

Mathematics Update

Board of Education

November 20, 2023

Success Criteria

- Beliefs at BRS
- Role of Math Specialists
- Enrichment for all
- Mathematics learning pathways

Rationale/beliefs

Acceleration should not happen at the expense of creating gaps in student understanding by skipping foundational learning standards.

The Mathematical Practice Standards are a critical component of instruction in today's classroom.

“Standards for Mathematical Practice describe the nature of the learning experiences, thinking processes, habits of mind, and disposition that students need to develop a deep, flexible, and enduring understanding of mathematics.” CSDE Website

- Commit to cultivating a solid K–8 mathematics foundation by appropriate implementation of grade-level standards and limiting acceleration options before high school.
- Provide extension and enrichment opportunities, aiming for deeper understanding (which is great for future learning), before acceleration is considered.
- Compact curriculum rather than skip important foundational content.

Role of Math Specialists

- Provide intervention services for children identified through the SRBI process
- Provide ongoing curriculum support across all grade levels
 - Attend PLC Meetings across all grade levels
- Serve as instructional coaches for teachers
- Push-in to classrooms to co-teach math lessons, work with small groups of students and provide feedback
- Represent as needed at PPTs and 504 meetings
- Instruct the 6th grade pre-algebra math class

Grade 5 pathways to grade 6

- All grade 5 students stay within their homeroom for math class
 - Support provided: intervention and extension within and outside of homeroom classroom
- Curriculum is compacted
 - “The term compacted means to compress content, which requires a faster pace to complete; it does not involve skipping content.”
- At the end of Grade 5, students are assessed for their grade 6 math placement
 - Identification and timeline for these processes to be shared in spring

Grade 6 math pathways

- All grade 6 students are departmentalized for all subject areas
 - Support provided: intervention and extension both within and outside of the classroom
- For the 2023-2024 school year -Grade 6 learners who qualified for Pre-algebra are provided with online learning platform (Aleks), a pre-algebra textbook and ongoing support from a Math Specialist 1-2x per cycle
- At the end of Grade 6, students may be identified for grade 7 math, pre-algebra, or to take the algebra readiness assessment

Grade 6 pathways to Middle and High School

	Traditional Math Sequence for Amity	Alternative Math Sequences for Amity	Additional Math Sequences for Amity
6	Grade 6 Math	Grade 6 Math	Pre-Algebra
7	Grade 7 Math	Pre- Algebra	Grade 8 Math
8	Grade 8 Math	Algebra I	Algebra I
9	Algebra I	Geometry	Geometry
10	Geometry	Algebra II	Algebra II
11	Algebra II	Pre-Calculus	Pre-Calculus
12	Pre-Calculus	Calculus or Statistics	Calculus or Statistics

Enrichment for all

- Compacting by unit
- Multi-Step Word Problems
- Opportunities for math talk → Interactive and Collaborative
- Critical and Logical Thinking
- Productive Struggle

Looking ahead

- Math meetings/observations with other high performing districts
 - Vertical conversations with Amity Middle School- Bethany
- Resource and curricular review
- Ongoing data analysis of curriculum based measures and schoolwide assessments
- Continued professional learning around mathematics instruction
- Return to after school math opportunities