



Eureka Math TEKS Edition (K-5) and Specially Designed Instruction

F I E L D U S E R G U I D E

A collaborative project of the Texas Education Agency and the Inclusion in Texas Network



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Purpose of This Guide

This Field User Guide was developed to support the use of the High Quality Instructional Materials (HQIM) Eureka Math TEKS Edition (K-5)-aligned instructional materials to provide specially designed instruction (SDI) for students with disabilities as required through IDEA (2004). Both general and special educators play a role in implementing SDI for students with Individualized Education Programs (IEPs). This document provides multiple ways to approach and plan for the provision of SDI and presents multiple lenses through which readers can examine the connections between the tools and content in Eureka Math TEKS Edition (K-5) and the components of SDI, which are: content, methodology, and delivery of instruction.

The content and lessons in Eureka Math TEKS Edition (K-5) are subject to change; however, the implementation remains the same. For the purpose of this resource, we've utilized Grade 3, Module 1: Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10 from the pilot Eureka Math TEKS Edition (K-5).

The SDI is tailored specifically to address the impact the disability has on a student's learning. It is designed to ensure access of the child to the general curriculum and to enable the child to meet IEP annual goals. The Admission, Review, and Dismissal (ARD) committee develops SDI for each student. The following graphic is from the [SDI Field User Guide](#) from the Inclusion in Texas Statewide Initiative.



***Impact of disability is only one part of the present levels of academic and functional performance statement (PLAAPF).**

Specially Designed Instruction and Eureka Math TEKS Edition (K-5)

The following are tools or supports included in the Eureka Math TEKS Edition (K-5) that support the development of specially designed instruction.

SDI Component	Description	Examples from Eureka Math TEKS Edition (K-5)
Content	<p>The curriculum, aligned with the state standards, is the content of instruction.</p> <p>Content adjustments could include: Systematic instruction</p>	<p>Systematic instruction:</p> <ul style="list-style-type: none"> • Always review and integrate prior learning or prerequisite skills and concepts. • Make the numbers accessible by changing the number set to a manageable number based on the student's needs. • Sequence instruction for incremental building by vertically aligning the concepts. • Give visual and verbal support. • Provide immediate feedback about the task or the process. <p><i>Adapted from Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades.</i></p>
Methodology	<p>The methodology includes the instructional approach(es) best suited to the student's needs. For example:</p> <ul style="list-style-type: none"> • Direct explicit instruction • Small-group instruction • Differentiated instruction 	<p>Explicit instruction</p> <ul style="list-style-type: none"> • Provide clear and concise instruction with immediate feedback for the task or the process. • Model using concrete manipulatives, and match to the representational and abstract representations. <p>Small-group Instruction: Delivery in a smaller setting</p> <p>Differentiated Instruction based on:</p> <ul style="list-style-type: none"> • Multiple intelligences • Learning styles <p>Provide alternate ways for students to demonstrate their understanding.</p>

Specially Designed Instruction and Eureka Math TEKS Edition (K-5)

SDI Component	Description	Examples from Eureka Math TEKS Edition (K-5)
Delivery of Instruction	Delivery of instruction includes: <ul style="list-style-type: none"> • Frequency (e.g., daily) • Duration (e.g., 30 minutes, one hour) • Location (e.g., general education, self-contained classroom, special education room) 	Suggested Lesson Structure: <ul style="list-style-type: none"> • Fluency Practice (daily, 5-15 minutes) • Application Problem (daily, 10 minutes) • Concept Development (daily, 35 minutes) • Student Debrief (daily, 10 minutes)
Accessibility Features	Accessibility features (accommodations) remove barriers to learning, change how the content is taught, or how the student accesses the general education curriculum.	<ul style="list-style-type: none"> • Audio or video recording of lessons provided by teacher • Student responses recorded • Change in pacing • Shortened assignments • Pre-teach vocabulary or mini lesson of concept/skill • Quick reference sheets or notes • Graphic organizers • Manipulatives • Tools such as charts • Didax Virtual Math Manipulatives

Considerations for Teacher Collaboration in an Inclusive Environment

The following table outlines the different collaborations that may take place regarding SDI in an inclusive environment. It is not meant to be an exhaustive list of activities a teacher might undertake or how the different roles and considerations look in the classroom.

General Education Teacher	Special Education Teacher	Technology
<p>Explicit instruction:</p> <ul style="list-style-type: none"> • Provide clear, detailed instructions • Provide examples 	<p>Meet with teacher (e.g., itinerant/co-teacher) to preview and model the lesson design.</p> <p>Review IEP for specific responsibilities.</p>	<p>Record directions or the steps/process of a problem-solving strategy.</p> <p>Project clear directions and visuals.</p>
<p>Modeling: Use co-teaching approaches to model with manipulatives, moving from the concrete to the representational to the abstract.</p>	<p>Use co-teaching approaches during lessons to demonstrate as the teacher explains steps in a process.</p>	<p>Provide virtual demonstrations and recordings of the concepts using manipulatives while connecting to the representational and abstract levels.</p>
<p>Preteaching:</p> <ul style="list-style-type: none"> • Vocabulary • Previewing concepts and skills • Mini lesson <p>Assistive technology for vision and hearing needs.</p>	<p>Pre-teach vocabulary to introduce students to new vocabulary words before the new vocabulary words are used within the context of new learning.</p> <p>Re-teach vocabulary or concepts to remind students of previously learned material before the prerequisite knowledge is used within the context of new learning.</p> <p>Procure assistive technology for students with vision or hearing needs.</p> <p>Upload documents to a virtual platform that provides access to magnification tools, highlighters, etc.</p> <p>Provide visual cards and hand signing or signals.</p>	<p>Use sentence stems in a virtual platform, which assists in scaffolding instruction to help students get started in speaking and writing.</p> <p>Provide technological modifications for students with sensory motor needs.</p> <p>Type or project content using a large font.</p> <p>Provide captioned audio and video productions for students who are deaf/hard of hearing.</p>

Curriculum Development Considerations

When beginning new learning, it is important to consider students' learning from previous grade levels. Subsequent learning is also important, as it gives teachers a view of what learning comes next to ensure appropriate mastery at students' current level.

Eureka Math-Grade 3 Source: Pilot Eureka Math TEKS Edition (K-5) Module 1 Overview: Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10	
Prior Learning:	
<p>Kindergarten: Generate a number that is one more than or one less than another number up to at least 20.</p> <p>First grade: Generate a number that is greater than or less than a given whole number up to 120.</p> <p>Second grade:</p> <ul style="list-style-type: none"> • Generate a number that is greater than or less than a given number up to 1,200; • Model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined and; • Model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets. 	
Anticipated Difficulty Considerations	
Anticipated Difficulty	"Must Do" Remedial Problem Suggestion
The first problem of the Problem Set is too challenging.	Write a short sequence of problems on the board that provides a ladder to Problem 1. Direct the class or small-group to complete those first problems to empower them to begin the Problem Set. Consider labeling these problems "Zero Problems" since they are done prior to Problem 1.
There is too big of a jump in complexity between two problems.	Provide a problem or set of problems that creates a bridge between the two problems. Label them with the number of the problems they follow. For example, if the challenging jump is between Problems 2 and 3, consider labeling the bridging problems "Extra 2s."

Curriculum Development Considerations

Eureka Math-Grade 3

Source: Pilot Eureka Math TEKS Edition (K-5)

Module 1 Overview: Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10

Prior Learning:

Students lack fluency or foundational skills necessary for the lesson.	Before beginning the Problem Set, do a quick, engaging fluency exercise, such as a Rapid White Board Exchange, 'Thrilling Drill', or Sprint. Before beginning any fluency activity for the first time, assess that students are poised for success with the easiest problem in the set.
More work is needed at the concrete or representational level.	Provide manipulatives or the opportunity to draw solutions strategies. Especially in Kindergarten, at times the Problem Set or pencil and paper aspect might be completely excluded, allowing students to simply work with materials.
More work is needed at the abstract level	Hone the Problem Set to reduce the amount of drawing as appropriate for certain students or the whole class.



Curriculum Development Considerations

Eureka Math-Grade 3

Source: Pilot Eureka Math TEKS Edition (K-5)

Module 1: Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10

Activate Prior Learning by using Sprints in Eureka Math

Sprints offer concentrated fluency practice on specific skills and concepts.

A well-managed and carefully timed routine is used in a Sprint to create an environment where students are fully engaged and focused on the activity. Students are not expected to complete all of the problems and should not be assessed on their speed. Instead, Sprints are intentionally designed to provide students with opportunities to strive for and measure their improvement from one Sprint to the next within an engaging and motivating environment.

Sprints support procedural fluency, a critical component of mathematical proficiency, by fostering conceptual understanding and flexible problem solving. The problems in each Sprint are carefully selected and sequenced to help students recognize patterns and structures to solve subsequent, more complex problems.

For example, consider the following sequence of problems. The first problem contains an unknown factor. The second problem intentionally decomposes the known factor in the first problem, 4, into 2×2 . The third problem is a variation of the second problem with one given factor changed. This type of sequence allows students to solve problems by flexibly using factual recall, pattern recognition, and numeracy strategies.

$$12 = 4 \times \underline{\quad}$$

$$12 = 2 \times 2 \times \underline{\quad}$$

$$12 = 3 \times 2 \times \underline{\quad}$$

Sprints distribute practice over time, which leads to a better retention of learning. The mathematics in the Sprint may be related to the lesson, but it is not used to introduce new learning.

Sprints allow students to focus on their own growth and to strive for their personal best. The problems are intentionally designed to progress in difficulty from simple to complex, and students are not expected to complete all the problems. Instead, each student does their personal best based on their current automaticity with a given concept or skill.

Curriculum Development Considerations

Eureka Math-Grade 3

Source: Pilot Eureka Math TEKS Edition (K-5)

Module 1: Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10

Fluency Practice Example:

Note: Basic skip-counting skills from Grade 2 shift focus in this Grade 3 activity. Group counting lays a foundation for interpreting multiplication as repeated addition. When students count groups in this activity, they add and subtract groups of 2 when counting up and down. Consider the following sample discussion.

Teacher: Let's count to 20 forward and backward. Watch my fingers to know whether to count up or down. A closed hand means stop. (Show hand signals during the explanation.)

Teacher: (Rhythmically point up until a change is desired. Show a closed hand; then point down.)

Student: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0.

Teacher: Let's count to 20 forward and backward again. This time, whisper every other number. Say the other number in a regular voice.

Student: (Whisper) 1, (speak) 2, (whisper) 3, (speak) 4, (whisper) 5, (speak) 6, etc.

Teacher: Let's count to 20 forward and backward again. This time, hum every other number instead of whispering. As you hum, think of the number.

Student: (Think), 2, (think), 4, (think), 6, etc.

NOTES ON FLUENCY PRACTICE:

Think of fluency of having three goals:

1. Maintenance (staying sharp on previously learned skills)
2. Preparation (targeted practice for the current lesson)
3. Anticipation (skills that ensure that students will be ready for the in-depth work of upcoming lessons)

Overview of Specially Designed Instruction and a Sample Student

Impact of Disability (excerpt from PLAAFP)	Annual Goals	Specially Designed Instruction	Progress Monitoring Plan
How does the identified disability impact the student's learning?	How much can the student progress in one year? Goals should be rigorous yet attainable.	What does the student need to ensure progress?	How will we know the student is successful?
<p>For the purpose of specializing this lesson plan, let's consider this sample student: Olivia.</p> <p>Olivia has been identified as a student with a specific learning disability in mathematics calculation.</p> <p>Olivia's disability is significantly impacting her ability to apply prerequisite math computation skills in order to interact meaningfully with grade-level problem-solving operations.</p> <p>It is indicated that Olivia is unable to recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts.</p> <p>Additionally, Olivia is unable to use strategies and algorithms (a process or set of rules to be followed in calculations), including the standard algorithm, to multiply a two-digit number by a one-digit number independently or with teacher support when supplemental aids are present.</p>	<p>In 36 instructional weeks, using manipulatives and correctly completed examples with solution steps, Olivia will solve one-step and multistep word problems involving addition and subtraction within 1,000. Success will be measured with 75% accuracy.</p>	<p>The following are a few options when adapting the content, methodology, or delivery of instruction as appropriate.</p> <ul style="list-style-type: none"> When applying basic fact strategies in math, the use of manipulatives and step-by-step scaffolding with correctly completed examples are needed for Olivia to perform these tasks. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties. 	<p>With the use of supplemental aids, Olivia will generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.</p>

Development of IEP Supports Within Eureka Math TEKS Edition (K-5) Lessons

The Following are examples of how the Eureka Math TEKS Edition (K-5) content is utilized with examples of IEP-driven supports, which are developed and applied specific to student needs and the impact of their disability. Consider our student Olivia and the impact discussed in the Overview of SDI section. The following examples are possible ways to implement her SDI during an Eureka Math TEKS Edition (K-5) lesson.

The following examples use lessons 1 and 2 from Grade 3, Module 1: Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10 from the pilot Eureka Math TEKS Edition (K-5).

General Application:	Differentiation Techniques:	Specially Designed Instruction:
What the curriculum says	Adaptations made for all students not required by IEP and provided at teacher discretion	IEP-driven and supports accommodations and modifications that are implemented routinely as outlined in an IEP
Terminology	Use a math word wall with cards that have the word, the definition, and a graphic.	Pre-teach the vocabulary in a mini-lesson format: <ul style="list-style-type: none"> • Relate to a variety of examples and non-examples. • Connect to hand signals. • Rehearse the vocabulary.
Tools and Representations	Introduce the tool/representation, and explain the parts of it and the purpose for using it.	<ul style="list-style-type: none"> • Add graphics or words to the tool/representation. • Connect this tool to a different tool/representation.
Lesson 1: Fluency Practice Group Counting	Students practice counting out loud using memory to recall the order of numbers.	<ul style="list-style-type: none"> • Use a number chart to count. • Use a number line to count.
Concept Development: Lesson 1, Problem 2	Students draw circles around the groupings of two counters.	Use small cups or cupcake liners to put the counters into to physically distinguish the groups from the objects.

Development of IEP Supports Within Eureka Math TEKS Edition (K-5) Lessons

General Application:	Differentiation Techniques:	Specially Designed Instruction:
What the curriculum says	Adaptations made for all students not required by IEP and provided at teacher discretion	IEP-driven and supports accommodations and modifications that are implemented routinely as outlined in an IEP
Concept Development: Lesson 2, Problem 2	Students draw objects into arrays.	Provide manipulatives and grid paper to create the arrays prior to drawing.
Exit Tickets: All lessons	Students draw pictorial representations.	Provide manipulatives and any tools, such as grid paper.



Special Considerations for Modifications

Modifications are changes to what (not how) a student will be learning. Modifications are provided when accommodations (adaptations to how) aren't sufficient and are only allowable when an Admission, Review, and Dismissal (ARD) committee agrees they are appropriate. For the following considerations, the [TEKS Vertical Alignment for STAAR Alternate 2 Mathematics Pre-kindergarten through Algebra I](#) was used.

Mathematics: Grade 3

Teachers can use formative assessment and other data sources to determine student readiness for the grade-level content. Teachers may need to reteach or accelerate learning to prepare students for the new instruction. Eureka Math TEKS Edition (K-5) provides a list of vertically-aligned foundational standards for the module and topic module overviews. Consider starting from the most recent standard and working backward to less complex standards and finding the student's instructional level using current data sources.

Consider the depth and complexity of the standard and whether the depth and breadth need to be adjusted for the student to access the content if deemed necessary by the ARD committee. The following teacher moves support learning at the previous standards that support Grade 3, Module 1-Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10.

Previous Standards	Teacher Moves
<ul style="list-style-type: none">• Compare sets of objects up to at least 20 in each set using comparative language. (K)• Use comparative language to describe two numbers up to 20 presented as written numerals. (K)	<ul style="list-style-type: none">• Model the use of "greater than," "less than," and "equal to" when working with sets of objects utilizing manipulatives.• Allow students time to work with sets and create comparative sets. Facilitate conversations between students to compare sets, and provide feedback and guidance to their responses.• Model this activity with written numbers.
<ul style="list-style-type: none">• Use place value to compare whole numbers up to 120 using comparative language. (1)• Order whole numbers up to 120 using place value and open number lines. (1)• Represent the comparison of two numbers to 100 using the symbols $>$, $<$, or $=$. (1)	<ul style="list-style-type: none">• Using manipulatives, create models of whole numbers up to 120. Teachers may reduce the numbers to support students who are not proficient in determining place value to the hundreds.• Using concrete or representational models, provide students with physical space to order numbers on a number line.• Utilize the language of "greater than," "less than," and "equal to" and the symbol associated with each when comparing two numbers. Provide students with movement or mnemonic devices to help them remember the correct use of each symbol.

Special Considerations for Modifications

Previous Standards	Teacher Moves
<p>Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols ($>$, $<$, or $=$). (2)</p>	<ul style="list-style-type: none">• Model the breaking down of a number by its place value in order to compare each place individually.• Reduce the number of place values students are expected to compare, ensuring a solid grasp of the concept of comparing numbers prior to adding additional places.



Evidence-Based Practices

Evidence-based practices are those that are supported by research and have positive outcomes for students.

The following examples can be found at [Accommodation Central: Classroom Accommodations](#), courtesy of Region 13.

Scaffold Steps in a Process

The teacher may reformat complex concepts into individual thinking steps to improve accessibility for a student struggling with memory, attention, focus, or comprehension.

Examples:

- Creating a bulleted list of thinking steps.
- Spacing out each step required to understand a concept.

How to implement:

1. Determine the process that requires support, based on your knowledge of the student's needs.
2. Create a step-by-step process to review with the student.
3. Schedule time to teach the student to properly use the tool, and model appropriate use of the support using a think-aloud process.
4. Lead guided practice using the tool, providing immediate supportive and corrective feedback.
5. Assign and monitor independent practice using the tool.
6. Monitor and record the student's progress and the effectiveness of the accommodation.

Evidence-Based Practices

Worked Example

Educator provides a step-by-step demonstration of how to complete a task or solve a problem during the initial acquisition of a skill.

Example:

Anchor chart

How to implement:

1. Determine the task or problem that requires support, based on your knowledge of the student's needs.
2. Create a worked example demonstrating the task or problem-solving process.
3. Schedule time to teach the student to use the worked example as a reference, using a think-aloud process.
4. Lead guided practice using the worked example, providing immediate supportive and corrective feedback.
5. Assign and monitor independent practice using the worked example.
6. Monitor and record the student's progress and the effectiveness of the accommodation.
7. Make plans to fade the support provided by the worked example and to increase the independence of the student.
8. Share progress and effectiveness with the student, the educational team, and the family.

Word Walls

A collection of words displayed on classroom walls, windows, or bulletin boards function as a visual scaffold and help the student learn new vocabulary.

Example:

Specific terminology

How to implement:

1. Identify which words to display based on the student's needs and the content to be covered.
2. Display the word wall where the student can see it and read the words from their desk.
3. Teach the student how to use the word wall, and model using it in a variety of contexts.
4. Practice by referring to and using the word wall daily.
5. Update the word wall. Add new words intentionally, and remove words that have been mastered.
6. Monitor and record the student's progress and effectiveness using the word wall.

Evidence-Based Practices

Sentence Stems

Sentence stems give the student an opportunity to effectively communicate using complete sentences. They can be used when asking a student for oral and written responses.

Examples:

- That reminds me of ...
- I predict that ...
- I have a connection to ...

How to implement:

1. Determine the language proficiency and specific needs of the student.
2. Develop sentence stems that apply to the student at various levels of language proficiency.
3. Place sentence stems in a prominent part of the room, or give them to the student.
4. Teach the student how to use sentence stems in a variety of contexts and with a variety of content.
5. Lead guided practice in how to use sentence stems. Provide lots of opportunities for the student to practice using sentence stems with peers and independently.
6. Monitor and record the student's progress and effectiveness using the sentence stems.
7. Provide specific feedback to the student about their progress.
8. Scaffold the student's learning by increasing the level of sentence stems based on student progress and need.

Side-by-Side Example

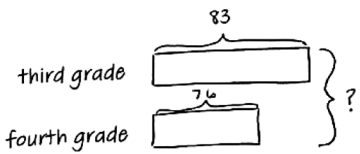
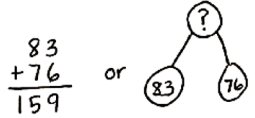
Standard Unit with Embedded Specially Designed Instruction

The following is a side-by-side comparison of a pilot Eureka Math TEKS Edition (K-5) lesson and a lesson that has been specially designed. It also includes areas of collaboration between professionals that occurs prior to the lesson.

Lesson Instruction Overview	Lesson 1: Grade 3, Module 1-Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10	Specially Designed Instruction (SDI)	Collaboration of Teachers Prior to Lesson
<p>Fluency Practice: Group Counting Sprint</p> <p>Basic skip-counting skills from Grade 2 shift focus in this Grade 3 activity. Group counting lays a foundation for interpreting multiplication as repeated addition. When students count groups in this activity, they add and subtract groups of 2 when counting up and down.</p>	<p>Teacher: Let's count to 20 forward and backward. Watch my fingers to know whether to count up or down. A closed hand means stop. (Show signals during the explanation.)</p> <p>Teacher: (Rhythmically point up until a change is desired. Show a closed hand; then point down.)</p> <p>Student: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0.</p> <p>Teacher: Let's count to 20 forward and backward again. This time, whisper every other number. Say the other number in a regular voice.</p> <p>Student: (Whisper) 1, (speak) 2, (whisper) 3, (speak) 4, (whisper) 5, (speak) 6, etc.</p> <p>Teacher: Let's count to 20 forward and backward again. This time, hum every other number instead of whispering. As you hum, think of the number.</p> <p>Student: (Think), 2, (think), 4, (think), 6, etc.</p>	<p>Provide technological modifications for students with sensory motor needs.</p> <p>Type or project content using a large font.</p>	<p>Plan to address fluency's three goals:</p> <ol style="list-style-type: none"> 1. Maintenance (staying sharp on previously learned skills) 2. Preparation (targeted practice for the current lesson) 3. Anticipation (skills that ensure that students will be ready for the in-depth work of upcoming lessons) <p>Teachers review student data and collaborate on using the Parallel Co-Teaching approach. With this approach, student grouping should be flexible and based on students'needs in relation to the standards being addressed. Variations include teaching to the same standard but in different ways (for example, direct instruction or problem-based learning) or with different materials (for example, more or less challenging vocabulary or using graphic organizers or manipulatives).</p>

Side-by-Side Example

Standard Unit with Embedded Specially Designed Instruction

Lesson Instruction Overview	Lesson 1: Grade 3, Module 1-Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10	Specially Designed Instruction (SDI)	Collaboration of Teachers Prior to Lesson
<p>Application Problem:</p> <p>Students may choose to use a strip diagram or a number bond to model the problem. They are also likely to solve today's Application Problem in less than 10 minutes. Ten minutes have been allotted to allow for review of the Read, Draw, Write (RDW) process for problem solving.</p>	<p>Read, Draw, Write (RDW) Process: Read the problem; draw and label; write an equation; and write a word sentence. The more students participate in reasoning through problems with a systematic approach, the more they internalize those behaviors and thought processes.</p> <p>Read-Draw-Write Example:</p> <p>Read: Math club is offered to all third and fourth graders. There are 83 third graders and 76 fourth graders in math club. How many total students are in math club?</p> <p>Draw:</p>  <p>Write:</p>  <p>There are 159 students in math club.</p> <p>(Excerpted from "How to Implement A Story of Units." A more complete explanation can also be found in a Grade 3 Module 1 Overview.)</p>	<p>Use the Three Reads Protocol as a strategy for solving.</p> <p>The Three Reads Protocol is one way to do a close read of a complex math task. This strategy includes reading a math scenario three times with a different goal each time.</p> <ul style="list-style-type: none"> • The first read is to understand the context. • The second read is to understand mathematics. • The third read is to elicit inquiry questions based on the scenario. <p>The Three Read Protocol is designed to engage students in sense-making of language-rich math problems or tasks. (San Francisco Unified School District Mathematics Department, June 2015, sfusdmath.org)</p> <p>Provide manipulatives</p>	<p>Identify the appropriate problem stem</p> <p>Anticipate linguistic and mathematical challenges/misconceptions</p> <p>Creates visuals to support understanding</p> <p>Select and gather appropriate accommodations (e.g., base ten blocks, strip diagram, place value chart)</p>

Side-by-Side Example

Standard Unit with Embedded Specially Designed Instruction

Lesson Instruction Overview	Lesson 1: Grade 3, Module 1-Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10	Specially Designed Instruction (SDI)	Collaboration of Teachers Prior to Lesson
<p>Concept Development</p>	<p>Problem 1: Skip-count to find the total number of objects.</p> <p>Problem 2: Understand the relationship between repeated addition, counting groups in unit form, and multiplication sentences.</p> <p>Problem 3: Write multiplication sentences from equal groups.</p>	<p>Problem 1: Connect the count to a number chart.</p> <p>Problems 2 and 3: Use small cups or cupcake liners to put the counters into to physically distinguish the groups from the objects.</p> <p>Provide manipulatives and a number chart.</p>	<p>Select and gather appropriate graphic organizers and manipulatives.</p> <p>Plan with co-teacher (if applicable) for implementation of co-teach models based on content and need.</p>

Side-by-Side Example

Standard Unit with Embedded Specially Designed Instruction

Lesson Instruction Overview	Lesson 1: Grade 3, Module 1-Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10	Specially Designed Instruction (SDI)	Collaboration of Teachers Prior to Lesson
<p>Problem Set: Students should do their personal best to complete the Problem Set within the allotted 10 minutes.</p>	<p>Some problems do not specify a method for solving. This is an intentional reduction of scaffolding that invokes MPS(C), Use Appropriate Tools Strategically.</p> <p>Students should solve these problems using the RDW approach used for Application Problems.</p>	<p>Provide manipulatives and a number chart.</p> <p>Specify which problems students should work on first. Let the purposeful sequencing of the Problem Set guide the selections so that problems continue to be scaffolded.</p> <p>Assign incomplete problems for homework or at another time during the day.</p>	<p>Balance word problems with other problem types to ensure a range of practice.</p> <p>Select and gather manipulatives and number charts based on student needs.</p> <p>Preview the new vocabulary and brainstorm words that could be added to an anchor chart to assist students in composing answers.</p>
<p>Student Debrief: The Student Debrief is intended to invite reflection and active processing of the total lesson experience.</p>	<p>Lesson Objective: Understand equal groups as multiplication.</p> <p>Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner.</p> <p>Look for misconceptions or misunderstandings that can be addressed in the Debrief.</p> <p>Guide students in a conversation to debrief the Problem Set and process the lesson.</p>	<p>Provide small-group instruction to guide students in a conversation to debrief the Problem Set and process the lesson.</p> <p>Purposefully select a debrief question(s) to target misconceptions or misunderstandings based on student need.</p> <p>Provide students with manipulatives, graphic organizers, etc. to help them articulate and share their thinking.</p>	<p>Select and gather manipulatives based on student needs.</p> <p>Review the lesson's objectives and co-plan which debrief question(s) to ask the class.</p> <p>Collaborate on how students can be partners to review the Problem Set.</p>

Side-by-Side Example

Standard Unit with Embedded Specially Designed Instruction

Lesson Instruction Overview	Lesson 1: Grade 3, Module 1-Properties of Multiplication and Division Solving Problems with Units of 2-5 and 10	Specially Designed Instruction (SDI)	Collaboration of Teachers Prior to Lesson
	<p>Any combination of the following conversation starters below may be used to lead the discussion.</p> <ul style="list-style-type: none"> • On the first page, what did you notice about the answers to your problems? • Discuss the relationship between repeated addition and the unit form <i>2 groups of three</i> or <i>3 groups of two</i>, depending on the drawing. • Discuss the relationship between repeated addition, unit form, and the multiplication sentence $3 \times 2 = 6$. <p>Review the new vocabulary presented in the lesson: equal groups, multiplication, and multiply.</p>	<p>Providing sentence stems to help students share their thinking or work.</p>	
<p>Exit Ticket: A review of students' work will help with assessing their understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons.</p>	<p>After the Student Debrief, instruct students to complete the Exit Ticket.</p>	<p>Provide manipulatives and something to use for the groups, such as cupcake liners.</p> <p>Teacher will read questions aloud to students.</p>	<p>Select and gather manipulatives based on student needs.</p> <p>Plan for small-group instruction to check for understanding and clarify misconceptions.</p>

Accommodations, Modifications, Differentiation, Language, and Specialization Supports Found Within Eureka Math TEKS Edition (K-5)

The following table includes specialization supports found within Eureka Math TEKS Edition (K-5) modules.

English Language Development
<ul style="list-style-type: none">• Embedded English Language Proficiency Standards• Visual support recommendations.• Student grouping suggestions.• English development support suggestions included in the lesson notes.• Suggested routines for foundational skills support.• Key terms are provided at the beginning of a lesson to support language development.<ul style="list-style-type: none">◦ Post vocabulary on a word wall with the word, definition, and graphic.
Differentiation Supports
<ul style="list-style-type: none">• Reference the Texas Education Agency Instructional Supports for Students with Disabilities• Daily checks for understanding.• Daily formative assessments.• Summative assessments.• Progress monitoring.• Use different manipulatives, tools, or representations than the ones used.• Provide sentence frames/starters to engage in mathematical discussions.• Provide graphic organizers, outlined notes, or quick references for content.• Use mnemonics, interactive foldable organizers, etc.• Provide choice boards for practice along with different ways to demonstrate understanding.• Eureka Math TEKS Edition (K-5) Accommodation Companion Guide.
Additional Supports Not Found in Eureka Math That Might Be Helpful During Instruction
<ul style="list-style-type: none">• Texas Education Agency, Mathematics TEKS Supporting Information (TEA provides these documents for all math grade levels and courses)<ul style="list-style-type: none">◦ https://www.texasgateway.org/resource/mathematics-teks-supporting-information• Vertical Alignment Documents<ul style="list-style-type: none">◦ https://d1yqpar94jqbqm.cloudfront.net/documents/GatewayK6VACHart_final.pdf• STAAR Graph Paper Grades 3-5<ul style="list-style-type: none">◦ https://tea.texas.gov/sites/default/files/GraphPaper-gr3-5.pdf• STAAR Reference Materials (Note: This one is for Grade 3. There are different ones for each tested grade level.)<ul style="list-style-type: none">◦ https://tea.texas.gov/sites/default/files/2014-15_RefMat-G3-f.pdf• Interactive Math Glossary provided by Texas Education Agency<ul style="list-style-type: none">◦ https://www.texasgateway.org/resource/interactive-math-glossary

Resources

Accommodation Central. ESC, Region 13, n.d. <http://acentral.education/>.

Brown, Peter C. 2018. MAKE IT STICK : *The Science of Successful Learning*. Harvard University Press.

Didax, Inc. 2019. "Virtual Manipulatives for Math." Didax.com. 2019. <https://www.didax.com/math/virtual-manipulatives.html>.

Fuchs, L.S., Newman-Gonchar, R., Schumacher, R., Dougherty, B., Bucka, N., Karp, K.S., Woodward, J., Clarke, B., Jordan, N. C., Gersten, R., Jayanthi, M., Keating, B., and Morgan, S. (2021). Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades (WWC 2021006). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://whatworks.ed.gov/>.

Hagedorn, Linda Serra, Yoram Sagher, and M. Vali Siadet. 2000. "Building Study Skills in a College Mathematics Classroom." *The Journal of General Education* 49 (2): 132–55. <https://doi.org/10.1353/jge.2000.0013>.

National Council of Teachers of Mathematics (NCTM). 2018. "Procedural Fluency in Mathematics - National Council of Teachers of Mathematics." Nctm.org. 2018. <https://www.nctm.org/Standards-and-Positions/Position-Statements/Procedural-Fluency-in-Mathematics/>.

Texas Education Agency. 2020. "Great Minds-Eureka Math TEKS Edition." Gm.greatminds.org. 2020. <https://gm.greatminds.org/eurekamathteksedition>.

Texas Education Agency (TEA). 2014. "Vertical Alignment Charts for Revised Mathematics TEKS | Texas Gateway." www.texasgateway.org. 2014. <https://www.texasgateway.org/resource/vertical-alignment-charts-revised-mathematics-teks>.

Texas Education Agency (TEA). n.d. "Mathematics TEKS: Supporting Information | Texas Gateway." www.texasgateway.org. Accessed December 15, 2021. <https://www.texasgateway.org/resource/mathematics-teks-supporting-information>.

United States. 2004. Individuals with Disabilities Education Act. Part 300. <https://www.ecfr.gov/current/title-34/subtitle-B/chapter-III/part-300>.