B.E.S.T. Standards for Mathematics: Journey to Implementation

October 21, 2021

Florida Charter School Conference

FLORIDA DEPARTMENT OF EDUCATION
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Agenda

- Updates and Information
  - B.E.S.T. Standards Update
  - Upcoming Events
- Questions

B.E.S.T. Standards for Mathematics

Journey Through the B.E.S.T. Standards for Mathematics

2019 – 2020 | Standards Review Process

Removal of instruction from language of standards

Benchmarks written as expectations for students by end of year

2020 – 2021 | Development of Instructional Support and PD

Created and released B1G-M for K-8 and Algebra 1/Geometry and delivered District Lead Professional Learning events

Consistent Messaging of the B.E.S.T. Standards

- No crosswalk will be created between the MAFS and B.E.S.T.
- These benchmarks **do not**:
  - Require any "unpacking";
  - Associate with any specific shifts (focus, coherence or rigor); nor
  - Have any specified DOK level.
- Meant to be connected, focusing on all concepts throughout the school year.
- Benchmarks built to be mastery-based with clear and concise language and with the inclusion of clarifications, examples and appendices, educators will be able to align instruction to the needs of ALL of their students.

Elementary Grades Courses

- Grade K Mathematics
- Grade 1 Mathematics
- Grade 2 Mathematics
- Foundational Skills for Mathematics K-2
- Grade 3 Mathematics
- Grade 3 Accelerated Mathematics
- Grade 4 Mathematics
- Grade 4 Accelerated Mathematics
- Grade 5 Mathematics
- Foundational Skills for Mathematics 3-5

Grade 3		Grade 4		Grade 5	
MA.3.NSO.1.1	MA.3.AR.2.3	MA.4.NSO.1.2	MA.4.NSO.1.1	MA.5.NSO.1.1	MA.5.AR.2.1
MA.3.NSO.1.2	MA.3.AR.3.1	MA.4.NSO.1.3	MA.4.NSO.1.5	MA.5.NSO.1.2	MA.5.AR.2.2
MA.3.NSO.1.3	MA.3.AR.3.2	MA.4.NSO.1.4	MA.4.NSO.2.3	MA.5.NSO.1.3	MA.5.AR.2.3
MA.3.NSO.1.4	MA.3.AR.3.3	MA.4.NSO.2.1	MA.4.NSO.2.4	MA.5.NSO.1.4	MA.5.AR.2.4
MA.3.NSO.2.1	MA.3.M.1.1	MA.4.NSO.2.2	MA.4.NSO.2.6	MA.5.NSO.1.5	MA.5.AR.3.1
MA.3.NSO.2.2	MA.3.M.1.2	MA.4.NSO.2.5	MA.4.NSO.2.7	MA.5.NSO.2.1	MA.5.AR.3.2
MA.3.NSO.2.3	MA.3.M.2.1	MA.4.FR.1.1	MA.4.FR.1.2	MA.5.NSO.2.2	MA.5.M.1.1
MA.3.NSO.2.4	MA.3.M.2.2	MA.4.FR.1.3	MA.4.FR.2.4	MA.5.NSO.2.3	MA.5.M.2.1
MA.3.FR.1.1	MA.3.GR.1.1	MA.4.FR.1.4	MA.4.AR.1.1	MA.5.NSO.2.4	MA.5.GR.1.1
MA.3.FR.1.2	MA.3.GR.1.2	MA.4.FR.2.1	MA.4.AR.1.3	MA.5.NSO.2.5	MA.5.GR.1.2
MA.3.FR.1.3	MA.3.GR.1.3	MA.4.FR.2.2	MA.4.M.1.1	MA.5.FR.1.1	MA.5.GR.2.1
MA.3.FR.2.1	MA.3.GR.2.1	MA.4.FR.2.3	MA.4.M.1.2	MA.5.FR.2.1	MA.5.GR.3.1
MA.3.FR.2.2	MA.3.GR.2.2	MA.4.AR.1.2	MA.4.M.2.1	MA.5.FR.2.2	MA.5.GR.3.2
MA.3.AR.1.1	MA.3.GR.2.3	MA.4.AR.2.1	MA.4.M.2.2	MA.5.FR.2.3	MA.5.GR.3.3
MA.3.AR.1.2	MA.3.GR.2.4	MA.4.AR.2.2	MA.4.DP.1.1	MA.5.FR.2.4	MA.5.GR.4.1
MA.3.AR.2.1	MA.3.DP.1.1	MA.4.AR.3.1	MA.4.DP.1.2	MA.5.AR.1.1	MA.5.GR.4.2
MA.3.AR.2.2	MA.3.DP.1.2	MA.4.AR.3.2	MA.4.DP.1.3	MA.5.AR.1.2	MA.5.DP.1.1
		MA.4.GR.1.1		MA.5.AR.1.3	MA.5.DP.1.2
		MA.4.GR.1.2			
		MA.4.GR.1.3			
		MA.4.GR.2.1			
		MA.4.GR.2.2			

Grade 3 Accelerated Mathematics

Grade 4 Accelerated Mathematics

Middle Grades Courses

- Grade 6 Mathematics
- Grade 6 Accelerated Mathematics
- Grade 7 Mathematics
- Grade 7 Accelerated Mathematics
- Grade 8 Mathematics
- Foundational Skills for Mathematics 6-8

Grade 6		Grade 7	Grade 8	
MA.6.NSO.1.1	MA.6.AR.2.4	MA.7.NSO.2.1	MA.7.NSO.1.1	MA.8.NSO.1.1	MA.8.F.1.1
MA.6.NSO.1.2	MA.6.AR.3.1	MA.7.NSO.2.2	MA.7.NSO.1.2	MA.8.NSO.1.2	MA.8.F.1.2
MA.6.NSO.1.3	MA.6.AR.3.2	MA.7.NSO.2.3	MA.7.AR.2.2	MA.8.NSO.1.3	MA.8.F.1.3
MA.6.NSO.1.4	MA.6.AR.3.3	MA.7.AR.1.1	MA.7.AR.3.3	MA.8.NSO.1.4	MA.8.GR.1.1
MA.6.NSO.2.1	MA.6.AR.3.4	MA.7.AR.1.2	MA.7.AR.4.1	MA.8.NSO.1.5	MA.8.GR.1.2
MA.6.NSO.2.2	MA.6.AR.3.5	MA.7.AR.2.1	MA.7.AR.4.2	MA.8.NSO.1.6	MA.8.GR.1.3
MA.6.NSO.2.3	MA.6.GR.1.1	MA.7.AR.3.1	MA.7.AR.4.3	MA.8.NSO.1.7	MA.8.GR.1.4
MA.6.NSO.3.1	MA.6.GR.1.2	MA.7.AR.3.2	MA.7.AR.4.4	MA.8.AR.1.1	MA.8.GR.1.5
MA.6.NSO.3.2	MA.6.GR.1.3	MA.7.GR.1.1	MA.7.AR.4.5	MA.8.AR.1.2	MA.8.GR.1.6
MA.6.NSO.3.3	MA.6.GR.2.1	MA.7.GR.1.2	MA.7.GR.1.3	MA.8.AR.1.3	MA.8.GR.2.1
MA.6.NSO.3.4	MA.6.GR.2.2	MA.7.DP.1.1	MA.7.GR.1.4	MA.8.AR.2.1	MA.8.GR.2.2
MA.6.NSO.3.5	MA.6.GR.2.3	MA.7.DP.1.2	MA.7.GR.1.5	MA.8.AR.2.2	MA.8.GR.2.3
MA.6.NSO.4.1	MA.6.GR.2.4	MA.7.DP.1.3	MA.7.GR.2.1	MA.8.AR.2.3	MA.8.GR.2.4
MA.6.NSO.4.2	MA.6.DP.1.1	MA.7.DP.2.1	MA.7.GR.2.2	MA.8.AR.3.1	MA.8.DP.1.1
MA.6.AR.1.1	MA.6.DP.1.2	MA.7.DP.2.2	MA.7.GR.2.3	MA.8.AR.3.2	MA.8.DP.1.2
MA.6.AR.1.2	MA.6.DP.1.3	MA.7.DP.2.3	MA.7.DP.1.4	MA.8.AR.3.3	MA.8.DP.1.3
MA.6.AR.1.3	MA.6.DP.1.4	MA.7.DP.2.4	MA.7.DP.1.5	MA.8.AR.3.4	MA.8.DP.2.1
MA.6.AR.1.4	MA.6.DP.1.5			MA.8.AR.3.5	MA.8.DP.2.2
MA.6.AR.2.1	MA.6.DP.1.6			MA.8.AR.4.1	MA.8.DP.2.3
MA.6.AR.2.2				MA.8.AR.4.2	
MA.6.AR.2.3				MA.8.AR.4.3	

Grade 6 Accelerated Mathematics

Grade 7 Accelerated Mathematics

Certification Alignment to Math Courses

Middle Grades Courses	
Course	**Educator Certifications**
Grade 6	Elementary Ed K-6; Elementary Grades 1-6; Mathematics 1-6; Middle Grades Math 5-9; Middle Grades Integrated 5-9; Mathematics 6-12
Grade 6 Accelerated	Middle Grades Math 5-9; Mathematics 6-12
Grade 7	Middle Grades Math 5-9; Middle Grades Integrated 5-9; Mathematics 6-12
Grade 7 Accelerated	Middle Grades Math 5-9; Mathematics 6-12
Grade 8	Middle Grades Math 5-9; Middle Grades Integrated 5-9; Mathematics 6-12
Foundational Skills in 6-8 Mathematics	Middle Grades Math 5-9; Middle Grades Integrated 5-9; Mathematics 6-12

https://www.fldoe.org/academics/standards/subject-areas/math-science/mathematics/

High School Courses

- Algebra I
- Algebra I Honors
- Algebra I-A
- Algebra I-B
- Geometry
- Geometry Honors
- Math for Data and Financial Literacy
- Math for Data and Financial Literacy Honors
- Probability and Statistics Honors
- Algebra II
- Algebra II Honors
- Math for College Algebra
- Math for College Liberal Arts
- Math for College Statistics
- Precalculus Honors
- Calculus Honors
- Discrete Math Honors
- Foundational Skills in Mathematics 9-12*

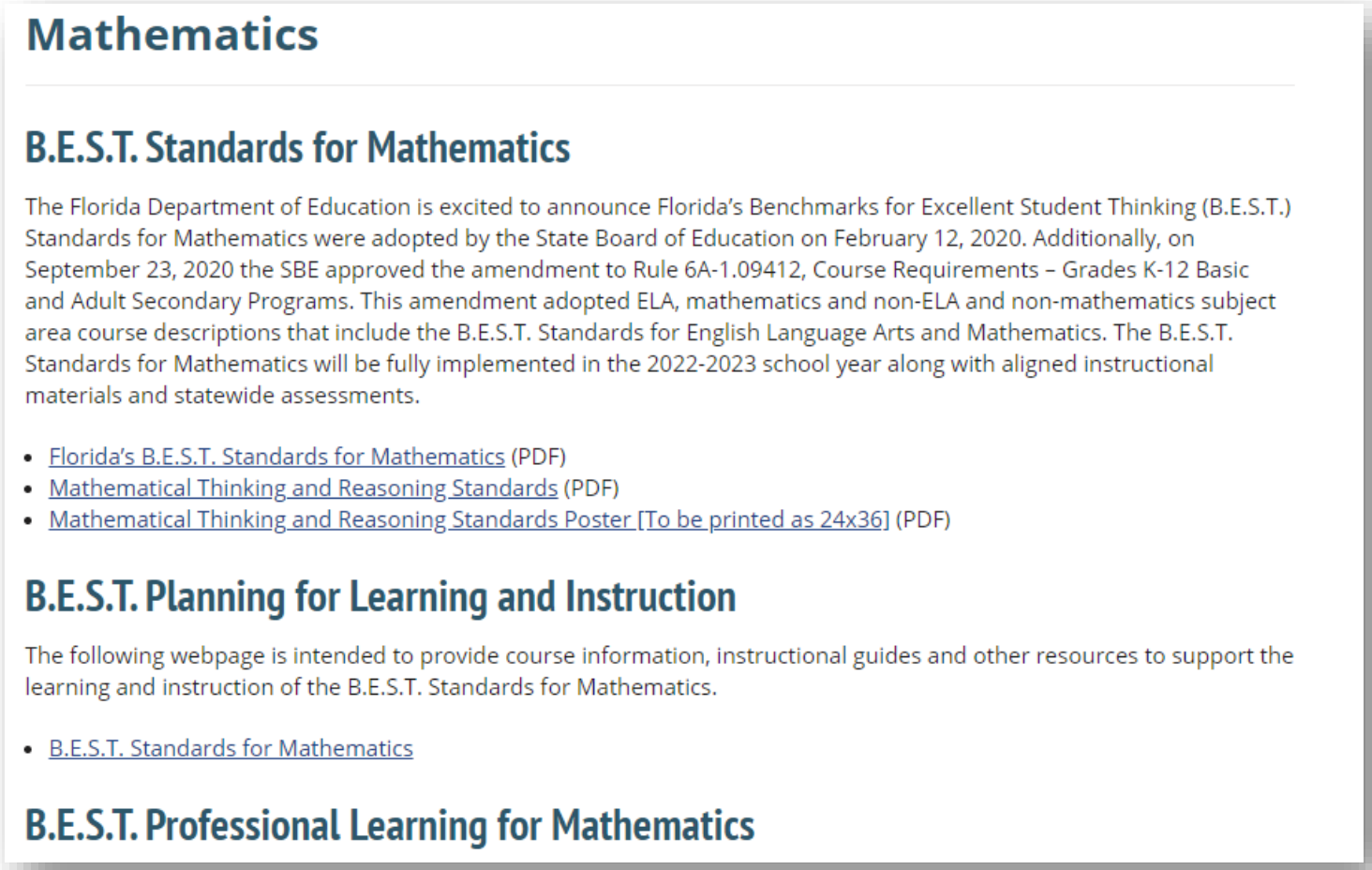
Equally Rigorous Courses for Scholar Designation

Equally Rigorous to Algebra 2 (#1200330)	
Course Number	**Course Title**
1200340	Algebra 2 Honors
1200388	Mathematics for Data and Financial Literacy Honors
1200395	IB Middle Years Programs Algebra II
1209825	Pre-AICE Mathematics 3 IGCSE Level
	Any college, credit-bearing mathematics course, including Advanced Placement and dual enrollment, where college credit is earned

Equally Rigorous Courses for Scholar Designation

Equally Rigorous to Statistics (#1210300)	
Course Number	**Course Title**
1212300	Discrete Mathematics Honors
1202340	Precalculus Honors
1202300	Calculus Honors
1210323	IB Statistics & Probability
1209300	IB Applications and Interpretation 1
1202352	AICE Mathematics 1 AS Level
1202362	AICE Mathematics & Probability & Statistics 1 AS Level
1202364	AICE Mathematics & Probability & Statistics 2 A Level
	Any college, credit-bearing mathematics course, including Advanced Placement and dual enrollment, where college credit is earned

FDOE Website



Mathematics

B.E.S.T. Standards for Mathematics

The Florida Department of Education is excited to announce Florida's Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards for Mathematics were adopted by the State Board of Education on February 12, 2020. Additionally, on September 23, 2020 the SBE approved the amendment to Rule 6A-1.09412, Course Requirements – Grades K-12 Basic and Adult Secondary Programs. This amendment adopted ELA, mathematics and non-ELA and non-mathematics subject area course descriptions that include the B.E.S.T. Standards for English Language Arts and Mathematics. The B.E.S.T. Standards for Mathematics will be fully implemented in the 2022-2023 school year along with aligned instructional materials and statewide assessments.

- Florida's B.E.S.T. Standards for Mathematics (PDF)
- Mathematical Thinking and Reasoning Standards (PDF)
- Mathematical Thinking and Reasoning Standards Poster [To be printed as 24x36] (PDF)

B.E.S.T. Planning for Learning and Instruction

The following webpage is intended to provide course information, instructional guides and other resources to support the learning and instruction of the B.E.S.T. Standards for Mathematics.

- B.E.S.T. Standards for Mathematics

B.E.S.T. Professional Learning for Mathematics

https://www.fldoe.org/academics/standards/subject-areas/math-science/mathematics/

B.E.S.T. Instructional Guide for Mathematics

- Intended to assist educators with planning for student learning and instruction aligned to B.E.S.T. Standards.
- Includes an analysis of information related to the B.E.S.T. Standards within this specific mathematics course, the instructional emphasis and aligned resources.
  - Connecting Benchmarks
  - Instructional Strategies
  - Common Misconceptions and Errors
  - Instructional Tasks and Instructional Items

Components of the B.E.S.T. Instructional Guide for Mathematics (B1G-M)

- Benchmark
  - Focal point for instruction within lesson or task
- Connecting Benchmarks/Horizontal Alignment
  - In other standards within the grade level or course
- Terms for the K-12 Glossary
- Vertical Alignment
  - Across grade levels or courses

Connecting Benchmarks

- Language of *connecting benchmarks* to make those mathematical connections throughout the school year.
- Connecting benchmark(s) should:
  - Make a mathematical connection;
  - Be a possible prerequisite benchmark;
  - Be authentic and purposeful; and
  - Support student learning in order to gain mastery by the end of the year.

Components of the B.E.S.T. Instructional Guide for Mathematics (B1G-M)

- Purpose and Instructional Strategies
- Common Misconceptions or Errors
- Instructional Tasks
  - Demonstrate the depth of the benchmark and the connection to horizontal alignment
- Instructional Items
  - Demonstrate the focus of the benchmark

Transition to the B.E.S.T. Standards

- Instructional Guidance for Transition to the New B.E.S.T. Standards for Mathematics
  - Provides educators with an overview of major changes in mathematical concepts within the courses incorporating the Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards for Mathematics as compared to the current courses utilizing the Mathematics Florida Standards (MAFS).

B.E.S.T. Standards Progression

- Documents that provide information for the intentional progression of the standards by grade band (K-5, 6-8 and 9-12) and by strand.
- These are intended to provide mathematics educators with an overview of the standards progression of the B.E.S.T. Standards for Mathematics.

Journey Through the B.E.S.T. Standards for Mathematics

2021 – 2022 | Professional Development and Implementation

Develop Tier 2/3 resources for B1G-M, develop B1G-M for 9-12 courses and continue professional development

2022 – 2023 SY | Implementation

Aligned instructional materials and assessment implemented with the B.E.S.T. Standards for Mathematics

B.E.S.T. Access Points

- To align to both the federal terminology and the adopted standards, the former term of Florida Standards Access Points has been revised to The Benchmarks for Excellent Student Thinking (B.E.S.T.) Access Points-Alternate Academic Achievement Standards (AP-AAAS) for English Language Arts and Mathematics.
- The B.E.S.T AP-AAAS for ELA and Math are only available for grades 3-12.

https://www.fldoe.org/core/fileparse.php/18736/urlt/AccessPointsMath.pdf

Aligning Assessments & Materials

- Please reach out to the Office of Assessment for any questions regarding assessments.
- Instructional Materials Timeline
  - November 2020 – Instructional Materials Specifications and Course Call
  - April – May 2021 – Intent to Bid
  - June 2021 – Bid Details, legal submission of bid
  - July 2021 – Materials due to department
  - August 2021 – Call for Reviewers
  - September 2021 – Review Period begins
  - Spring 2022 – Adoption Report
  - April 1, 2022 – Contract Period begins

Instructional Materials

- Call for Reviewers
  - The Instructional Materials Office seeking qualified expert reviewers for the 2021-2022 Mathematics Adoption.
  - FDOE has received 136 bids for K-12 Mathematics.
  - To sign up as a reviewer, please visit www.flimadoption.org.

https://www.fldoe.org/core/fileparse.php/5574/urlt/2021CallforReviewers.pdf

9-12 B1G-M Development

- Currently working on developing the following 9-12 courses:
  - Math for Data and Financial Literacy
  - Math for Data and Financial Literacy Honors
  - Math for College Algebra
  - Math for College Liberal Arts
  - Math for College Statistics

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Upcoming Events

PAEMST 2021-2022

- Nominations for grade K-6 teachers in Science, Technology, Engineering, Math and/or Computer Science are now open and will close January 7, 2022.
- Applications are now open and are due February 6, 2022.
- Please visit www.paemst.org to submit your nominations or to apply.
- For more information, email Alicia Foy Alicia.Foy@fldoe.org.

2022 B.E.S.T. Mathematics Professional Learning Events

- Participants can choose to attend one of four tracks: K-5, 6-8, 9-12 and Leadership.
- Locations
  - North, Leon County
    - June 6 – 10, 2022
  - Central, Osceola County
    - June 20 – 24, 2022
  - South, St. Lucie County
    - June 27 – July 1, 2022

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Discussion

Questions and Feedback

- Questions?

- Please provide your feedback using the QR code below.

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