are “platform neutral” (i.e., are compatible with multiple operating systems such as Windows and Apple and are not proprietary to any single platform) and allow the use of tablets and mobile devices.</b>	Are materials accessible on a variety of devices?  Do materials require specific device requirements that may not be accessible on all device types?	0 1 2	
<b>3c. Digital materials are well-designed, easy to use, and encourage learner use.</b>	Are the materials well-designed and easy to use?  Do the materials encourage learner use?	0 1 2	
<b>3d. Digital materials are accessible from within a Learning Management System (LMS).</b>	Can materials be easily shared within a Learning Management System?	0 1 2	
<b>3e. Non-digital versions of materials are available for students who do not have off-campus access to digital materials.</b>	Are there non-digital versions of all materials that students can use when off-campus and away from internet access?	0 1 2	

	Rating Levels	Sub-Total	Rating
<b>Criterion 3.1 Summary</b>	Exemplifies Quality: 8-10		
	Approaching Quality: 6-7	/10	
Not Representing Quality: 0-5			

<b>Criterion 3.2 Technology</b>		Materials integrate digital technology and interactive tools, when appropriate, in ways that support student engagement.	
<b>Indicators</b>	<b>Guiding/Key Questions</b>	<b>Score</b>	<b>Comments</b>
<b>3f. Digital materials are responsive to student input in a way that creates an individualized learning experience.</b>	Do the materials adapt to user actions?  Do the materials allow the user some flexibility or individual control during the learning experience?	0 1 2	
<b>3g. Interactive material is purposeful and directly related to learning.</b>	Does the interactive material support the learning objectives of the lesson(s)?	0 1 2	
<b>3h. Digital materials meet all district privacy and data security requirements.</b>	Do materials meet privacy and data security requirements for districts?	0 1 2	
<b>Criterion 3.2 Summary</b>	<b>Rating Levels</b>	<b>Sub-Total</b>	<b>Rating</b>
	<b>Exemplifies Quality: 6</b> <b>Approaching Quality: 4-5</b> <b>Not Representing Quality: 0-3</b>	<b>/6</b>	

Gateway 3 Points Available	Rating Levels	Gateway 3 Points Achieved	Gateway 3 Rating
<b>16</b>	Exemplifies Quality: 13-16	<b>/16</b>	
	Approaching Quality: 9-12		
	Not Representing Quality: 0-8		
Gateway 3 Comments			

## Gateway 4: Statutory and Regulatory Fidelity

**Gateway 4 examines the statutory and regulatory fidelity of the program.**

To determine the Gateway rating, educators use evidence gathered from the instructional materials to score indicators to each criterion. **If the reviewer response is Yes, then score 0 points. If the reviewer response is No, then score 1 point.**

Gateway 4 Overview		
Criterion	Indicators	Available Points
<b>Criterion 4.1:</b> Materials align with Oklahoma statute 70 O.S. § 24-157.	<b>4a-4h</b>	<b>8</b>
<b>Criterion 4.2:</b> Materials align with Oklahoma Administrative Code 720:10-5-3.	<b>4i-4u</b>	<b>13</b>
		<b>21</b>

<b>Criterion 4.1 Statutory and Regulatory Fidelity</b>	<b>Oklahoma statute 70 O.S. § 24-157</b>	
<b>Indicators</b>	<b>Score</b>	<b>Comments</b>
<b>4a. Do the instructional materials teach or promote the idea that one race or sex is inherently superior to another race or sex?</b>	0 1	
<b>4b. Do the instructional materials teach or promote the idea that an individual, by virtue of his or her race or sex, is inherently racist, sexist or oppressive, whether consciously or unconsciously?</b>	0 1	
<b>4c. Do the instructional materials teach or promote the idea that an individual should be discriminated against or receive adverse treatment solely or partly because of his or her race or sex?</b>	0 1	
<b>4d. Do the instructional materials teach or promote the idea that members of one race or sex cannot and should not attempt to treat others without respect to race or sex?</b>	0 1	
<b>4e. Do the instructional materials teach or promote the idea that an individual’s moral character is necessarily determined by his or her race or sex?</b>	0 1	
<b>4f. Do the instructional materials teach or promote the idea that an individual, by virtue of his or her race or sex, bears responsibility for actions committed in the past by other members of the same race or sex?</b>	0 1	
<b>4g. Do the instructional materials teach or promote the idea that any individual should feel discomfort, guilt, anguish or any other form of psychological distress on account of his or her race or sex?</b>	0 1	

<p><b>4h. Do the instructional materials teach or promote the idea that meritocracy or traits such as a hard work ethic are racist or sexist or were created by members of a particular race to oppress members of another race?</b></p>	<p>0 1</p>		
<p><b>Criterion 4.1 Summary</b></p>	<p><b>Rating Levels</b></p>	<p><b>Sub-Total</b></p>	<p><b>Rating</b></p>
	<p>Exemplifies Quality: 7-8  Approaching Quality: 5-6  Not Representing Quality: 0-4</p>	<p><b>/8</b></p>	



<b>Criterion 4.2 Statutory and Regulatory Fidelity</b>	<b>Oklahoma Administrative Code 720:10-5-3</b>	
<b>Indicator</b>	<b>Score</b>	<b>Comments</b>
4i. Are the instructional materials subjective in content and partial in interpretations?	0 1	
4j. Do the instructional materials encourage or condone civil disorder, social strife, or disregard for the law?	0 1	
<p>4k. Do the instructional materials degrade or avoid teaching, where appropriate, high moral standards, including:</p> <ul style="list-style-type: none"> <li>• Honesty?</li> <li>• Respect for parents, teachers, and those properly in authority?</li> <li>• The importance of the work ethic in achieving personal goals?</li> <li>• The existence of absolute values of right and wrong?</li> </ul>	0 1	
4l. Do the instructional materials de-emphasize or play down the importance of the family as the core of American society, and do they degrade traditional roles of men and women, boys and girls?	0 1	
4m. Do the instructional materials exclude or undermine the principles of the free enterprise system and the effectiveness of the free enterprise system?	0 1	
4n. Do the instructional materials include extraneous material unrelated to the subject of the textbook, negatively impacting the intellectual development of the child's instruction in reading, writing and arithmetic?	0 1	

<p><b>4o. Are the instructional materials designed to neglect or suppress an awareness of the religious and classical culture of the western world and its significance to the preservation of the liberties of the American people?</b></p>	<p>0 1</p>	
<p><b>4p. Do the instructional materials present imbalanced and nonfactual treatments to controversial, political, and social movements with biased editorial judgments?</b></p>	<p>0 1</p>	
<p><b>4q. Do the instructional materials promote:</b></p> <ul style="list-style-type: none"> <li>• <b>Illegal lifestyles?</b></li> <li>• <b>Illegal sexual behavior?</b></li> <li>• <b>Sadistic behavior?</b></li> <li>• <b>Degrading behavior?</b></li> </ul>	<p>0 1</p>	
<p><b>4r. Do the instructional materials include blatantly offensive language or illustrations?</b></p>	<p>0 1</p>	
<p><b>4s. Do the instructional materials include violence for reasons of excitement, sensationalism or as an excuse for relevance?</b></p> <ul style="list-style-type: none"> <li>• <b>If violence does appear in the instructional materials, do the instructional materials treat the violence without context of cause or consequence?</b></li> </ul>	<p>0 1</p>	
<p><b>4t. Do the instructional materials treat the subject of historical origins of humankind in a subjective and biased manner?</b></p>	<p>0 1</p>	
<p><b>4u. Do the instructional materials invade the privacy of the pupils or the pupils' parents?</b></p>	<p>0 1</p>	

<b>Criterion 4.2 Summary</b>	<b>Rating Levels</b>	<b>Sub-Total</b>	<b>Rating</b>
	<b>Exemplifies Quality:</b> 10-13 <b>Approaching Quality:</b> 7-9 <b>Not Representing Quality:</b> 0-6	<b>/13</b>	

Gateway 4 Points Available	Rating Levels	Gateway 4 Points Achieved	Gateway 4 Rating
<b>21</b>	Exemplifies Quality: 16-21	<b>/21</b>	
	Approaching Quality: 11-15		
	Not Representing Quality: 0-10		
<b>Gateway 4 Comments</b>			