

Introduction

The B.E.S.T. Instructional Guide for Mathematics Interventions (B1G-MI) is designed to support educators in delivering targeted interventions aligned with <u>Florida's Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards</u> and the <u>Mathematical Thinking and Reasoning Standards (MTRs)</u>, and throughout the guide it references the <u>B.E.S.T. Instructional Guide for Mathematics (B1G-M)</u> for additional instruction and content support. This guide helps educators plan and implement high-quality instruction and interventions that address learning gaps while supporting mastery of the B.E.S.T. Standards for Mathematics.

The B1G-MI outlines a framework for tiered instruction, addressing the needs of all learners through Tier 1 (core), Tier 2 (supplemental) and Tier 3 (intensive) interventions. It emphasizes the use of assessments such as screening, diagnostic, formative, summative and progress monitoring to identify student learning gaps and guide instructional decisions. The guide also promotes evidence-based intervention strategies, including corrective feedback, explicit instruction, scaffolded learning, differentiated instruction and inquiry-based approaches to improve mathematics proficiency.

In addition to instructional strategies, the B1G-MI provides practical resources to assist educators in planning and delivering effective interventions. It offers guidance on best practices for lesson planning, small group instruction and intervention scheduling to maximize student learning. The guide encourages student engagement through manipulatives, questioning strategies and real-world applications to make mathematics more interactive and meaningful. It also includes helpful tools such as FAQs, instructional resources and intervention materials to streamline lesson planning and support classroom implementation.

The B1G-MI will be continuously updated and is available on the Florida Department of Education's (FDOE) website.



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

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Goal of Intervention

The goal of mathematics intervention is to empower all students to achieve mastery of grade- or course-level mathematical benchmarks through targeted instructional support. Intervention strategies are designed to address learning barriers identified by data, close achievement gaps and enhance overall academic performance.

A key component of effective intervention is **tiered instruction**, which ensures that students receive the appropriate level of support based on their individual learning needs. This structured approach allows students to build foundational skills, close learning gaps and transition out of intervention as they gain independence and confidence in their mathematical abilities. Tiered instruction is delivered through a **multi-tiered system of support (MTSS)** framework, where the intensity of instruction increases as student needs become more significant. Instruction is often intensified by increasing instructional time, narrowing the focus to specific barrier skills and/or reducing group size to develop a strong mathematical foundation.

- **Tier 1** instruction is accessible to all students and includes high-quality core instruction. Tier 1 interventions are adjustments made to core instruction when data indicate that a large percentage of students are performing below expectations. Classroom teachers typically implement Tier 1 interventions by modifying whole-group or differentiated instruction to better meet the needs of their students.
- Tier 2 provides supplemental instruction and intervention for students not meeting expectations. It is often delivered in small groups and targets specific skills that require additional support.
- **Tier 3** offers intensive intervention for students experiencing significant barriers to learning. Tier 3 interventions are often provided one-on-one or in very small groups with focused support on critical skills.

Both Tier 2 and Tier 3 interventions are intended to supplement, not replace, Tier 1 instruction. When data indicate that a student requires Tier 2 and/or Tier 3 intervention, these additional supports should be layered alongside Tier 1 mathematics instruction to ensure comprehensive learning opportunities. When implemented with fidelity, differentiated instruction within Tier 1 can effectively address the unique needs of all learners, including those requiring intervention.

Through collaboration, data analysis and problem-solving, educators can ensure students receive the right level of support to meet their needs and accelerate their learning trajectory. Whether through whole-group instruction, targeted interventions or individualized support, the ultimate objective is to equip students with the skills and confidence needed to succeed in mathematics and beyond, fostering lifelong learners prepared for future challenges.



Florida's Formula for Success

To support the implementation of the B.E.S.T. Standards for Mathematics with fidelity, the Florida Department of Education developed Florida's Mathematics Formula for Success, establishing the characteristics of high-quality mathematics instruction. Access to high-quality mathematics instruction is a fundamental value provided to Florida's students through the B.E.S.T. Standards. It is the responsibility of all educators to establish the necessary infrastructure to help students thrive. This infrastructure must be student-centered for all learners and incorporate Universal Design for Learning (UDL) principles.

High-quality mathematics instruction:

- builds upon student prior knowledge;
- develops a foundation for future learning;
- is guided by careful planning of appropriate instructional goals, content, methods, routines and use of materials;
- includes teachers consistently using the appropriate mathematical language within the B.E.S.T. Standards and guiding students to develop their own use of academic vocabulary; and
- results in deeper student understanding of mathematical concepts, strategies and skills, increased student engagement with mathematics and improved student learning outcomes.

The first column of the Formula for Success refers to the "5 Characteristics of High-Quality Math Instruction." High-quality mathematics instruction is guided by careful planning and appropriate instructional goals, content, methods, routines and use of high-quality instructional materials. The characteristics of high-quality mathematics instruction include horizontal and vertical alignment, the use of balanced instructional approaches, student-centered instruction, informed assessments and implementation of tiered instruction.

- The horizontal and vertical alignment of the B.E.S.T. Standards for Mathematics provide mathematical progressions, alignment and connections within and between strands of the grade level or course. Horizontal alignment is the intentional progression of content within a grade level or course linking skills within and across strands. Vertical alignment is the intentional progression of content from one year to the next spanning across multiple grade levels.
- Balanced instructional approaches are used intentionally as the context of the benchmark demands. Teachers encourage students to explore mathematical ideas using manipulatives and different representations (e.g., drawings, equations and graphs) through challenging tasks. Additionally, teachers help students build mathematical fluency with procedures by summarizing steps and encouraging practice.
- Student-centered instruction occurs when teachers create both collaborative and independent classroom learning environments, in which students are actively engaged in challenging mathematical tasks, encouraging them to be risk-takers and to persevere in their learning.
- Instruction is informed by teachers assessing student understanding in multiple ways (e.g., screening, progress monitoring, formative assessment, diagnostic and summative assessment). Teachers use assessment data to identify the appropriate instructional approach, select appropriate scaffolds, guide differentiation of instruction and use corrective feedback.
- Implementation of tiered instruction occurs when teachers deliver instruction and intervention for all students through informed data practices. Teachers determine the level of support students need by utilizing a variety of assessment data.



FORMULA FOR SUCCESS

5 + 5 + T1 + T2 + T3

CHARACTERISTICS OF HIGH-QUALITY INSTRUCTION

Horizontally and Vertically Aligned

Balanced Instructional **Approaches**

Student-Centered

Instruction Informed by **Assessment**

Implements Tiered Instruction

TYPES OF **ASSESSMENTS**

Screening

Progress Monitoring

Diagnostic

Formative

Summative

INSTRUCTION FOR ALL **STUDENTS**

The B.E.S.T. Instructional Guides for Mathematics (BIG-M) include ways to provide access for ALL students, including students with disabilities (SWD) and English Language Learners (ELL), and incorporate Universal Design for Learning (UDL) principles.

SUPPLEMENTAL FOR STUDENTS NEEDING ADDITIONAL SUPPORT

Small Group

Frequent Progress Monitoring

T3

TARGETED FOR STUDENTS **NEEDING INTENSIVE** SUPPORT

Systematic

Small Group and/or One-One Scaffolded Instruction

More Differentiated Guided Practice

> Immediate Corrective Feedback

> > **Explicit**

More Frequent Progress Monitoring

Occurs in Addition to Tier 1 and Tier 2

Assessment Types and Example

| Type of Assessment | Purpose | Assessment Questions | Characteristics/Specifications |
|------------------------|---|---|---|
| Screening | To know student progress toward end- of-year grade-level standards. To identify students who may benefit from intervention. | Is instruction sufficient for the majority of students to meet end-of-year gradelevel standards? Which students may be at risk for not meeting grade-level standards? | Administered to all students. Has strong <i>predictive validity</i>. Fairly quick, easy to administer, efficient. Some screeners measure specific skills. Computer Adaptive Tests (CAT) are commonly used as screeners. |
| Diagnostic Measure | To assess student specific skill strengths and weaknesses. | What are student weaknesses and strengths related to a particular skill? For what skills do students need intervention? Is there a particular skill that should be revisited in Tier 1? | Individually administered, typically to students identified as at-risk. Provides information regarding specific skills. Identifies specific areas of weakness. Norm- or criterion-referenced. Some diagnostic assessments indicate size of gap for particular skills. |
| Progress Monitoring | To monitor student progress toward an identified goal: progress toward overall proficiency, and progress on specific skills identified for intervention. To evaluate effectiveness of instruction. To quantify rate of improvement. | To what degree is instruction and/or intervention resulting in improvement for students? Are students acquiring the specific skills that have been taught at expected rates? How quickly and to what degree are students closing academic proficiency gaps? | Predicts: whether students are on track to meet end-of-year standards. whether gaps for students receiving intervention will close within a designated timeframe. Provides information on rate of growth relative to peers and standards. Repeatable (multiple forms, equal in difficulty to measure growth). Sensitive to small amounts of growth when administered at regular intervals. Frequency of administration is related to the intensity of the intervention. |
| Formative | To provide feedback and inform adjustments to ongoing teaching and learning. | Are students learning what is being taught? | Generally low-stakes. Can be formal or informal. A type of progress monitoring used for informing instruction, not determining students' Response to Intervention. |
| Summative | To evaluate student learning at the end of an instructional unit or grade level (end-of-the year). | Did students meet grade-level standards? | Typically outcome assessments. Administered at the end of an instructional unit or at the end-of-the year. |



Instructional Approaches

Within each tier of instruction, a variety of instructional approaches are chosen and utilized purposefully and intentionally to deliver instruction and intervention based on the needs of students. The instructional approaches are as follows:

Systematic Instruction

A highly structured, organized sequence of teaching that uses appropriate academic vocabulary while introducing and reinforcing new concepts, strategies and skills over time, aiming to ensure a cumulative progression of learning from simple to complex.

Systematic instruction contributes to the student's continuous acquisition of increasingly complex concepts, strategies and skills to become a confident mathematician. Systematic instruction decreases the possibility of a student developing a mathematics deficiency over time and builds a foundation for future learning.

Scaffolded Instruction

The intentional and strategic support provided by a teacher for students to carry out a task, solve a problem or achieve a goal that requires support. Support is planned, temporary and adjustable based on student understanding and need.

Scaffolded instruction contributes to student learning by building upon student knowledge and experience. It bridges learning gaps and helps students deepen their understanding of concepts, strategies and skills at grade or course level. Scaffolded instruction also supports English Language Learners in communicating information, ideas and concepts necessary for academic success. The goal is to enable students to accomplish a learning task independently.

Differentiated Instruction

Adapting instruction in response to the distinctly assessed skills and needs of students to increase their access and opportunity to meet grade- or course-level learning goals or progress toward them.

Differentiated instruction contributes to student learning by adapting instructional strategies to meet student needs in accessing and mastering grade or course-level standards and benchmarks. Differentiated instruction allows students to remediate, stay on task or accelerate their learning as needed.

Corrective Feedback

Identifying and correcting student errors by explaining what each error is and suggesting how it can be corrected, making sure students understand why an answer is either correct or incorrect. Corrective feedback needs to be timely, specific, individualized and ongoing. Corrective feedback contributes to student learning by providing opportunities to reflect and correct misconceptions or errors and reinforces expectations during lessons. Corrective feedback creates a collaborative process between teachers and students that supports continuous learning and improvement.

Explicit Instruction

Highly structured, intentional teaching, with clear objectives and purposeful presentation to students, of the concepts, strategies and skills necessary to master benchmark expectations. Explicit instruction models thinking and problem-solving skills and can be implemented as needed in whole groups, small groups or individually. Explicit instruction contributes to student learning by minimizing proximal gaps and misconceptions through teacher modeling and opportunities to master benchmark expectations.



Inquiry-Based Instruction

A discovery-based approach where teachers act as facilitators while students develop their understanding of concepts, strategies and skills through exploration. Inquiry-based instruction contributes to student learning by emphasizing critical thinking, creativity, curiosity, collaboration and problem-solving, allowing students to take ownership of their learning and develop a deeper understanding of concepts, strategies, skills and real-world connections. Inquiry-based instruction provides students the opportunity to justify their methods using appropriate mathematical language and compare their mathematical thinking to the thinking of their peers to advance and deepen their understanding of correct and increasingly efficient methods.



Planning and Implementation

Effective instruction and intervention require thoughtful planning, strategic implementation and the use of evidence-based practices. The following best practices provide flexible guidance to help educators maximize instructional planning and delivery to support student learning. By incorporating intentional planning, clear objectives and engaging methods, teachers can create meaningful learning experiences that foster growth and understanding.

Once the specific area of support is identified, develop an intervention plan that includes options for flexible learning, small group instruction and engaging activities.

• Set Clear Objectives

Begin each intervention by clearly stating the learning objectives. Use simple, student-friendly language to ensure everyone understands what they are expected to learn. Displaying the objective will help students stay focused as they work toward their goals.

• Connect the Objective to the Activity

Establish the purpose of each task by explaining how the activity relates to the learning objective. Encourage students to reflect on their progress and determine measurable steps for improvement.

• Incorporate Small Group Instruction

Small group instruction allows teachers to provide targeted support based on students' individual needs. In small groups, teachers can:

- o focus on specific skills or concepts identified through data.
- o provide immediate feedback and address misconceptions in real time.
- o differentiate tasks by adjusting pacing, materials and strategies to match students' readiness.
- o foster collaboration by encouraging peer-to-peer discussions that promote deeper understanding.

• Use Manipulatives and Visuals

- o Manipulatives: Provide hands-on tools to help students understand abstract concepts.
- o Visuals: Use charts, diagrams and visual aids to support visual learners.

Combining manipulatives and visuals allows students to explore concepts concretely before transitioning to abstract understanding.

• Incorporate Guided Questioning

Thoughtful questioning strategies can deepen understanding and promote critical thinking. Ask questions that prompt students to explain their reasoning, connect new information to prior knowledge and reflect on their learning. Effective questioning encourages students to analyze their thought processes, refine their methods and build problem-solving skills.

• Provide Corrective Feedback

Corrective feedback identifies and addresses student errors by explaining mistakes and offering strategies for improvement. Effective feedback is timely, specific and individualized, helping students understand why an answer is correct or incorrect.

Corrective feedback supports learning by:

- o reinforcing expectations and encouraging perseverance.
- o helping students recognize and correct misconceptions.
- o providing strategies that guide students toward improved understanding.



Anticipating common misconceptions allows teachers to provide targeted strategies that help students recognize and correct errors. By embedding feedback into instruction and encouraging peer discussions, educators can create a collaborative learning environment that values mistakes as learning opportunities. This approach promotes resilience, strengthens problem-solving skills and builds student confidence in mathematics.

By combining these best practices, educators can provide targeted interventions that meet the needs of all of their students. These strategies help ensure that all students receive the support necessary to develop strong mathematical foundations, close learning gaps and achieve long-term academic success.



Mathematical Thinking and Reasoning Standards (MTRs) Teacher and Student Moves

The <u>Mathematical Thinking and Reasoning (MTR) Classroom Coaching Tool</u> is designed to assist educators and leaders in enhancing their teaching practices to foster student engagement, perseverance and deep understanding in mathematics. Aligned with Florida's B.E.S.T. Standards for Mathematics, this tool emphasizes the integration of MTRs into daily instruction, ensuring that students not only grasp mathematical concepts but also apply them effectively in real-world contexts.

Key Features of the MTR Coaching Tool:

- **Detailed Teacher and Student Actions:** The tool outlines specific behaviors and strategies for both teachers and students corresponding to each MTR standard. This dual perspective promotes a collaborative learning environment where instructional practices and student engagement are aligned.
- Sample "Look-for" Tool: Included is an observational resource that educators can utilize to provide constructive feedback on the implementation of MTRs in the classroom. This feature aids in continuous improvement and reflective teaching practices.

Application of the MTRs in Mathematics Interventions

Incorporating the MTRs into mathematics interventions is pivotal for addressing all student needs and promoting comprehensive mathematical understanding.

Here's a list of examples of connection between each MTR and tiered instruction strategies, including relevant teacher and student moves:

MA.K12.MTR 1.1 - Actively participate in effortful learning both individually and collectively.

- Tiered Instruction and Intervention Connection: Encourage student persistence during intervention activities, supporting growth mindset and productive struggle.
- Student Moves: Engage actively in tasks, ask clarifying questions and reflect on their own thinking.
- Teacher Moves: Provide differentiated tasks, create a supportive environment for risk-taking and encourage perseverance in problem-solving.

MA.K12.MTR 2.1 - Demonstrate understanding by representing problems in multiple ways.

- Tiered Instruction and Intervention Connection: Support students in accessing content through varied representations, critical for closing learning gaps.
- Student Moves: Use manipulatives, drawings and abstract representations to explore concepts.
- Teacher Moves: Offer visual aids, hands-on tools and multiple entry points for problem-solving to meet all learner needs.

MA.K12.MTR 3.1 - Complete tasks with mathematical fluency.

- Tiered Instruction and Intervention Connection: Emphasize building flexibility and accuracy through practice, key for Tier 2 and Tier 3 instruction and interventions.
- Student Moves: Practice efficient methods, use feedback for improvement and build confidence through repeated exposure.



• Teacher Moves: Provide targeted practice, guide reflection on method efficiency and use error analysis as a learning tool.

MA.K12.MTR 4.1 - Engage in discussions that reflect on the mathematical thinking of self and others.

- Tiered Instruction and Intervention Connection: Facilitate small group or one-on-one discussions that uncover misconceptions and reinforce learning.
- Student Moves: Justify methods, engage in peer discussions and revise thinking through reflection.
- Teacher Moves: Use probing questions, encourage collaborative dialogue and facilitate structured discussions to deepen understanding.

MA.K12.MTR 5.1 - Use patterns and structure to help understand and connect mathematical concepts.

- Tiered Instruction and Intervention Connection: Help students recognize relationships across concepts, aiding in scaffolding and knowledge transfer.
- Student Moves: Identify patterns, decompose problems into manageable steps and connect prior knowledge to new learning.
- Teacher Moves: Guide students in identifying patterns, sequencing steps effectively and reflecting on generalizable strategies.

MA.K12.MTR 6.1 - Assess the reasonableness of solutions.

- Tiered Instruction and Intervention Connection: Encourage self-monitoring strategies during intervention, strengthening students' ability to check their work.
- Student Moves: Estimate answers, monitor calculation steps and reflect on solution viability.
- Teacher Moves: Encourage students to predict solutions, compare results to estimates and explain their reasoning.

MA.K12.MTR 7.1 - Apply mathematics to real-world contexts

- Tiered Instruction: Provide meaningful applications that reinforce concepts and deepen understanding for struggling learners.
- Student Moves: Connect mathematical ideas to real-life scenarios, gather data for analysis and modify models for accuracy.
- Teacher Moves: Introduce authentic contexts, provide opportunities for inquiry and guide students in evaluating mathematical models.

Tiered Instruction Strategies Using MTRs

- Tier 1: Embed MTR strategies in core instruction with varied representations, hands-on tools and real-world applications.
- Tier 2: Implement targeted small group interventions that include structured discussions, guided practice and scaffolded instruction.
- Tier 3: Provide intensive, individualized interventions with opportunities for visual supports, error analysis and real-world problem-solving to reinforce understanding.



Substantial Deficiency in Mathematics

Pursuant to Section (s.) 1008.25(6), Florida Statutes (F.S.), any student in Kindergarten through Grade 4 who exhibits a substantial deficiency in mathematics, or the characteristics of dyscalculia, based upon a variety of assessments, such as screening, diagnostic, progress monitoring, formative and summative must:

- 1. Be provided explicit, systematic mathematics interventions immediately following the identification of the mathematics deficiency(ies) to address his or her specific deficiency(ies). This instruction can be done through daily targeted small group mathematics intervention or through supplemental, evidence-based mathematics instruction before or after school, or both, delivered by a highly qualified teacher of mathematics or a trained tutor.
- 2. Be monitored for their performance of receiving mathematics instruction under <u>s. 1008.25(6)(a)</u>, F.S., and instruction must be adjusted based on the student's needs.
- 3. Be monitored and the intensive interventions must continue until the student demonstrates grade-level proficiency in a manner determined by the district, which may include achieving a Level 3 on the statewide, standardized mathematics assessment.

To support students who have been identified as having a substantial deficiency in mathematics, the Florida Department of Education (FDOE) will be providing a list of state-examined and approved mathematics intervention programs, curricula and high-quality supplemental materials that **may be** used to improve a student's mathematics deficiency(ies). Additionally, school districts and teachers may utilize effective evidence-based practices (EBP) in mathematics, strategies and interventions as disseminated by FDOE.

A school may not wait for a student to receive a failing grade at the end of a grading period or wait until a plan under <u>s. 1008.25(4)(b)</u>, F.S., is developed to identify the student as having a substantial mathematics deficiency and initiate intensive mathematics interventions. In addition, a school may not wait until an evaluation conducted, pursuant to <u>s. 1003.57</u>, F.S., is completed to provide appropriate, evidence-based interventions for a student whose parent submits documentation from a professional licensed under Chapter 490, F.S., which demonstrates that the student has been diagnosed with dyscalculia. Such interventions must be initiated upon receipt of the documentation and based on the student's specific areas of difficulty as identified by the licensed professional.

Rule 6A-6.0533, Florida Administrative Code (F.A.C.) – Determining a Substantial Deficiency in Early Mathematics Skills and Substantial Deficiency in Mathematics

In accordance with <u>Rule 6A-6.0533</u>, F.A.C., for Kindergarten through Grade 4, a student is identified as having a substantial deficiency in mathematics based upon a minimum of five data points. The data must be based on if the student scores below the 10th percentile on various assessments including screening, diagnostics, formative, summative, progress monitoring, or the coordinated screening and progress monitoring system pursuant to <u>s. 1008.25(9)</u>, F.S., and if the student has demonstrated minimum skill levels for mathematics competencies in one or more of the areas of emphasis for that grade level.



Frequently Asked Questions

What are some methods for teaching foundational mathematics concepts during an intervention?

• Methods include using concrete manipulatives (e.g., base ten blocks or ten frames) before moving to pictorial representations and then abstract symbols and algorithms. Meeting students where they are and closing learning gaps through misunderstandings or common errors is essential to build onto. (MA.K12.MTR.2.1)

What strategies are used to differentiate instruction for learners in mathematics interventions?

• Differentiation strategies provide instruction through the Universal Design for Learning (UDL) framework (e.g., choices to access and engage with instruction, as well as choice for demonstrating understanding/learning). This could include providing tiered levels of support.

What does scaffolding look like? What are some examples of ways to scaffold a small group lesson?

• Scaffolding helps build understanding from basic to more complex concepts. Scaffolding in a small group lesson involves providing support at each step of learning and gradually removing it as students show more understanding. For example, when teaching addition, you might begin by using concrete manipulatives (e.g., counting blocks) to represent the addends of an addition problem. To effectively use manipulatives in a small group lesson, begin by clearly introducing the tool and explaining how it relates to the concept being taught. For example, when teaching place value, introduce base-ten blocks and demonstrate how a rod can represent a group of ten units. Model how to use the manipulative to solve problems, providing students with hands-on practice. Emphasize the importance of manipulating objects carefully, reinforcing that these are tools to help visualize and solve mathematical problems.

Intervention and Support

When does Tier 2 or 3 intervention happen within the school day?

• Tier 2 and Tier 3 interventions should occur in addition to, not in place of, regular Tier 1 (core) instruction. These interventions may take place before, during or after the school day, depending on district guidance and student needs. Tier 2 intervention typically involves small group sessions focusing on specific skills, while Tier 3 intervention provides more intensive one-on-one or very small group support. Interventions are scheduled based on student needs and may align with designated time blocks within the school day for focused instruction. These could occur for students with or without an identified substantial deficiency in mathematics.

Who is responsible for providing Tier 3 intervention?

• Tier 3 interventions may be provided by classroom teachers, coaches, highly trained interventionists or special education staff. In Florida, Tier 3 interventions may involve specialized programs or strategies, as aligned with Individual Educational Plans (IEPs), based on specific student needs outlined in benchmarks. For Kindergarten through Grade 4 students who exhibit a substantial deficiency in mathematics, supplemental interventions provided before or after school must be delivered by an educator with a bachelor's degree or higher who holds an active valid Florida Educator Certificate or a trained tutor.



If a student has an IEP, what tier(s) of instruction do they receive?

• Students with an IEP continue to receive Tier 1 instruction alongside their peers. Tier 2 or Tier 3 interventions may be provided based on specific skill deficits, but having an IEP does not automatically place a student in these additional tiers of support. Interventions should be tailored to their IEP goals, aligned with Florida standards and include Specially Designed Instruction (SDI) to meet unique learning needs. For more information on how SDI aligns with tiered instruction for students identified as exceptional student education (ESE), refer to the resource "What's Special About Special Education?."

How do I adapt my resources to fit the needs of my students?

• Resources can be adapted by selecting materials or tools that are appropriate for the student's level of understanding, such as simplified word problems or manipulatives. For example, if a student struggles with addition, use number lines or counting manipulatives to make the concept more tangible. (MA.K12.MTR.2.1, MA.K12.MTR.4.1).

How do I identify the key skills my students need to focus on during tiered instruction?

• To determine the most critical skills for tiered instruction, review Florida's grade-level mathematics benchmarks and identify the foundational skills students must master at each stage. You may use the <u>B.E.S.T. Instructional Guide for Mathematics (B1G-M)</u> to help identify horizontally and vertically aligned benchmarks that are connected to grade-level benchmarks. Use diagnostic assessments and progress monitoring tools to identify specific gaps. Focus on the skills that will enable students to succeed in subsequent grade-level standards and ensure that interventions are aligned with these priorities. This approach ensures that tiered instruction addresses the most essential areas for student success. (MA.K12.MTR.3.1)

How often should I progress monitor students receiving Tier 2 or 3 instruction and interventions?

• While there is no specific timeframe required by the state, Florida's MTSS emphasizes the importance of frequent and consistent progress monitoring based on the intensity of the intervention. Students receiving Tier 2 support should be monitored more frequently than those in Tier 1, and Tier 3 students require even more intensive monitoring to ensure interventions are effective. The fidelity of implementation—ensuring the intervention is delivered as intended—is just as critical as the frequency of progress monitoring. Regular data collection allows for timely adjustments to instructional strategies if students are not making adequate progress. For more specific guidelines, please refer to your school or district policies.

What are some ways to increase student engagement and motivation while using interventions?

• Incorporate strategies that make learning meaningful, interactive and student-centered. Use real-world examples, connect mathematics to students' interests and provide hands-on activities to create relevance and foster engagement. Solving real-world problems that are benchmark-aligned helps students see the value of mathematics in everyday life. (MA.K12.MTR.7.1) Additionally, strategies such as game-based learning, immediate feedback and student choice can boost engagement. Applying the principles of Universal Design for Learning (UDL) can further enhance engagement by offering multiple means of engagement, representation and action. Providing choice in activities, setting meaningful goals and encouraging collaboration can build student persistence. Presenting information using visuals, manipulatives and digital tools supports learning preferences while offering students flexible ways to demonstrate their learning, such as



discussions, visual models or written explanations. This ensures all learners can actively participate. Incorporating these strategies makes interventions accessible and motivating for all students.

Assessment and Monitoring

How do you monitor student progress during intervention and adjust strategies as needed?

 Progress monitoring involves utilizing a variety of assessments such as formative assessments, diagnostic tools and progress monitoring aligned with the B.E.S.T. Standards. These could include informal checks for understanding, classroom assessments and/or the Florida Assessment of Student Thinking (F.A.S.T.) progress monitoring assessments to identify specific gaps in foundational skills.

How can I determine the effectiveness of an intervention?

• Use progress monitoring data to assess whether students are meeting benchmarks over time. If a student is not progressing, adjust the intervention strategies. For example, use diagnostic assessments aligned with the benchmark that students are working on. Consider modifying strategies, group size and/or the amount of instructional time as needed. It is essential to implement interventions with fidelity, meaning they should be delivered as designed and intended, following the recommended procedures and duration. Fidelity ensures that the data collected accurately reflects the effectiveness of the intervention itself rather than inconsistencies in its delivery. Regular observations and checklists can help monitor fidelity and identify areas for improvement.

Tools and Resources

What are some essential mathematics tools students should use during instruction?

- Essential mathematics tools include a variety of resources that support conceptual understanding, problem-solving and student engagement across all instructional settings, including whole group, small group and independent learning. Manipulatives help students interact with mathematical concepts in a hands-on and visual way, making abstract ideas more concrete.
- Tools such as base-ten blocks, number lines, fraction tiles and ten frames support foundational number sense, place value understanding and fraction concepts.
- Students benefit from algebra tiles for exploring expressions and equations, geometric models
 like patty paper and three-dimensional figures for understanding spatial relationships, and tools
 such as protractors, rulers and compasses for measurement and geometric constructions.
 Additionally, function machines, equation balance scales and coordinate planes help students
 grasp algebraic relationships and transformations.
- Digital tools, including graphing calculators and dynamic software, provide further opportunities for interactive exploration across grade levels.
- When used effectively, these tools create a multi-sensory learning environment that allows students to visualize, manipulate and analyze mathematical concepts, reinforcing their understanding and building a strong foundation for more complex problem-solving.

What is the difference between strategy, tool and representation?

• A strategy is a method for solving problems (e.g., "counting on"). A tool is a material used to facilitate learning (e.g., ten frames). A representation is a visual or symbolic expression of a concept (e.g., a number line to represent addition).



Grouping and Structure

What is the best way to group students for small group instruction?

To effectively group students for small group instruction, use data to identify their current skill levels and specific learning needs. Grouping students with similar instructional needs allows for targeted support and maximizes learning outcomes. For example, a small group working on fluency may focus on different addition and subtraction strategies tailored to each student's readiness. Flexible grouping is key, regularly reviewing data and adjusting groups ensures that instruction remains responsive to students' progress and evolving needs.

How do I structure a high-quality small group lesson in mathematics?

- A well-structured small group mathematics lesson is focused, responsive to student needs and aligned with grade-level benchmarks. While designed to provide targeted intervention, this structure can also be highly effective in whole-group or individual instruction to support diverse learning needs.
- A small group lesson typically includes the following key components:
 - O Clear Learning Objective: Begin with a clearly stated objective that guides instruction and helps students understand the purpose of the lesson. Using student-friendly language ensures clarity and focus throughout the session.
 - Connection to Prior Knowledge: Activate students' background knowledge with a brief
 discussion, warm-up task or review of foundational skills. This step helps students make
 meaningful connections between what they already know and the new concepts being
 introduced.
 - Purposeful, Interactive Instruction: Engage students through strategies such as modeling, guided practice and questioning. Incorporating hands-on tools like manipulatives, visual representations or digital resources allows students to explore concepts in multiple ways, accommodating different learning styles.
 - Opportunities for Collaboration and Practice: Provide time for students to engage in meaningful practice, whether individually or collaboratively. Encouraging students to explain their thinking, participate in discussions and solve problems together promotes deeper understanding.
 - Ongoing Assessment and Feedback: Continuously monitor student progress through observation and assessment. Adjust instruction in real time to address misconceptions and provide corrective feedback to guide learning.
 - O Closure and Reflection: Conclude the lesson with a summary or reflection activity. This reinforces key ideas, encourages students to articulate their learning and helps connect the lesson to future instruction.
- By maintaining a flexible yet structured approach, this framework can be adapted to meet the
 needs of various instructional formats. Whether used for small groups, whole-class instruction or
 one-on-one support, this structure promotes active engagement, meaningful learning and
 improved mathematical understanding.

How much time do I spend on fluency?

 Fluency practice should be embedded in daily lessons. Florida's benchmarks suggest fluency should be developed through consistent and focused practice sessions. Instruction should NOT focus on speed in the classroom, nor should it be in isolation from other benchmarks that emphasize understanding.



Glossary

The following glossary is a reference resource provided for teachers to support the expectations of Florida's B.E.S.T. Standards for Mathematics in intervention settings. This glossary is not intended to serve as a comprehensive vocabulary list for teachers or students. FDOE recognizes that there may be alternative definitions for some terms that are also mathematically correct. However, the intention here is to provide common language and shared understanding among all stakeholders in the state of Florida.

| Term | Definition |
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| Accommodation | Changes that are made in how the student accesses information and demonstrates performance. Rule 6A-6.03411(1)(a), F.A.C. |
| Actionable Steps | Specific, clear and practical actions that can be taken to achieve a particular goal or solve a problem. |
| Corrective Feedback | Identifies and corrects student errors by explaining what each error is and suggesting how it can be corrected, ensuring students understand why an answer is either correct or incorrect. Feedback needs to be timely, specific, individualized and ongoing. This approach contributes to student learning by providing opportunities to reflect and correct misconceptions or errors and reinforces expectations during instruction. Corrective feedback creates a collaborative process between teachers and students that supports continuous learning and improvement. |
| Diagnostic | Assessments used to identify a student's strengths and weaknesses for students identified as at-risk on a screening assessment. |
| Differentiated Instruction | Adapts instruction in response to the distinctly assessed skill, as well as the needs of students to increase their access and opportunity to progress to and meet grade or course-level learning goals. This approach contributes to student learning by adapting instructional strategies to meet student needs in accessing and mastering grade or course-level standards and benchmarks. Differentiated instruction allows students to remediate, stay on task or accelerate their learning as needed. |
| Explicit Instruction | Highly structured and intentional teaching, with clear objectives. Through purposeful presentation to students of the concepts, strategies and skills necessary to master learning objectives, the instruction models thinking and problemsolving skills. This approach can be implemented as needed in whole groups, small groups or individually. Explicit instruction contributes to student learning by minimizing proximal gaps and student misconceptions. Proximal gaps occur when a student is performing below grade level and has yet to achieve grade-level expectations. This intentional approach to instruction utilizes teacher modeling and opportunities for student practice to support mastery of grade-or course-level learning objectives. |



| Facilitate | Guiding and supporting students through the learning process rather than simply delivering information. |
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| Formative | Assessments used to monitor student learning to provide ongoing feedback that can be used by educators to identify the current state of the learners' knowledge and skills. More specifically, educators can use formative assessment on a regular basis to monitor student learning and adjust their current instruction to meet the needs of the learner. |
| Guided Questioning | A teaching strategy where the teacher uses a series of carefully crafted questions to lead students through the learning process in order to help students develop a deeper understanding by teaching them to think critically and independently. |
| Horizontal Alignment | The intentional progression of content within a grade level or course linking skills within and across strands. Connecting benchmarks are benchmarks that either make a mathematical connection or include prerequisite skills. |
| Inquiry-Based Instruction | A discovery-based approach where teachers act as facilitators while students develop an understanding of concepts, strategies and skills through exploration. This instruction contributes to student learning by emphasizing critical thinking, creativity, curiosity, collaboration and problemsolving. This allows students to take ownership of their learning and develop a deeper understanding of concepts, strategies, skills and real-world connections. Inquiry-based instruction provides students the opportunity to justify their methods using appropriate mathematical language while comparing their mathematical thinking to the thinking of their peers. |
| Instruction Informed by Assessment | Teachers use assessment data to identify the appropriate instructional approach, select appropriate scaffolds, guide differentiation of instruction and use corrective feedback. |
| Modification | To adjust the curriculum, instruction or assessment to better meet a student's need while maintaining the integrity of the learning objective. |
| Multi-Tiered System of Supports (MTSS) | An educational framework designed to promote successful outcomes for ALL students. It provides a framework where educators use a data-based problem-solving process to inform multiple tiers of standards-aligned instruction and intervention designed to increase the academic, behavioral and life skills of students. For more information, visit MTSS. |
| Ongoing Assessment | A continuous process of evaluating students' understanding and progress throughout the learning process. It is integrated into daily instruction and provides immediate feedback to both teachers and students. |



| Progress Monitoring | Assessments that are used to monitor students' progress toward an identified goal. Progress toward overall proficiency and progress on specific skills identified for intervention. Progress monitoring may be used to evaluate effectiveness of instruction and to quantify rate of improvement. |
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| Scaffold | Temporary support provided to learners as they work toward mastery of the skill or benchmark. |
| Scaffolded Instruction | The intentional and strategic support provided by a teacher for students to carry out a task, solve a problem or achieve a goal with support. It is planned, temporary and adjustable based on student understanding and need. The support decreases as mastery of concepts, strategies and skills increases. Scaffolded instruction contributes to student learning by building upon student knowledge and experience. It bridges learning gaps. Scaffolded instruction also supports English Language Learners in communicating information, ideas and concepts necessary for academic success. The goal is to enable students to accomplish a learning task independently. |
| Screening Assessment | Identifies the probability of risk or success in mathematics achievement. Can be used to measure the effectiveness of Tier 1, or core, instruction in the classroom and identify students needing more intensive interventions and supports. |
| Student-Centered Instruction | Teachers create both collaborative and independent classroom learning environments, in which students are actively engaged in challenging mathematical tasks, encouraging students to be risk-takers and to persevere in their learning. |
| Summative | Assessments used to evaluate students' performance relative to a set of content standards generally administered at the end of the school year. |
| Systematic Instruction | A highly structured, organized sequence of teaching that introduces and reinforces new concepts, strategies and skills and aims to ensure a cumulative progression of learning from simple to complex. Systematic instruction contributes to students' continuous acquisition of increasingly complex concepts, strategies and skills to become a confident mathematician. This approach decreases the possibility of a student developing a mathematics deficiency over time and builds a foundation for future learning. |



| Tier 1 | Includes instruction that is accessible to all students. A Tier 1 intervention is a change or adjustment made to core instruction for all students based on data. Tier 1 interventions are implemented when data indicate that the majority or a high percentage of students in a large group (e.g., class, grade level, school) are performing below expectations. Typically, classroom teachers implement Tier 1 interventions for their class by planning and implementing data-based changes to either whole group or differentiated instruction that impacts all students. |
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| Tier 2 | Supplemental instruction and intervention, which is provided to students not meeting expectations and is often delivered to small groups of students who will likely benefit from instruction focused on the same target skill(s). Tier 2 occurs in addition to Tier 1 (core) instruction. |
| Tier 3 | Intensive intervention is intended for students experiencing significant barriers to learning and can be provided one-on-one or in very small groups. Tier 2 and 3 interventions should be aligned with Tier 1 and include additional instructional time focused on critical skills. Tier 3 occurs in addition to Tier 1 (core) instruction and Tier 2. |
| Tiered Instruction | Teachers deliver instruction and intervention for all students through informed data practices. Teachers determine the level of support students need by utilizing a variety of assessment data. |
| Universal Design for Learning (UDL) | An educational framework that aims to create accessible learning environments by proactively designing curricula to accommodate the needs of all learners. Grounded in research from the learning sciences, UDL emphasizes the elimination of barriers in education through intentional planning and flexible instructional methods. For more information, visit Universal Design for Learning Guidelines. |
| Vertical Alignment | The intentional progression of content from one year to the next spanning across multiple grade levels. |