Reimagining Opportunities for Learning in Mathematics

Position Statement on Mathematics Pathways for Success

The goal of K-12 mathematics education is for each student whom we have the privilege of educating to develop a solid mathematical foundation and a mindset toward mathematical work that enables each student to pursue his/her individual interests and post-secondary goals. There must be a shared belief that all students can learn deeply and that the responsibility for that learning rests upon the partnership between all stakeholders, including families, students, and educators. Also, each student should be provided equitable opportunities to access high-quality instruction that is focused on meeting their individual needs.

Educators must strive to see students for who they are, as unique individuals; with various strengths, weaknesses, interests, goals, and experiences. Combined with rich data and a multi-tiered system of supports, these qualities should drive robust classroom instruction. With intentional professional learning opportunities and intelligent discussion, educators will be prepared to provide educational opportunities that meet the demands of a diverse community of learners who begin to take ownership of their learning to become mathematically proficient, cultivate a joy in, and develop self-efficacy in doing and understanding mathematics; thus, opening the door to a plethora of post-secondary opportunities.

Mathematics education must equip students with the ability to think, reason, and learn new things productively. Therefore, rigorous learning experiences should be provided to highlight contextual learning to make mathematics relevant to real-life experiences. Classrooms throughout Georgia have a diverse community of problem solvers. All students must have opportunities for support and enrichment as needed or desired. Learning will be ongoing throughout a student’s life. Advancement in mathematics should be based on the student’s individual goals and objectives, career paths, and identified strengths. Educators should be in the habit of continually using data to address each student’s learning-needs to ensure all students have access to advanced level coursework. Students should be empowered to make informed decisions about which courses to take that align with their own post-secondary goals. In mathematics programming, there should be more student-driven advancement, where students are able to double-up content, as needed. This practice will result in all students developing a rich understanding of the foundations of mathematics necessary to help them succeed in more advanced mathematics courses.

It is the position of the Mathematics Advisory Council that all students should engage in a deep study of grade-level mathematics through a curriculum that contextualizes learning to make mathematics meaningful and connected to real-life experiences. In grades K-7, the focus of the grade-level content should be on helping all students develop a deep, conceptual understanding of the mathematics taught in the grade level without additional acceleration. Following completion of Grade 7 Mathematics, as an option, or following the completion of Algebra: Concepts and Connection and Geometry: Concepts and Connections, as a second opportunity, an enhanced course that thoughtfully blends the content of courses into one course should be offered to all interested students based on their future goals and aspirations. Enhanced course options can be offered to assist students who are interested in pursuing higher level mathematics courses in high school and college. The enhanced pathway should be flexible and allow for multiple entry points along a student’s high school matriculation.

Personal interests, strengths, and goals may change as students mature and matriculate through school. Therefore, it is imperative to have multiple points at which students, parents, and counselors collaboratively analyze and decide which mathematics course sequence best aligns with the students’ post-secondary goals. All students should be strongly encouraged to take mathematics courses at the highest level of challenge possible. Confidence and ability with mathematical reasoning and problem-solving can open many doors to post-secondary educational and career opportunities, and all students should have full access to those opportunities.