Georgia's K-12 Mathematics Standards

Mathematics Instructional Materials Quality Assurance Rubric

Focus	4 Fully Aligned	2 Minimally Aligned	0 Not aligned
Alignment	The resource is in direct alignment to key competencies/ overarching standards for the grade level. The resource is also directly aligned to the Essential Instructional Guidance components included within the standards. The information and tools within the resource connect to the GaDOE resources through a cluster-based approach to the key competencies/ standards and learning objectives.	The resource shows alignment with the mathematics learning objectives with limited alignment to the key competencies/overarching standard. OR The resource shows limited alignment to the Essential Instructional Guidance components of the standards.	The resource is not aligned with all components of Georgia's K-12 Mathematics Standards, including the Essential Instructional Guidance.
Instruction through a lens of Mathematical Modeling	Interdisciplinary learning tasks are provided in this resource to help students learn the mathematics through real-life contexts and phenomena.	Real-world problems and word problems are included in the resource with limited emphasis on process-based thinking through the use of the Mathematical Modeling Framework.	There is no evidence that this resource has a focus on teaching mathematics through relevant situations.
Student Actions	The tasks and learning resources included in this resource are student-centered and regularly engage students in creative and patient problem-solving provoking thought leading to understanding. The resource includes lessons and activities that regularly engage students in productive discourse and collaboration when learning mathematics. The materials in the resource help students build a positive attitude toward and an appreciation for mathematics through engaging, student-centered classroom tasks and lessons.	The resource is student-centered with some activities that involve students in the student actions that lead to understanding; however, there are some lessons that limit student thinking and ownership.	The resource is largely teacher-centered with limited or no guidance on how to create environments that promote student thinking and sense-making.
Mathematical Practices	The tasks, activities, and lessons included in the resource help bring to life the 8 Mathematical Practices. There is direct alignment to multiple mathematical practices in each lesson.	The tasks, activities, and lessons included in the resource are aligned to the 8 Mathematical Practices at a surface level. There is indicated alignment to one or two mathematical practices in some lessons.	There is no attempted alignment with the 8 Mathematical Practices. The tasks, activities, and lessons included in the resource are not aligned to any mathematical practice.
Student Supports for Learner Variability	The resource supports students' prior knowledge by building upon the previous skills maintained and providing the necessary scaffolds of support to access the new content. The resource includes embedded tiered supports for all lessons.	The resource includes some supports for learner variability, but these supports are not tiered to benefit all learners.	The resource does not include targeted, specific supports for learner variability embedded within the lessons.
Mathematical Reasoning and Sense-Making	The concepts presented in the resource are not overly procedural and encourage higher-order thinking and mathematical modeling through the instructional lessons outlined. All lessons include a focus on mathematical reasoning and sense-making.	Some concepts presented foster a focus on answer-getting in isolation of reasoning and sense-making	The concepts presented in the resource focus on procedures and answer-getting in isolation of comprehension and understanding.
Flexibility in Strategy Selection and Problem Solving	• The resource is developed to promote student-centered teaching and learning of mathematics based on the tasks and activities included. • The tasks and activities encourage students to use their own reasoning flexibly allowing choice in their strategy selection and problem-solving methods.	The tasks and activities limit student voice and choice in the selection of strategies and problem-solving methods.	The tasks and activities are teacher-centered and include limited to no involvement from students with regards to computation and problem-solving.

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Statistical Thinking	The Framework for Statistical Reasoning is referenced and evident throughout the resource to encourage statistical problem solving when engaging students with understanding the mathematical concepts presented. Students are provided with opportunities to ask statistical investigative questions when solving contextual problems.	There is limited evidence of students being engaged in asking and answering statistical questions. The focus of the resource is more on students asking and answering mathematical questions.	There is no evidence of statistical reasoning support in the resource.
Conceptual Understanding	The tasks and activities included in this resource provide strategic support for helping learners develop a conceptual understanding of the concepts presented within each of the big ideas of the standards.	There is some focus on building a conceptual understanding of the content presented in the resource; however, there is a significant focus on skills in isolation of reasoning through many of the tasks, activities, and lessons presented.	The tasks and activities are procedural without a targeted focus on conceptual thinking and learning of the mathematics concepts.
Numeracy Development	The resource includes tasks and activities to help students develop a foundation of numeracy through part-whole reasoning and strategy development within each of the big ideas.	Some components of the resource focus on strategy development without an emphasis on the progression of counting to part-whole thinking. Some components of the resource are procedural without a focus on comprehension.	The resource focuses on procedures and memorization in isolation of part-whole thinking or conceptual understanding of quantities.
Technology Tools for Students	Interactive technology tools are embedded to help students visualize the mathematics presented and make connections between mathematical concepts. The technology is included as a tool for learning designed to help students build a solid understanding of the concepts included within each big idea through exploration, investigation, and play.	There are some technology tools aligned to the standards; however, the focus of the tool(s) is on teacher use with limited focus on student exploration and sense-making.	The technology tool included in the resource limits students' thinking and exploration. There is no student-centered embedded technology within the resource to invoke investigation, exploration, or sense-making of the mathematical concepts.
Assessment	There are accompanying diagnostic, formative, and summative assessments that align directly with the standards and assess mathematical reasoning and comprehension. The assessments are contextual in nature and help students explain real-life phenomena using the mathematics learned.	Some assessments are provided that align with the standards; however, there are some components that do not align with the intent and rigor of the mathematics standards, such as non-contextual items in isolation.	The assessments included, if any, lack context, are procedural in nature, or focus on anxiety-provoking time restraints that do not align with the adopted state standards.
Teaching Support	The tasks and activities included in the resource are student-centered. The teacher support resources include specific teacher moves to help learners engage with and master the content. The following additional components are all included within each lesson as support for the teacher: • Consideration for students with disabilities • Lessons addressing multiple DOK level • Explanations and ideas for using manipulatives or exploring concrete representations of the mathematical ideas • Details for the educators (particularly those without formal education preparation) – • Accessible to a wide variety of teacher experience • Support teachers in the use of manipulatives	The support provided for teachers aligns with the standards but includes limited information on any of the following components: • Consideration for students with disabilities • Lessons addressing multiple DOK level • Explanations and ideas for using manipulatives or exploring concrete representations of the mathematical ideas • Details for the educators (particularly those without formal education preparation) – • Accessible to a wide variety of teacher experience • Support teachers in the use of manipulatives	The support provided for teachers within the resource is teacher-centered and largely promotes procedural teaching without an emphasis on the Essential Instructional Guidance components included within the state-adopted standards.
Embedded Professional Learning	High-quality professional learning related to the essential instructional components of Georgia's K-12 Mathematics Standards is embedded within the resource. Teachers are able to learn solid instructional practices through the use of the resource. The resource helps teachers think creatively about allowing students to generate mathematical ideas of their own.	There is limited professional learning provided related to the essential instructional components of Georgia's K-12 Mathematics Standards (i.e., mathematical practices, mathematical modeling, student-centered learning, conceptual understanding, statistical reasoning, flexibility in thinking, etc.).	There is no professional learning included with the resources.