



Computer Science Evaluation Tool

2018 Curricular Materials Review

Grades 6-8 Computer Science¹

PUBLISHER INFORMATION

- Publisher Name:
- Title:
- ISBN #:
- Author:
- Copyright:

INSTRUCTIONS:

Publishing Company:

- Complete the course evaluation form below. Please provide written justification as to how the material meets the standard along with location references. If a justification requires additional space, please submit response on an additional document.

Review Team Member:

- Please use information and attachments to complete the course evaluation form.
- Explain any discrepancies between your findings and those provided information. Explanations and comments should directly reflect the rubric.
- Further, explain any findings.

¹ [Idaho Computer Science Standards](#)

SCORING:

- 0 = No Alignment – Not Evident: content as described in the Standards is not evident.
- .5 = Partial Alignment – Partially Evident: content as described in the Standards is partially evident and there are few gaps.
- 1 = High Alignment – Clearly Evident: content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is clearly evident.
- N/A = Not applicable for standard.

STANDARDS ALIGNMENT EVALUATION RUBRIC:

Standard 1: Computing Systems (CS)

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.CS.01: Exemplify how computational devices impact the quality of life (both positively and negatively) and enhance the ability of people to perform work, communicate, and interact with others. (Grades 6-8)		
6-8.CS.02: Compare and contrast the ways that humans and machines process instructions and sense the world. (Grades 6-8)		
6-8.CS.03: Differentiate features of everyday objects that contain computing components (i.e., computing systems that collect, store, analyze, and/or transmit		

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
data) (e.g. Kinect, GoPro, smartphone, car). (Grades 6-8)		
6-8.CS.04: Apply troubleshooting strategies for solving hardware and software problems (e.g. recognizing, describing, reproducing, isolating, fixing and retesting). (Grades 6-8)		
6-8.CS.05: Compare and contrast the capabilities of different hardware and software in computer systems (e.g. processors, display types, input devices, communication, and storage capabilities). (Grades 6-8)		

Standard 2: Data Analysis (DA)

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.DA.01: Describe the trade-off between quality and file size of stored data (e.g. music, video, text, images). (Grades 6-8) or collaboratively. (Grades 3-5)		

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.DA.02: Defend the selection of the data, collection, and analysis needed to answer a question. (Grades 6-8)		
6-8.DA.03: Understand that data collection is used to make recommendations to influence decisions as well as predict behavior. List the positive and negative impacts. (Grades 6-8)		
6-8.DA.04: Encode and decode information using encryption/decryption schemes. (e.g. Morse code, Unicode, binary, symbols, student-created codes, simple ciphers). (Grades 6-8)		
6-8.DA.05: Identify layers of abstraction in different contexts (e.g. video and animation are made of audio and video frames, which are made of pixels, which are made of color codes). (Grades 6-8)		

Standard 3: Impacts of Computing (IC)

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.IC.01: Explore security risks associated with using weak passwords, lack of encryption and/or insecure transactions. (Grades 6-8)		
6-8.IC.02: Explore how computer science fosters innovation and enhances other careers and disciplines. (Grades 6-8)		
6-8.IC.03: Describe ethical issues that relate to computers and networks (e.g. equity of access, security, privacy, ownership and information sharing, copyright, licensing). (Grades 6-8)		
6-8.IC.04: Explore how the Internet impacts global communication and collaboration. (Grades 6-8)		
6-8.IC.05: Design, develop, and present computational artifacts that have a positive social impact (e.g. web pages, mobile applications, animations). (Grades 6-8)		

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.IC.06: Redesign user interfaces to be more inclusive, accessible, and minimizing the impact of the designer's inherent bias. (e.g. web pages, mobile applications, animations). (Grades 6-8)		
6-8.IC.07: Understand and explain the elements of federal, state, and local regulations that relate to digital citizenship (e.g. COPPA, CIPA, state laws, district policies). (Grades 6-8)		
6-8.IC.08: Summarize current events and changes resulting from computing and their effects on education, the workplace, and society. (Grades 6-8)		
6-8.IC.09: Predict positive and negative social impacts of existing or student created content and computational artifacts (e.g. economic, entertainment, education, or political). (Grades 6-8)		

Standard 4: Networks and the Internet (NI)

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.NI.01: Simulate the flow of information as packets on the Internet and networks (e.g. model using strings and paper, note passing). (Grades 6-8)		
6-8.NI.02: Compare and contrast the trade-offs between physical (wired), wireless, and mobile networks (e.g. speed, security, and cost). (Grades 6-8)		

Standard 5: Algorithms and Programming (AP)

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.AP.01: Solicit, evaluate, and integrate peer feedback as appropriate to develop or refine a product. (Grades 6-8)		
6-8.AP.02: Compare different algorithms that may be used to solve the same problem by time and space efficiency. (Grades 6-8)		

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.AP.03: Interpret, modify, and analyze content-specific models used to run simulations (e.g. ecosystems, epidemics, spread of ideas) . (Grades 6-8)		
6-8.AP.04: Apply an iterative design process (define the problem, generate ideas, build, test, and improve solutions) in problem solving, both individually and collaboratively. (Grades 6-8)		
6-8.AP.05: Create, analyze, and modify control structures to create programming solutions. (Grades 6-8)		
6-8.AP.06: Predict the outcome of an algorithm and then step through it to verify your predictions. (Grades 6-8)		
6-8.AP.07: Decompose a problem into sub-problems and demonstrate how the parts can be synthesized to create a solution. (Grades 6-8)		

Performance Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6-8.AP.08: Evaluate the correctness of a program by collecting and analyzing data generated from multiple runs of the program. (Grades 6-8)		
6-8.AP.09: Use debugging and testing to improve program quality. (Grades 6-8)		

INDICATORS OF QUALITY RUBRIC:

Literacy Connections Across All Content Areas:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. Students will build knowledge and academic language through content rich, complex nonfiction texts.		
2. Students will participate in Reading/Writing/Speaking that is grounded in evidence from the text, across the curriculum.		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
3. Students will use digital resources strategically to conduct research and create and present material in oral and written form.		
4. Students will collaborate effectively for a variety of purposes while also building independent literacy skills.		

Equity:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
<p>1. Materials are free from bias in their portrayal of ethnic groups, gender, age, disabilities, culture, religion, etc., and contain accommodations for multiple learning styles, students with exceptionalities, English Language Learners, and cultural differences.</p> <ul style="list-style-type: none"> • Multicultural representation • Free from bias • Designed for use in planning and implementation of differentiated instruction 		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
<p>addressing multiple learning styles and the needs of Talented and Gifted (TAG), English Language Learners (ELL) and Special Education (SPED) students.</p> <ul style="list-style-type: none"> • The material provides a balanced representation of points of view regarding issues such as race, gender, religion, environment, business, industry, political orientation, careers and career choices. 		
<p>2. The material offers texts representing a wide array of cultures and experiences, allowing students opportunities to learn about situations similar to and different from their own personal experiences.</p>		

Accessibility:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. Accessible Education Materials (AEM): Print- and technology-based educational materials, including printed and electronic textbooks and related core materials that are designed or converted in a way that makes them usable across the widest range of student variability regardless of format (print, digital, graphical, audio, video).		

Student Focus:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. The material supports the sequential and cumulative development of foundational skills. Those skills are necessary for a student's independent comprehension of grade-level complex texts and mastery of tasks called for by the standards.		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
2. The material provides many and varied opportunities for students to work with each standard within the grade level.		
3. The material reflects the progression of the strands and how they build within and across the grades in a logical way. This enables students to develop and demonstrate their independent capacity to read and write at the appropriate level of complexity and sophistication indicated by the standards.		
4. The material engages the reader, i.e. does it correspond with age appropriate interests?		
5. The material cross-refers and integrates with other subjects in related areas of the curriculum.		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
6. The material includes strategies and textual content that are grade appropriate.		
7. The material has a balance of text types and lengths that encourage close, in-depth reading and rereading, analysis, comparison, and synthesis of texts.		
8. The material includes sufficient supplementary activities or assignments that are appropriately integrated into the text.		
9. The material has activities and assignments that develop problem-solving skills and foster synthesis and inquiry at both an individual and group level.		
10. The material has activities and assignments that reflect varied learning styles of students.		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
11. The material includes appropriate instructional strategies.		

Pedagogical Approach:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. The material offers strategies for teachers to meet the needs of a range of learners, including advanced students and those requiring remediation.		
2. The material provides suggestions for scaffolding that support the comprehension of grade-level text without replacing students’ opportunities for full and regular encounters with grade-level complex texts. Removing the scaffolding over the course of the materials is encouraged.		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
<p>3. The material provides opportunities for supporting English language learners to regularly and actively participate with grade-level text.</p>		
<p>4. The material gives clear and concise instruction to teachers and students. It is easy to navigate and understand.</p>		
<p>5. The material assesses students at a variety of knowledge levels (e.g., recall, inferencing/analyzing, reasoning, problem solving) centered on grade-level texts that are clearly aligned and measureable against the expectations of the ICS.</p>		
<p>6. The material offers ongoing, easily implemented, and varied assessments.</p> <ul style="list-style-type: none"> • Assessments should clearly denote which standards are being emphasized. They should also include aligned rubrics and scoring guidelines that provide sufficient guidance to teachers for interpreting student performance and suggestions for follow-up. 		

Presentation and Design:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
<p>1. The material has an aesthetically appealing appearance (attractive, inviting).</p>		
<p>2. Layout is consistent, clear, and understandable.</p> <ul style="list-style-type: none"> • The material has headings and sub-headings that make it easy to navigate through the book. • Chapters are logically arranged. • Text provides a useful table of contents, glossary, and index. • Text contains references, bibliography, and resources. 		
<p>3. The material uses a language/reading level suitable for the intended readers.</p>		
<p>4. The material has a reasonable and appropriate balance between text and illustration. The material has grade-appropriate font size.</p>		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
5. The illustrations clearly cross-reference the text, are directly relevant to the content (not simply decorative), and promote thinking, discussion, and problem solving.		
6. Non-text content (performance clips, images, maps, globes, graphs, pictures, charts, databases, and models) are accurate and well integrated into the text.		

Technology:

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
1. The material includes or references technology that provides teachers with additional tasks for students.		
2. The material includes guidance for the mindful use of embedded technology to support and enhance student learning.		
3. The material has “platform neutral” technology (i.e., will run on Windows or other		

Standards	Justification: Provide examples from materials as evidence to support each response for this section. Provide descriptions, not just page numbers.	Rating (Reviewer Only):
platforms) and availability for networking.		
4. The material has a user-friendly and interactive interface allowing the user to control (shift among activities).		

For Questions Contact

Academics
 Idaho State Department of Education
 650 W State Street, Boise, ID 83702
 208 332 6800 | www.sde.idaho.gov