

Florida Charter School Conference + School Choice Summit

October 2023



www.FLDOE.org



Agenda

- High-Quality Mathematics Instruction
- Coaching for the Benchmarks for Excellent Student Thinking (B.E.S.T.)
- Questions





Norms

- Ensure a positive and productive learning experience.
- Take responsibility for yourself as a learner:
 - Honor timeframes,
 - Be an active and hands-on learner,
 - Contribute to the learning environment in which it is okay to not know, and
 - Suspend any assumptions.



Icon Guide

Icon on the Slide	Meaning of the Icon
	Denotes opportunity for writing in Participant Guide
	Denotes opportunity for discussion
	Denotes opportunity for hands- on activity



High-Quality B.E.S.T. Math Instruction





B.E.S.T. Mathematics Learning and Teaching

What			
Florida's B.E.S.T.	How		
Standards for Mathematics	Mathematical Thinking and Reasoning Standards	Why	
		Teacher Beliefs	
	Teacher Planning and Pedagogy		



Florida's		MATH FORMULA FOR SUCCESS		
		5 + 5 + T1 + T2 + T3		
5 -	5	T1	T2	Т3
CHARACTERISTICS OF HIGH-QUALITY MATH INSTRUCTION	TYPES OF ASSESSMENTS	INSTRUCTION FOR ALL STUDENTS	SUPPLEMENTAL FOR STUDENTS NEEDING ADDITIONAL SUPPORT	TARGETED INTENSIVE FOR STUDENTS WITH SUBSTANTIAL MATH DEFICIENCY
Horizontally and Vertically Aligned	Screening	Systematic	Systematic	Systematic
Balanced Instructional Approaches	Progress Monitoring	Scaffolded	Small Group Scaffolded Instruction	Small Group and/or One-One Scaffolded Instruction
Student-Centered	Diagnostic	Differentiated	Multiple Differentiated Opportunities to Practice Targeted Skill(s)	More Differentiated Guided Practice
Instruction Informed by Assessment	Formative	Corrective Feedback	Corrective Feedback	Immediate Corrective Feedback
Implements Tiered Instruction	Summative	Explicit	Explicit	Explicit
		Inquiry-Based	Frequent Progress Monitoring	More Frequent Progress Monitoring
The B.E.S.T. Instructional Guides for students, including students with di incorporate Universal Design for Lea	sabilities (SWD) and English Lang		Occurs in Addition to Tier 1	Occurs in Addition to Tier 1 and Tier 2



The Six Goals of High-Quality Math Instruction

- 1. Represent Mathematical Concepts in Multiple Ways
- 2. Mathematical Fluency
- 3. Mathematical Discourse
- 4. Mathematical Patterns and Structures
- 5. Check for Reasonableness of Solutions
- 6. Real-World Applications



Coaching for the B.E.S.T.





Discussion

- When you hear the word coach, what do you think of?
 - What do they do?
 - What qualities make a good coach?
- How does this relate to a mathematics coach?
 - What do they do?
 - What qualities make a good mathematics coach?





Planning for Learning and Teaching as an Instructional Leader

- Asking the right questions will drive the planning conservation.
- Choose one of the common questions to get a more specific response.
 - What instructional strategies do you plan to use in this lesson?
 - What MTRs do you plan on using as a lens of instruction?
 - What data did you use prior to this lesson to inform your instruction?
 - What is the evidence of student learning?



Stand Up-Pair Up

- Find someone who shares your birthday month.
 - Partner A: Share one of your revised questions.
 - Partner B: Provide any feedback.
 - Partner B: Share one your revised questions.
 - Partner A: Provide any feedback.





Discussion

• How can we ask questions to drive a productive planning conversation?





Coaching Systems

- Consider the categories within a coaching system:
 - Hiring
 - Time
 - Relationships
 - Non-negotiables
 - Improving Instruction
- Which two categories do you feel successful with?
 - Record three strategies that help you with the categories you feel successful in.
- Which two categories do you feel you need to strengthen?



Coaching Systems Activity

- Choose a category you feel successful with and form a group of no more than six.
- As a group, create a bulleted list of three to five ideas or strategies for ensuring success with your chosen category.
 - Consider how your ideas or strategies might be different for math than for literacy.





Gallery Walk

- As you travel with your group, make notes as you gather ideas and strategies.
 - Consider your categories that you feel you need more support with when reviewing other groups strategies.
- As you travel, use a sticky note to provide feedback:
 - Leave a 🎔 for a strategy you like.
 - Leave a **?** for a strategy you have a question about.
- You will have 1 minute at each chart paper.





A Systems Approach to Coaching

Prioritizing coaching:

- Effective practices for mathematics instruction.
- Support with understanding the benchmarks.
- Support MTRs used as a lens for instruction.

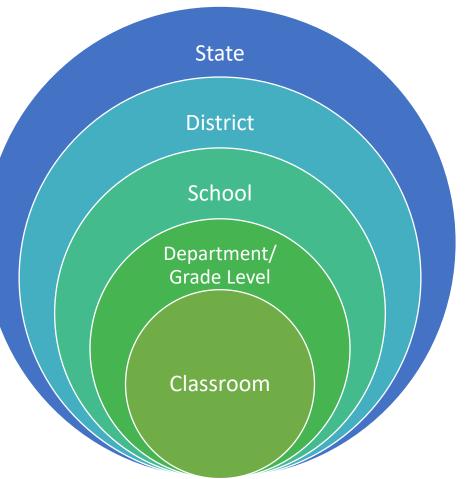
Tier 1 Instruction improves.

Student achievement improves.



Where do you fit within the system?

- The state's vision:
 - B.E.S.T. Standards for Mathematics
 - Strategic Plan
 - Five Characteristics of High-Quality Math Instruction





Let's Reflect...

"Our students are capable of unprecedented success. It is our responsibility to implement the infrastructure necessary to help them thrive."

- B.E.S.T. Standards for Mathematics, page 1

 What does "infrastructure" mean to you as a mathematics leader?





Reflection

- What is the infrastructure within your school/district?
- How are the MTRs incorporated within your infrastructure?
- What resource(s) are part of the infrastructure?
- How does the infrastructure support Tier 1 instruction?





B.E.S.T. Resources





Florida Department of Education (FDOE) Website

Mathematics & Science				
Home Academics Standards &	k Instructional Support Content Areas Mathematics & Science B.E.S.T. Standards for Mathem			
B.E.S.T Mathematics B.E.S.T Mathematics	B.E.S.T. STANDARDS FOR MATHEMATICS			
Resources Science	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.			
Sunshine State Scholars	 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. Professional Learning for Mathematics			
	Below you can find information about past, present and future professional learning opportunities.			
	Virtual Standards Institute, July and September 2020			
	 <u>B.E.S.T. Standards Overview</u> (PDF) <u>B.E.S.T. Standards for K-5 Mathematics</u> (PDF) <u>B.E.S.T. Standards for 6-12 Mathematics</u> (PDF) 			
	B.E.S.T. Mathematics District Lead Professional Development, July 2021			
	Presentations and Materials			

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

www.FLDOE.org



Mathematical Thinking and Reasoning Coaching Tool

- This tool contains Student and Teacher Moves aligned to the MTRs.
- It provides examples that demonstrate the embedding of the MTRs within the mathematics classroom, and how some MTRs could be incorporated into student learning and instruction keeping in mind the benchmark(s) that are the focal point of the lesson or task.



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

- Intended to assist educators with planning for student learning and instruction aligned to the B.E.S.T. Standards.
- Includes an analysis of information related to the B.E.S.T. Standards within a specific mathematics course, the instructional emphasis and the aligned resources.
 - Connecting Benchmarks
 - Vertical Alignment
 - Terms from the K-12 Glossary
 - Instructional Strategies
 - Common Misconceptions and Errors
 - Strategies to Support Tiered Instruction
 - Instructional Tasks and Instructional Items

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



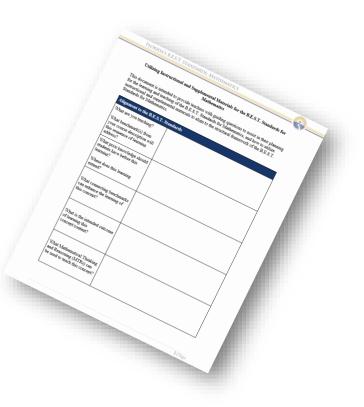
B1G-M

- Currently on the website:
 - K-8 courses with Strategies to Support Tiered Instruction
 - Algebra 1 (H) with Strategies to Support Tiered Instruction
 - Geometry (H)
 - Math for College Algebra
 - Math for College Statistics
 - Math for College Liberal Arts
 - Math for Data and Financial Literacy (H)



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

 This document is intended to provide teachers with guiding questions to assist in their planning for the learning and teaching of the B.E.S.T. Standards for Mathematics, and how to utilize instructional and supplemental materials to align to the structural framework of the B.E.S.T. Standards for Mathematics.





Questions? Contact Us!

- Courtney Starling, Secondary Mathematics Specialist
 - <u>Courtney.Starling@fldoe.org</u>
- Omar Quijada, Elementary Mathematics Specialist
 - <u>Omar.Quijada@fldoe.org</u>
- PJ Duncan, Director
 - <u>Patricia.Duncan@fldoe.org</u>



www.FLDOE.org



www.FLDOE.org