Richmond County School System Mathematics Pamela Lovett, Math Coordinator

In the Richmond County School District, the Georgia Standards of Excellence are taught in kindergarten through 12th grade. Georgia Mathematics Curriculum focuses on actively engaging the students in the development of mathematical understanding by using manipulatives and a variety of representations, working independently and cooperatively to solve problems, estimating and computing efficiently, and conducting investigations and recording findings. There is a shift towards applying mathematical concepts and skills in the context of authentic problems and for the student to understand concepts rather than merely follow a sequence of procedures.

In mathematics classrooms, students will learn to think critically in a mathematical way with an understanding that there are many different ways to a solution and sometimes more than one right answer in applied mathematics. Mathematics is the economy of information. The central idea of all mathematics is to discover how knowing some things well, via reasoning, permit students to know much else—without having to commit the information to memory as a separate fact. It is the connections, the reasoned, logical connections that make mathematics manageable. As a result, implementation of Georgia Standards of Excellence places a greater emphasis on problem solving, reasoning, representation, connections, and communication.

| Key Features of Georgia Standards of Excellence for Math | |
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| K-5 GSE | Conceptual understanding of whole numbers, decimals, and fractions |
| Math | • Procedural skill and fluency of operations with whole numbers, decimals, and fractions |
| | • Problem solving strategies, analysis of data, critical thinking, mathematics vocabulary, and literacy skills for speaking, reading, representing, and writing about the mathematics content of grades K-5 |
| 6-8 GSE Math | • Conceptual understanding of rational and irrational numbers, ratios, proportions (including percents), expressions, equations, inequalities, probability, statistics, and |
| | Procedural skill and fluency of operations with rational and irrational numbers, simplifying expressions, solving one- and two-step equations and inequalities, finding measures and graphing linear functions |
| | • Deeper levels of problem-solving strategies, analysis of data, critical thinking, mathematics vocabulary, and literacy skills for speaking, reading, representing, and writing about the mathematics content of grades 6-8 |
| 9-12 GSE Math | Increased conceptual understandings of more complex algebraic functions and their applications to geometry and statistics found in the real-world |
| | - Emphasis on modeling real-world phenomena and novel situations using mathematics |
| | - Deeper levels of problem-solving strategies, analysis of data, critical thinking, mathematics vocabulary, and literacy skills for speaking, reading, modeling, and writing about the mathematics content of grades 9-12 |
| | - A solid learning experience for college, career, and citizenship readiness |