

Georgia Science Instructional Materials Adoption Rubric (GSIMAR)

The Georgia Science Instructional Materials Adoption Rubric (GSIMAR) is a tool to inform the adoption of science instructional materials for use with students in Georgia schools, grades K-12. It was developed by members of the Science RESA Collaborative between March and May, 2007 to increase the objectivity of the process of evaluating science instructional materials at the state, school system, and school levels. The GSIMAR can be used to judge the appropriateness of instructional materials in the form of textbooks, textbooks with laboratory kits, kit programs, and digitally-based programs.

The GSIMAR was designed to render an analytic judgment, based on ratings of 16 criteria. The 16 criteria are presented as questions and organized into three strands: Curriculum, Assessment, and Instructional Support. Criteria in the Curriculum Strand address the adequacy of instructional materials in the areas of content accuracy and appropriateness, the nature of science and the scientific community, and resources to develop units of instruction that support the Georgia Performance Standards and Elements. Criteria in the Assessment Strand focus on the adequacy of the assessments included within the instructional materials to inform instruction provide for relevance and rigor, and support learning aligned with the Georgia Performance Standards. The Instructional Support Strand addresses the adequacy of instructional materials to facilitate instruction that is conceptually organized; supports inquiry, critical thinking, and learner differentiation; and makes uses of technology-based resources.

The first page of the GSIMAR provides space for identifying the instructional material and vendor, instructional material type, and Lexile scores in addition to commenting on strengths and weaknesses of the materials. Space is also provided on this page for rendering an overall score based on the rubric criteria and an adoption recommendation.

Each of the 16 criteria of the GSIMAR has four judgment options. The judgment options are numeric, with 3 points for the most desirable option, 2 points for the second most desirable option, 1 point for the third most desirable option, and 0 points for the least desirable option. ***Bold and italicized*** print is used to highlight terms in each choice option that serve to distinguish it from other choice options for the same criterion. A bold line is presented between the options receiving 1 point and 2 points for each criterion. This line delineates those judgment options consider acceptable (3 points and 2 points) and those considered unacceptable (1 point and 0 points) by the rubric developers. Further, the wording of each judgment option was scrutinized to eliminate professional jargon and to enhance usability of the rubric.

The first criterion in the rubric, which falls within the Curriculum Strand, is strategically positioned. It asks the question: Do instructional materials adequately support the Georgia Performance Standards in Science? It is the recommendation of the developers of the GSIMAR that instructional materials that do not receive a score of at least 2 points on this criterion be deemed inappropriate for adoption and not examined further.

In providing the GSIMAR for use by Georgia educators, we, as members the RESA Collaborative, acknowledge that the rubric reflects our professional wisdom as well our professional biases about the nature of high quality science instructional materials. We recognize that the GSIMAR represents our attempt to quantify the subjective process of assessing instructional materials, and hope that other educators find it to be a useful tool.

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Instructional Materials Adoption Rubric

Name of Materials _____ Publisher/Vendor _____

Type of materials: Textbook Textbook w/lab Kit Kit Digital

Overall score _____/48

Publisher Reported Lexile Score Range: _____ Local Verification of Lexile Score Range (optional): _____

Strongest component:

Weakest component:

Recommend for adoption: Yes No

Teacher who reviewed these materials _____

School _____

Curriculum Strand

	3 points	2 points	1 point	0 points	Notes	Score
Do instructional materials adequately support the Georgia Performance Standards in Science?	Instructional materials provide sufficient resources to develop units that address 100% of the Standards and Elements.	Instructional materials provide sufficient resources to develop units that address 80% or more of the Standards and Elements.	Instructional materials provide sufficient resources to develop units that address less than 80% of the Standards and Elements.	Instructional materials provide insufficient resources to develop units that address the Standards and Elements.		
Are instructional materials scientifically accurate and presented at the level of the learner?	Instructional materials are scientifically accurate and always developmentally appropriate.	Instructional materials are scientifically accurate and mostly developmentally appropriate.	Instructional materials are scientifically accurate and occasionally developmentally appropriate.	Instructional materials are either scientifically inaccurate or developmentally inappropriate.		
Do instructional resources facilitate student construction of conceptual understanding?	Instructional materials extensively involve students in using evidence and argumentation to construct conceptual understanding.	Instructional materials frequently involve students in using evidence and argumentation to construct conceptual understanding.	Instructional materials rarely involve students in using evidence and argumentation to construct conceptual understanding.	Instructional materials do not involve students in using evidence and argumentation to construct conceptual understanding.		
Do instructional materials portray scientific knowledge as constantly changing?	Instructional materials extensively include historical perspectives and current issues in science.	Instructional materials frequently include historical perspectives and current issues in science.	Instructional materials rarely include historical perspectives and current issues in science.	Instructional materials do not include historical perspectives and current issues in science.		
Do the instructional materials portray the diversity of the scientific community?	Instructional materials extensively include contributions to science by men and women of all ethnic and national backgrounds.	Instructional materials frequently include contributions to science by men and women of all ethnic and national backgrounds.	Instructional materials rarely include contributions to science by men and women of all ethnic and national backgrounds.	Instructional materials do not include contributions to science by men and women of all ethnic and national backgrounds.		
Total Points:						

Instructional Support Strand

	3 points	2 points	1 point	0 points	Notes	Score
Do instructional materials promote student participation as prescribed in the Georgia Performance Standards in Science?	Instructional materials provide for <i>extensive</i> student participation in science learning experiences that promote real world application through a variety of materials and strategies.	Instructional materials provide for <i>frequent</i> student participation in science learning experiences that promote real world application through a variety of materials and strategies.	Instructional materials <i>rarely</i> provide for student participation in science learning experiences that promote real world application through a variety of materials and strategies.	Instructional materials <i>do not</i> provide for student participation in science learning experiences that promote real world application through a variety of materials and strategies.		
Does the conceptual organization of the instructional materials facilitate teaching that is consistent with the Georgia Performance Standards in Science?	The organization of the instructional materials is coherent and logical, facilitating a <i>thematic and effective</i> teaching approach.	The organization of the instructional materials is coherent and logical, facilitating an <i>effective</i> teaching approach.	The organization of the instructional materials is coherent and logical, but <i>does not facilitate an effective</i> teaching approach.	The organization of the instructional materials is neither coherent nor logical.		
Do instruction materials promote inquiry and critical thinking?	Instructional materials provide <i>extensive</i> opportunities for students to pose questions and investigate problems scientifically.	Instructional materials provide <i>frequent</i> opportunities for students to pose questions and investigate problems scientifically.	Instructional materials <i>rarely</i> provide opportunities for students to pose questions and investigate problems scientifically.	Instructional materials <i>do not</i> opportunities for students to pose questions and investigate problems scientifically.		
Do instruction materials promote safety in the laboratory and classroom?	Safety in the laboratory and classroom are <i>adequately</i> addressed in all parts of the instructional materials.			Safety in the laboratory and classroom are <i>inadequately</i> addressed in all parts of the instructional materials.		

Instructional Support Strand (continuation)

	3 points	2 points	1 point	0 points	Notes	Score
Do instructional materials provide suggestions for differentiating instruction (e.g., ELL, reading levels, multicultural connections, gifted, and SWD)?	Instructional materials provide <i>extensive</i> suggestions for differentiating instruction.	Instructional materials provide <i>frequent</i> suggestions for differentiating instruction.	Instructional materials <i>rarely</i> provide suggestions for differentiating instruction.	Instructional materials <i>do not</i> provide suggestions for differentiating instruction.		
Do instructional materials incorporate technology that supports teaching and learning?	Instructional materials <i>extensively</i> incorporate technology-based instructional practices that use multiple formats to include data collection.	Instructional materials <i>frequently</i> incorporate technology-based instructional practices that use multiple formats to include data collection.	Instructional materials <i>rarely</i> incorporate technology-based instructional practices that use multiple formats to include data collection.	Instructional materials <i>do not</i> incorporate technology-based instructional practices that use multiple formats to include data collection.		
Do instructional materials include current and accessible online and/or CD-based resources for teachers?	Instructional materials provide <i>extensive</i> online and/or CD-based resources for teacher updates and support.	Instructional materials provide <i>adequate</i> online and/or CD-based resources for teacher updates and support.	Instructional materials provide <i>limited</i> online and/or CD-based resources for teacher updates and support.	Instructional materials <i>do not</i> provide online and/or CD-based resources for teacher updates and support.		
Total Points:						

Assessment Strand

	3 points	2 points	1 point	0 points	Notes	Scores
Do instructional materials include assessments that are aligned with the Georgia Performance Standards in Science?	Assessments extensively require students to demonstrate mastery of enduring understandings, knowledge, and skills. <input type="checkbox"/>	Assessments <i>frequently</i> require students to demonstrate mastery of enduring understandings, knowledge, and skills. <input type="checkbox"/>	Assessments <i>rarely</i> require students to demonstrate mastery of enduring understandings, knowledge, and skills. <input type="checkbox"/>	Assessments <i>do not</i> require students to demonstrate mastery of enduring understandings, knowledge, and skills. <input type="checkbox"/>		
Do the instructional materials include relevant and rigorous assessments?	Assessments <i>extensively</i> provide for real world applications and require higher order reasoning (e.g., synthesis, analysis, evaluation). <input type="checkbox"/>	Assessments <i>frequently</i> provide for real world applications and require higher order reasoning (e.g., synthesis, analysis, and evaluation). <input type="checkbox"/>	Assessments <i>rarely</i> provide for real world applications and require higher order reasoning (e.g., synthesis, analysis, and evaluation). <input type="checkbox"/>	Assessments <i>do not</i> provide from real world applications nor require higher order reasoning (e.g., synthesis, analysis, evaluation). <input type="checkbox"/>		
Do assessments included in the instructional materials provide information for teachers to plan and modify instruction?	Assessments useful for making instructional decisions and determining student mastery are <i>extensively</i> provided in the instructional materials. <input type="checkbox"/>	Assessments useful for making instructional decisions and determining student mastery are <i>frequently</i> provided in the instructional materials. <input type="checkbox"/>	Assessments useful for making instructional decisions and determining student mastery are <i>rarely</i> provided in the instructional materials. <input type="checkbox"/>	Assessments useful for making instructional decisions and determining student mastery are <i>not</i> provided in the instructional materials. <input type="checkbox"/>		
Do assessments included in the instructional materials accommodate student differences (e.g., learning styles, interests, special needs, gifted and limited English proficiency)?	Assessments that accommodate student differences are <i>extensively</i> provided in the instructional materials. <input type="checkbox"/>	Assessments that accommodate student differences are <i>frequently</i> provided in the instructional materials. <input type="checkbox"/>	Assessments that accommodate student differences are <i>rarely</i> provided in the instructional materials. <input type="checkbox"/>	Assessments that accommodate student differences are <i>not</i> provided in the instructional materials. <input type="checkbox"/>		
Total Points:						