SUBJECT

Superintendent's K-12 Update

BACKGROUND

Idaho State Board of Education bylaws establish the Superintendent of Public Instruction as responsible for carrying out policies, procedures, and duties prescribed by the Constitution of the State of Idaho and by Idaho Code or as established by the Board for all elementary and secondary school matters.

Debbie Critchfield was sworn into office as the Idaho Superintendent of Public Instruction on January 2, 2023.

PROPOSAL

Superintendent Critchfield will update the State Board of Education on the following priorities moving forward:

- K-12 Funding Formula Work
- FY 2028 Budget Request
- Legislative Implementation Update

IMPACT

Any proposals related to the Superintendent's priorities will be brought to the Board following appropriate Board and legislative processes as necessary.

BOARD STAFF COMMENTS AND RECOMMENDATIONS

Informational item; no Board staff recommendations.

BOARD ACTION

This item is for informational purposes only.

APPLICABLE STATUTE, RULE OR POLICY

Idaho Code § 33-125, § 33-125A, § 33-127
Board Policy I. Bylaws, Section E.4

SUBJECT

Mathematics Instructional Guide

BACKGROUND

In February 2024, the Board supported the Math Work Group's priority recommendation to develop an Idaho Comprehensive Mathematics Plan (ICMP). In October 2024, the Comprehensive Math Plan Work Group was established to complete the work, with Board Member Cindy Siddoway as Chair and Dr. Linda Clark (Board President at the time) as an additional member. The group also included representatives from the Office of the State Board of Education, Idaho Department of Education (Department), Regional Math Centers, institutions of higher education, district and school leaders, classroom educators, and mathematics experts from across Idaho.

While the ICMP was being developed to provide a vision and direction for improving K-12 math outcomes, the work group identified the need to create a second document to provide educators with clear guidance regarding evidence-based mathematics instruction. When the work group split into subgroups, approximately one third of the members were assigned to groups to begin work on the Idaho Mathematics Instructional Guide.

After the completion of the ICMP, Board and Department staff recognized that the existing work group did not have the capacity to complete the Mathematics Instructional Guide. The Department contracted math expert Joleigh Honey to edit and expand the draft document produced by the work group, with Department staff providing project support. Stakeholders, including the original work group, were given several opportunities to provide feedback on drafts of the document before it was finalized.

PROPOSAL

The Idaho Mathematics Instructional Guide supports implementation of the Idaho Mathematics Initiative by providing in-depth descriptions of how evidence-based math instructional practices are applied in the field. The guide complements the Idaho Comprehensive Mathematics Plan by focusing specifically on how educators can support mathematical learning in their classrooms.

The content of the Idaho Mathematics Instructional Guide includes:

- Guidance to support educators in implementing the instructional practices outlined in the Idaho Mathematics Instructional Framework
- Detailed descriptions and examples of evidence-based teaching practices
- Information to guide schools and educators in implementing tiered systems of support within mathematics instruction to ensure students' needs for intervention and expansion are met
- Recommendations for supporting all types of learners, including gifted students and those with specific learning disabilities
- A summary of research related to mathematics teaching and learning

The Mathematics Instructional Guide is intended to serve as a statewide instructional resource for educators and will establish a common vision for effective mathematics instruction across Idaho's public schools. It provides districts and educators with a consistent, research-based resource to support improved student outcomes.

IMPACT

The Mathematics Instructional Guide does not require Board approval and is not a document incorporated by reference. It is intended as guidance for local education agencies, school leaders, instructional coaches, and classroom educators.

The Department has adopted the Mathematics Instructional Guide and will be distributing it to districts and schools. Professional development provided by the Department and the Regional Math Centers will be aligned to the guide beginning with the 2026-2027 school year. There is no fiscal impact associated with use of this guidance document beyond existing Department resources.

BOARD STAFF COMMENTS AND RECOMMENDATIONS

The Mathematics Instructional Guide was developed through a collaborative process that included Department and Board staff. It is a complementary and essential implementation resource supporting the Board's previously adopted Idaho Comprehensive Mathematics Plan and advances the statewide vision to improve mathematics achievement for all Idaho students.

Board staff is supportive of the Department's development and distribution of the Idaho Mathematics Instructional Guide.

ATTACHMENTS

Attachment 1 – 2026 Idaho Mathematics Instructional Guide

BOARD ACTION

This item is for informational purposes only.

APPLICABLE STATUTE, RULE OR POLICY

Idaho Code § 33-1627

REFERENCE

February 2024	Board received and reviewed the 2023 Math Work Group Report, including the priority recommendation to develop an Idaho Comprehensive Mathematics Plan.
April 2026	Board approved the Idaho Comprehensive Mathematics Plan.

Mathematics Instructional Guide

Kindergarten through 12th Grade

June 2026

P.O. BOX 83720, BOISE, ID 83720-0037
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With special thanks to Joleigh Honey, National Math Consultant and co-founder of Math for the Future, who refined the work and intentions of many subgroups. While this document reflects the work of diverse educators across our state, Joleigh facilitated the work of clearly communicating Idaho’s vision for excellence in mathematics instruction.

Special Consideration for the Mathematics Instructional Guide

This instructional guide has been developed in alignment with the principles that will be reflected in the forthcoming Idaho Tiered System of Supports (ITSS) Framework. Once the ITSS Framework is released, this guide should be considered a companion resource that supports mathematics instruction within the broader statewide framework.

Overview: Idaho Mathematics Initiative

The *Idaho Mathematics Initiative* was established in 2008 in recognition that "mathematical skills are increasingly important to the future academic and career success of students," and that improvements in mathematical outcomes are necessary to meet the needs of Idaho's economy (Idaho Code, Section 33-1627). The Mathematics Initiative aims to expand and modernize mathematics with a renewed focus on a single goal: creating systems and supports to ensure all Idaho students receive high-quality mathematics instruction and develop mathematical thinking and proficiency that empowers their future success. The Mathematics Initiative's success will be evidenced by continued growth in meeting the following performance targets:

- The Idaho Consolidated State Plan long-term academic achievement goals for Mathematics (Idaho Standards Achievement Test- ISAT); and
- the State Board of Education's Strategic Plan Performance Measures for Mathematics.

To support the success of *Idaho's Mathematics Initiative*, the State Board of Education and Idaho Department of Education have identified specific guidance documents and frameworks that are foundational to this work. The *Idaho Comprehensive Mathematics Plan* (CMP) and this document, the *Idaho Mathematics Instructional Guide* (MIG), are designed to set a vision and direction for the Idaho Mathematics Initiative. These two guidance documents are complementary and intended to build alignment across our efforts to improve mathematics instruction and student outcomes. Additionally, the third forthcoming guidance document within the initiative is the *Idaho Tiered System of Support Framework and Toolkit.* This document will provide guidance on building a continuum of tiered support in mathematics and other subjects. Table 1.1 shows the distinct purpose and intended audience for each document.

TABLE 1.1 GUIDANCE DOCUMENTS FOR THE IDAHO MATHEMATICS INITIATIVE

Document	Audience(s)	Focus	Purpose
Idaho Comprehensive Mathematics Plan (CMP)	All stakeholders: policymakers, state agencies, districts, schools, classrooms, parents/guardians, students, and the community	Policy & Systems	Align state, district, and local efforts in support of Idaho's Mathematics Initiative. Updated every five years. Sets clear expectations.

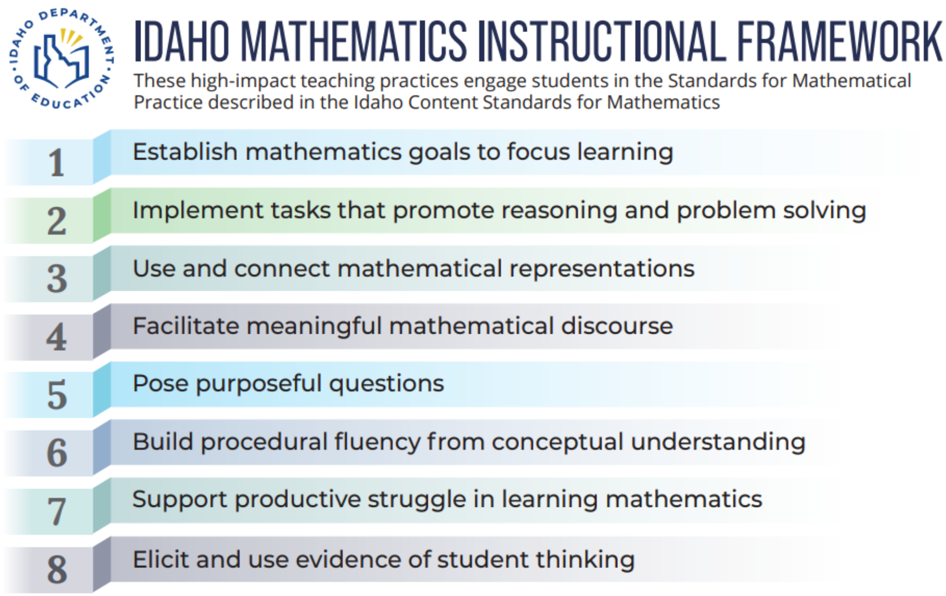
Document	Audience(s)	Focus	Purpose
Idaho Mathematics Instructional Guide (MIG) (this document)	Educators: District and school leaders, instructional coaches, classroom teachers, and paraprofessionals	School-level Instruction & Interventions	Provide clear guidance on the state's expectations for high-quality mathematics instruction, intervention, and extension.
Idaho Tiered System of Supports (ITSS) Framework and Toolkit	Educators: district and school leaders, instructional coaches, classroom teachers	School-level Instruction & Interventions	Provide common understanding and vocabulary across all content areas and behavior for building a tiered system of supports in a school or district.

Within these guidance documents are foundational frameworks that provide clarity on how each contributes to the overarching plan for increasing student achievement in mathematics in Idaho. Together, these documents and frameworks are designed to achieve the goals identified by the *Idaho Mathematics Initiative*. The following includes short descriptions of the frameworks, with more details of each framework existing within the aligned guidance documents.

Idaho Mathematics Instructional Framework

The *Idaho Mathematics Instructional Framework* (MIF) outlines the evidence-based teaching practices educators use that support students in developing mathematical thinking and proficiency (Figure 1.1). Effective core instruction occurs when planning and implementing a content standards-aligned curriculum happens in conjunction with the eight teaching practices from the MIF.

FIGURE 1.1 IDAHO MATHEMATICS INSTRUCTIONAL FRAMEWORK



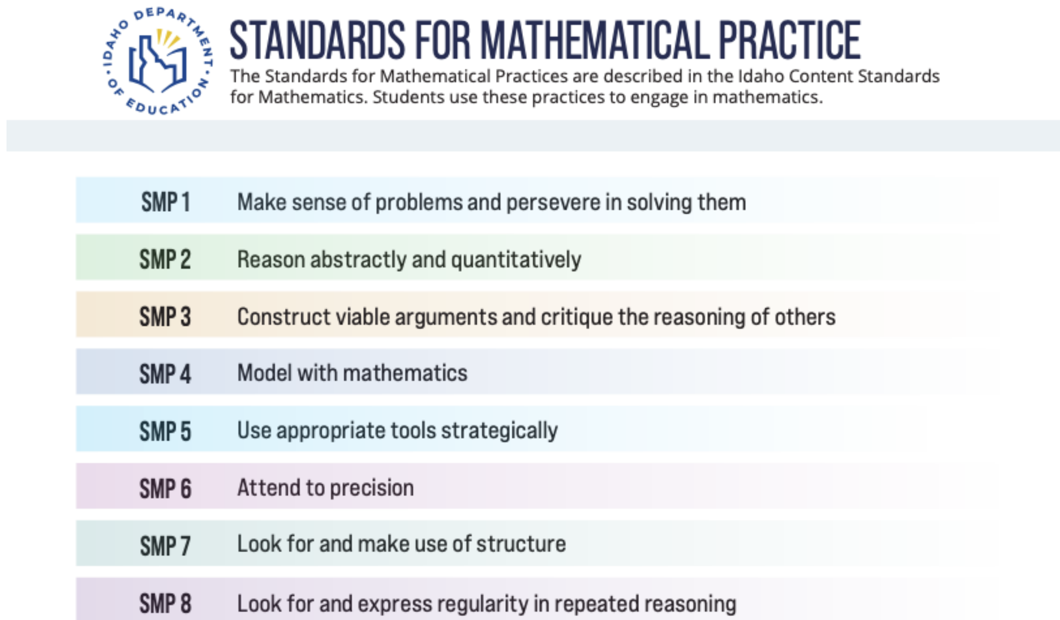
The Idaho Mathematics Instructional Framework is adopted from *Principles to Actions: Ensuring Mathematical Success for All*, National Council of Teachers of Mathematics (2014).

Idaho Standards for Mathematical Practice for Students

While the MIF addresses teacher moves via instruction, the *Idaho Standards for Mathematical Practice for Students* (SMP) (Figure 1.2) describe the eight habits of mind and actions students engage in as they develop deep understandings of mathematical concepts.[1] The SMPs describe the “doing” part of mathematics as a discipline as opposed to “knowing” content. These are the mental processes that occur when people are *math*-ing. The SMPs provide common language across all grade levels to emphasize that these habits of mind are used to develop students' lifelong experience as *doers* of mathematics, while the content standards are specific to the grade level/course content knowledge students should master. The five mathematical proficiencies mentioned in Idaho’s Comprehensive Math Plan and described in Section 5 of this document are infused within the Standards for Mathematical Practice (SMP). The SMPs are what *students* do when teachers implement the MIF. An educator's goal is to get students engaging in these practices; teachers use their grade-level content as a vehicle to make it happen.

[1] NCTM 2024

Figure 1.2 Standards for Mathematical Practice



The SMPs complement the content standards across K-12, with student implementation of the SMPs increasing as they grow in mathematical maturity. The SMPs are aligned to the Elaborations for the SMPs are provided in the *Idaho Content Standards for Mathematics*.

Idaho Tiered System of Supports (ITSS)

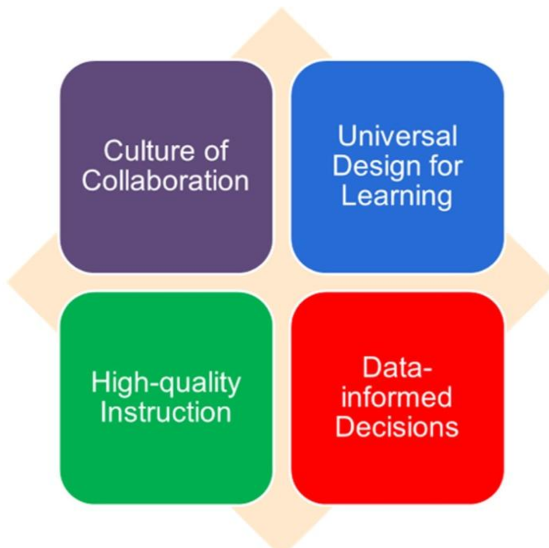
The forthcoming Idaho Tiered System of Supports (ITSS) Framework will provide a statewide structure to support Local Education Agencies (LEAs) in designing, implementing, and sustaining a comprehensive system that provides students with the necessary support they need to achieve at high levels. ITSS combines Multi-Tiered System of Supports (MTSS), Response to Intervention (RTI), and other evidence-based strategies to meet the needs of Idaho students. This framework will reflect Idaho's commitment to ensuring that all students, regardless of background, ability, or starting point, are provided access to high-quality instruction and timely, evidence-based support to reach grade-level standards and beyond.

The ITSS Framework will provide a structure for Idaho LEAs to implement MTSS. Figure 1.3 illustrates the four components of the framework:

- Culture of Collaboration - Leadership structures and professional learning communities that ensure shared ownership of student success.

- Universal Design for Learning - Core instruction designed to provide access to grade-level standards for all learners.
- High-quality Instruction - A seamless continuum of academic, behavioral, and well-being supports across all tiers.
- Data-informed Decisions - Systematic use of multiple data sources, including screening, formative, diagnostic, and progress monitoring data to guide instruction and intervention.

FIGURE 1.3: IDAHO TIERED SUPPORTS FRAMEWORK



Overview: Idaho Mathematics Instructional Guide

The remaining sections of this document provide guidance and resources to support the implementation of the *Idaho Mathematics Initiative* across classrooms, schools, and districts. The following sections expand on the instructional practices, systems, and research that support high-quality mathematics teaching and learning for all students in Idaho.

The remaining sections include:

• **Section 2 – Idaho Mathematics Instructional Framework**
Introduces Idaho's Mathematics Instructional Framework (MIF), which outlines eight research-based teaching practices that support students in developing mathematical thinking and proficiency. The framework emphasizes the use of standards-aligned curriculum and

instructional strategies grounded in research from the National Council of Teachers of Mathematics (NCTM).

• **Section 3 – Tiered System of Supports in Mathematics**
Explains the role of high-quality mathematics instruction within a Multi-Tiered System of Supports (MTSS). The section describes how effective instruction, combined with a culture of collaboration, universal design for learning, data-informed decisions, and a continuum of tiered supports, helps ensure all students can access and succeed in grade-level mathematics.

• **Section 4 – Supporting All Learners**
Provides additional guidance and resources for educators to support groups of students with unique characteristics. The section highlights considerations and strategies for ensuring all learners have access to meaningful mathematics instruction.

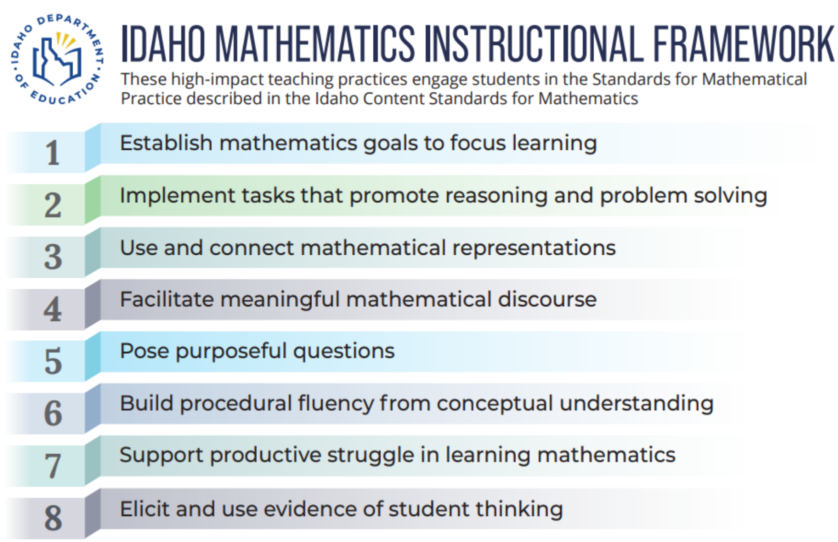
• **Section 5 – Research in Mathematics**
Explores research related to how students learn mathematics, including neuropsychological perspectives such as the Triple Code Model of number processing, which describes how language, mathematical symbols, and magnitude representation interact in mathematical thinking.

SECTION 2: IDAHO MATHEMATICS INSTRUCTIONAL FRAMEWORK

Overview: Idaho's Mathematics Instructional Framework

Instruction in Idaho should be delivered using a curriculum that is aligned with the *Idaho Content Standards for Mathematics* and through instruction that incorporates the eight teaching practices in *Idaho's Mathematics Instructional Framework* (MIF). The framework, shown in Figure 2.1, outlines the evidence-based teaching practices that support students in developing mathematical thinking and proficiency. These practices are research-based and have been adapted from the National Council of Teachers of Mathematics (NCTM) *Principles to Actions.*[2]

FIGURE 2.1 IDAHO MATHEMATICS INSTRUCTIONAL FRAMEWORK



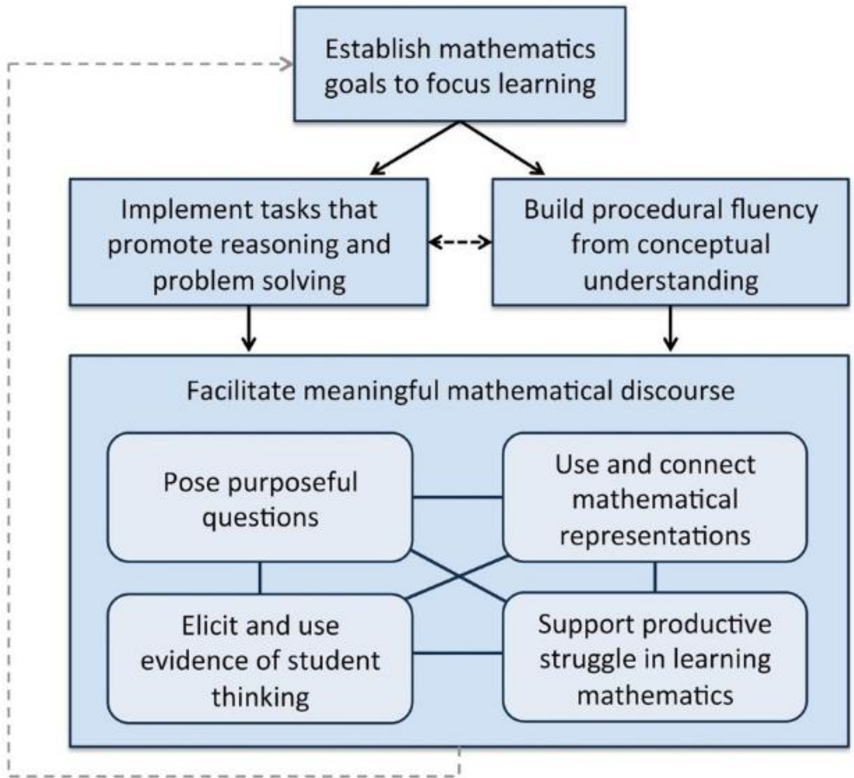
The Idaho Mathematics Instructional Framework is adopted from *Principles to Actions: Ensuring Mathematical Success for All*, National Council of Teachers of Mathematics (2014).

Understanding each Teaching Practice is important, and this guide offers implementation recommendations to highlight its key aspects. Likewise, understanding their connections is also important. Figure 2.2 from NCTM's *Taking Action*[3] highlights the connected and coordinated use of the Teaching Practices, including how they build on each other and work together as an interrelated, cohesive instructional process when implemented.

[2] NCTM, 2024

[3] NCTM, 2018

FIGURE 2.2 MATHEMATICS TEACHING FRAMEWORK



Mathematics Teaching Framework

For example, understanding mathematical goals, how students learn those goals conceptually and procedurally over time, and implementing tasks that promote reasoning of those goals are foundational to effective instruction. The facilitation of meaningful mathematical discourse occurs in conjunction with and is deeply interrelated with the remaining four Teaching Practices. Resources such as NCTM's Principles to Actions[4] and the Taking Actions[5] provides more explanation and examples of how these work in concert with one another. Each of these will be examined later in this section.

The eight teaching practices from the MIF align with the Idaho Explicit Attention to Concepts (EAC) and Student Opportunities to Struggle (SOS) Frameworks. Together, these three frameworks describe what *teachers* do to support students in developing proficiency in mathematics. The Standards for Mathematical Practice (SMPs) and the five mathematical proficiencies are what *students* do when teachers use the MIF, EAC, and SOS. The rest of this

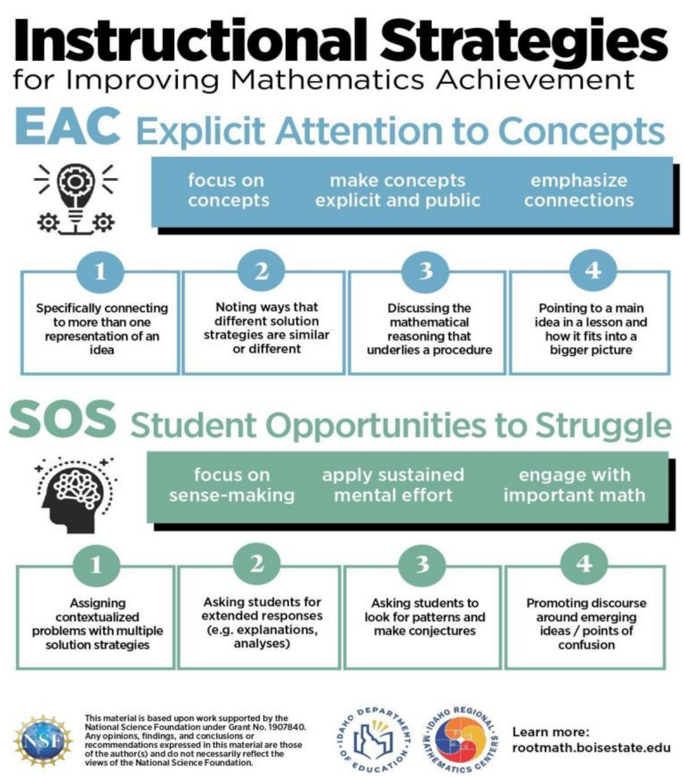
[4] NCTM, 2024
[5] NCTM, 2017

section provides guidance for the teaching practices. Before diving into each practice, it is valuable to review the EAC and SOS mathematics instructional frameworks. The EAC and SOS framework provides strategies that make the MIF more accessible to some educators.

Explicit Attention to Concepts and Student Opportunities to Struggle

Two educational constructs that encompass most of the practices within the MIF are Explicit Attention to Concepts (EAC) and Students' Opportunities to Struggle (SOS). These two constructs (Figure 2.3) are connected to increasing student achievement and provide a clear focus and coherence for educators.[6]

FIGURE 2.3 INSTRUCTIONAL STRATEGIES: EAC AND SOS



Explicit Attention to Concepts (EAC) and Students' Opportunity to Struggle (SOS) are two overarching constructs of instructional practices with robust research evidence for supporting students' access to mathematics.[7] Hiebert and Grouws coined the terms in their synthesis of

[6] Hughes, et al., 2023

[7] Hiebert and Grouws, 2007

effective instructional practices that cut across grade levels, topics, teaching formats, audiences, study design, and historical time:

> EAC - Teachers and students are involved in explicitly making public connections among mathematical concepts via representations, strategies, and the mathematical reasoning that underlies the procedures. This often occurs through activities such as questioning, discussing, relating, and comparing. Explicit Attention to Concepts means surfacing the underlying ideas — not just procedures — making them visible and public, and emphasizing connections across representations, topics, and approaches.
>
> SOS - Students need regular opportunities to spend time grappling with important mathematical concepts in order to create deeper understanding rather than recall of rote procedures. Productive struggle involves students engaging with problems which require them to “figure something out that is not immediately apparent” (see footnote 7 for reference) with a focus on sense-making, sustained mental effort, and important math.

Overview: Teaching Practices Guidance

Each of the eight instructional practices is presented individually, with consistent components that provide both a conceptual overview and actionable guidance. The structure for each practice includes:

- Brief Description: A concise summary that captures the essence of the practice.
- Key Components: A bulleted list highlighting the essential elements of the practice.
- Common Misconceptions: A look at prevalent misunderstandings educators may have, along with clarifying realities to promote accurate implementation.
- Practical Application: A table providing concrete steps educators can take before, during, and after instruction to apply the practice effectively.
- Shift in Practice: A table derived from NCSM: Mathematics Education Leadership's Mathematical Teaching Practices Continuum[8] that illustrates observable teacher behaviors that reflect incremental growth in implementing the practice.
- Student Action: Observable student behaviors that indicate the practice is being successfully enacted.

These practices are multifaceted, and presenting them from different perspectives helps educators understand both the overarching intent and the specific actions—by teachers and

[8] NCSM, 2019

students—that support effective implementation. As a result, some information will appear across multiple components. Additionally, across all eight practices, assessment is intertwined with the structure of each practice itself- not treated as a separate entity. Gathering, understanding, and using evidence of student thinking is integral to planning, delivering, and reflecting on instruction.

Teaching Practice 1: Establish Mathematics Goals to Focus Learning

Having clear mathematics learning goals is the foundation for intentional teaching that guides unit planning and focuses daily instruction. Identifying and articulating clear unit goals and lesson learning targets that align to Idaho Content Standards allows educators to plan more effectively, invite students to own their learning, make in-the-moment instructional decisions, and reflect on students' progress.

Key Components

- Learning targets describe concepts, ideas, and skills.
- Goals encourage use and development of mathematical practices by students.
- Goals are situated in learning progressions, allowing educators and students to respond to the following questions:
    - What mathematics is being learned?
    - Why is it important?
    - How does it relate to what has already been learned?
    - Where are these mathematical ideas going?
- The lesson's purpose, how the learning activities support the intended goals, and the criteria for meeting the goals are clear for educators and students.
- Unit goals and learning targets align to grade level Idaho Content Standards in Mathematics, and allow responsive instructional decisions by educators, such as what questions to ask, what connections to make, how to support productive struggle, and what demonstrates meaningful evidence of learning.

Common Misconceptions

➢ Misconception: Mathematics programs / curricula always provide meaningful learning goals.

Reality: The learning goals and targets presented by mathematics programs can be procedural in nature, limited in conceptual development, and lacking the depth and rigor present in the content standards.

- Misconception: Content goals are the only goals that guide instruction.

  Reality: Content-only goals do not incorporate the standards of mathematical practice, which are equally important as the content standards. Important goals include performance goals (related to procedural fluency), content-focused goals (related to conceptual understanding), and standards for mathematical practice (related to adaptive reasoning and strategic competencies).

- Misconception: Learning goals are only communicated at the beginning of each lesson.

  Reality: Educators communicate learning goals to students using the MIF teaching practices and making them visible and relevant throughout the lesson.

Table 2.1A Teaching Practice 1 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: ● Unpacks the mathematics content standards, reviews research & clarifies the unit's big ideas. ● Establishes a unit's goals, detailed learning targets, and assessments for weekly or daily instruction. ● Identifies opportunities for students to develop and demonstrate mathematics practices. ● Plans possible scaffolds and extensions to keep all students learning.	Educator: ● Informs students of the lesson's purpose, learning targets, and connections to prior learning. ● Uses goals to inform instructional decision making during the lesson. ● Uses the learning targets as a guide to facilitate the Teaching Practices. ● Refers to the learning targets to maintain students' focus and self-monitoring of learning. ● Co-creates with students the key takeaways of the lesson and summarizes the goals. ● Calls attention to students' ideas and strategies that align to the learning targets.	Educator: ● Reflects on student assets and contributions in the lesson: What do they know (vs what is missing) and how will instruction build from this? ● Examines evidence of student learning and reflects on students' current progress toward the learning targets. ● Identifies next steps for adjusting instruction to build on and extend knowledge.

Table 2.1B Shifts in Practice[9]

Teacher Centered	Making Progress	Student Centered
• Educator shows a general rule or talks about the point of the lesson. • Educator reminds students of the mathematics they did previously and what they will do next.	• Educator connects mathematics learning targets to prior learning and the overall unit goal. • Educator facilitates a learning summary that connects to the learning target and includes student voice.	• Educator clearly communicates the lesson's learning targets and connects them to the unit goal and learning progression. • Educator encourages students to explain why they are doing a task and how it is connects to other areas of math. • Educator empowers students to lead the learning summary, connecting their progress to the learning target, unit goal, and future needs.

Student Actions[10]

When educators make these shifts in practice, you will see students:

✓ Engage in the purpose and goals related to their current work. Mathematically, they know what they are learning, why they are learning it, where it is going, and how it relates to broader ideas.

✓ Use the learning goal to stay focused on their progress by knowing what to attend to.

✓ Monitor and self-assess their progress toward the learning goals.

[9] NCSM, 2019
[10] NCTM, 2024

Teaching Practice 2: Implement Tasks that Promote Reasoning & Problem Solving

Effective mathematics teaching engages students in solving and discussing tasks that promote reasoning and problem solving and allows multiple entry points and varied solution strategies.

Key Components

- Mathematical tasks vary in cognitive demand, and while a range of task types has a place in the classroom, research shows that high cognitive demand tasks are underused — and that increasing their presence leads to stronger student achievement.[11]
  - Low cognitive demand tasks typically involve recalling facts or following step-by-step procedures. These tasks are often focused on getting the right answer rather than understanding why.
  - High cognitive demand tasks are more intellectually challenging. They may ask students to create their own strategies, make connections between ideas, or explain why a procedure works. Students engage in reasoning, problem solving, and conceptual thinking, rather than simply applying a formula or rule.
- The need for high cognitive demand tasks is recognized and educators avoid practices that may diminish rigor during instruction (e.g. excessive guidance, direct hints, etc.).[12]
- The level of cognitive demand of tasks is aligned to the learning progression and goals. Online platforms are used with caution, since choosing poorly-aligned tasks can disrupt the coherence of a curriculum, hinder conceptual development, and reduce outcomes.[13]

Common Misconceptions

➢ Misconception: All problems must be cognitively demanding.

Reality: Math class includes tasks with varying levels of cognitive demand. Providing SOS occurs with cognitively demanding tasks that promote reasoning and problem solving.

➢ Misconception: Word problems are always high cognitive demand tasks.

[11] Stein & Lane, 1996; Stein & Smith, 1998
[12] Stein & Lane, 1996; Stein et al., 1996
[13] Larson, 2016

Reality: The cognitive demand of a task depends on learners' prior knowledge and how the task is presented. For instance, if a word problem follows set procedures, students may find numbers and solve the problem without engaging in mathematical reasoning.

➢ Misconception: The objective of this practice is to do some "fun" tasks sporadically.

Reality: When well chosen, tasks can be engaging, relevant, and of increasing rigor. According to Heibert, "A teacher's role in selecting tasks goes well beyond choosing good individual tasks, one after another. Teachers need to select sequences of tasks so that, over time, students' experiences add up to something important."[14]

Table 2.2A Teaching Practice 2 – Practical Application

Before Instruction	**During Instruction**	**After Instruction**
Educator: ● Works the task in advance, anticipating different ways students may approach it. ● Identifies ways to make the task accessible to all learners while maintaining the task's cognitive demand (i.e. not suggesting a specific method or strategy). ● Prepares clear connections between the task's new mathematical concepts and students' prior learning.	Educator: ● Activates prior knowledge and generates interest at task launch so all students have an entry point. ● Implements tasks and routines that provides opportunities for students to consider each other's mathematical thinking, with a focus on reasoning and sense-making. ● Highlights and compares students' different approaches and connects them to key mathematical ideas within the task.	Educator: ● Reflects on the effectiveness of the mathematical learning opportunities provided to students during the task and identifies those that were most successful. ● Implements a sequence of tasks, over time, so that students have multiple experiences to build a strong foundation of knowledge that has both depth and breadth.

[14] Hiebert, 1997

Table 2.2B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Educator presents mathematical tasks in a routine manner that encourages students to imitate a set procedure, (rather than identify multiple solution approaches). • Educator regularly lowers the cognitive demand of tasks through heavy scaffolding or excessive guidance or hints.	• Educator implements tasks that are complex and suitable for group work, but does not consistently frame tasks in a manner that encourages deep mathematical reasoning. • Educator provides students with a task that encourages exploration, but sometimes decreases cognitive demand during implementation (through leading questions and suggestions, etc.).	• Educator engages students in mathematically rich and appropriately challenging tasks, ensuring multiple entry points and solution strategies. • Educator frames tasks in ways that encourage exploration and invite students to think creatively. • Educator facilitates student-led discussions comparing and contrasting solution strategies.

Student Actions

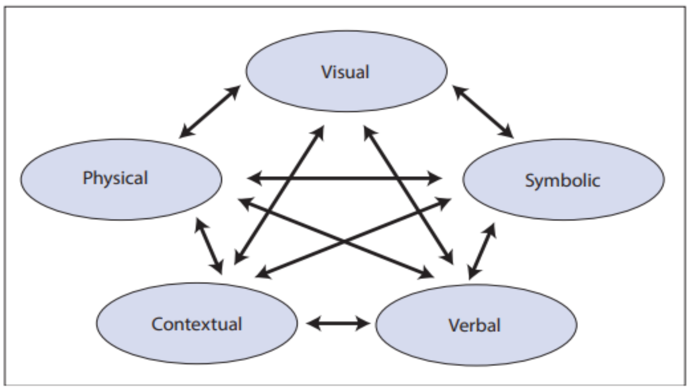
When educators make these shifts in practice, you will see students:

- ✓ Take opportunities to make sense of tasks and explain and justify their solution paths to one another.
- ✓ Accept and expect their classmates to use a variety of solution approaches.
- ✓ Use tools and representations as needed to support their thinking and problem solving.

Teaching Practice 3: Use and Connect Mathematical Representations

Using and making connections among mathematical representations can deepen student understanding of concepts and procedures, support mathematical discourse among students, and serve as tools for solving problems. When students learn to represent, discuss, and make connections among mathematical ideas in multiple forms, they demonstrate deeper mathematical understanding and enhanced problem-solving abilities[15], as shown in Figure 2.4.

FIGURE 2.4 DIFFERENT REPRESENTATIONS AND THE CONNECTIONS BETWEEN THEM



Key Components

- Multiple mathematical representations (drawings, tables, equations, manipulatives, etc.) are used to make mathematics more meaningful for students, strengthen their understanding, and engage them in discourse.
- Explicit Attention to Concepts (EAC): mathematical concepts are explicitly and publicly highlighted and connected.[16]
- Visual representations are used to encourage students to see relationships between quantities, which supports them in making sense of and solving problems.

Common Misconceptions

➢ Misconception: It is sufficient to have students share their thinking and solutions methods.

Reality: Discourse should go further than basic sharing of student thinking. Educators should intentionally choose and sequence student sharing to compare ideas,

[15] NCTM, 2024
[16] Hughes et al., 2023

representations, and strategies aligned to the learning goals in order to extend and deepen learning of mathematical concepts and procedures.

- Misconception: The purpose of using different representations is to have students pick their favorite and use it repeatedly to solve problems.
- Reality: Making connections between representations deepens understanding of mathematical concepts and procedures, and allows for representations to become tools to solve problems. Connecting representations is critical to build understanding and recognize important mathematics structures.
- Misconception: The primary goal of mathematics instruction is to know how to use tools (e.g., base ten blocks, algebra tiles, ratio tables).
- Reality: Knowing how to use tools and models is the first step, but using tools and models should be seen as an opportunity to support students in building deeper knowledge. Tools and models, such as concrete representations, assist students in understanding, identifying varied solution approaches, and communicating about and solving problems.

Table 2.3A Teaching Practice 3 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: • Selects tasks that allow students to use different representations to communicate reasoning strategies. • Identifies connections of different representations to each other and the presented mathematical concepts. • Anticipates strategies and representations students may use as well as potential questions / issues.	Educator: • Encourages students to use and connect multiple representations to make sense of and solve problems. • Asks students to make drawings and other visual representations to explain and justify their thinking. • Allows time and space for students to use and make connections between their representations and the representations of their peers.	Educator: • Reflects on the type of visual representations the students used. • Identifies which representations students need more experience with and plans accordingly for future instruction.

Table 2.3B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Educator presents a limited number of representations and only provides minimal connections to prior learning. • Educator uses only one representation or strategy that will be needed for the lesson or homework. • Educator doesn't prioritize explicit and public connections between representations, models, or strategies.	• Educator facilitates student share-outs to summarize, but lacks deep comparison of solutions or consolidation of understanding. • Educator demonstrates how new concepts fit in with prior and future learning, but may fail to adequately show how using various representations also connects. • Educator uses some representations and builds connections, but may not consistently demonstrate how students can use a variety of representations to develop connections across concepts and/or models.	• Educator supports students in understanding new concepts using appropriate representations in context with prior learning, future concepts, and the real world. • Educator encourages the use of multiple models and representations that help students advance through the learning progression. • Educator ensures students explore, discuss, and identify connections between different models and the mathematics concepts and strategies they represent. • Educator encourages students to flexibly develop and apply their own representations, models, and connections.

Student Actions

When educators make these shifts in practice, you will see students:

- ✓ Use multiple forms of representation to make sense of and understand mathematics.
- ✓ Make choices about which forms of representation to use as tools for solving problems.
- ✓ Contextualize mathematical ideas by connecting them to real-world situations.

Teaching Practice 4: Facilitate Meaningful Mathematical Discourse

Meaningful discourse is facilitated by educators' planning of key mathematical ideas for students to discuss. When students engage in whole or small group discourse, they process their understanding of important mathematics topics while speaking and listening to the meanings of others.

Key Components

- Safe environments that foster student discourse are created by:
    - Setting norms (what it looks like/sounds like) and expectations (how students are held accountable)
    - Establishing routines (discussion supports, interactive structures, etc.)
    - Arranging the classroom (pairs, small groups, whole class)
- The likelihood of meaningful discourse is increased through pre-planning, with consideration given to the following components:
    - The educator's role in supporting student engagement (task selection, sentence frames, interactive structures, etc.)
    - Who should serve as the questioner (students and/or educators) and the types of questions to present
    - Who provides what kinds of explanations (students and/or educators)
    - How mathematical representations are used in support of discussion
    - How much responsibility students share for their and their peers' learning[17]

Common Misconceptions

➢ <u>Misconception</u>: Discourse is only verbal.

<u>Reality</u>: Student discourse "includes the purposeful exchange of ideas" and may happen verbally or in written or visual form.[18] Offering varying modes for communication can support students in communicating their understanding and asking clarifying questions while encouraging engagement of those less comfortable with verbal communication.

[17] Hufferd-Ackles et. al., 2004
[18] NCTM, 2024

- Misconception: Younger students and those with special needs cannot share their thinking or contribute to group discussions.

  Reality: Releasing responsibility of discussion over to students can take time. It may look different depending on students' age and ability, but with the right supports and multiple modes of communication, ALL students can demonstrate their understanding of mathematics concepts.

- Misconception: Discourse is an isolated event during learning.

  Reality: Discourse, whether teacher-student or student-student, is intentionally facilitated by the educator and embedded in the culture of learning.

Table 2.4A Teaching Practice 4 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: • Plans opportunities for student discourse, including whether discussions will be whole group, small group, or in pairs. • Identifies discussion supports, such as sentence frames, to support student communication. • Anticipates how students may respond to prompts and tasks and identifies ways to support student learning during discussions.	Educator: • Monitors student discussions and helps students make connections to the learning targets. • Asks purposeful questions to assess and advance student thinking. • Highlights important mathematical ideas revealed through discourse and encourages students to connect those ideas to prior learning, representations, and other solution strategies.	Educator: • Reflects on students' interactions, including the quality and depth of the discussions. • Identifies key ideas shared during student discourse and identifies how to build upon those ideas to support future learning.

Table 2.4B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Instruction is primarily educator-centered; the mathematics authority resides with the teacher. • Educator provides minimal opportunities for students to collaborate and share their thinking. • Educator creates opportunities for students to share their solutions, but does not facilitate deeper discourse. • Educator does not arrange classroom to support collaborative work.	• Educator shares mathematical ideas and representations and facilitates and encourages students to ask questions. • Educator facilitates group work and peer discussions on mathematics concepts, but does not guide students to fully engage in comparing strategies and building connections. • Educator facilitates discussion, but lacks the confidence to relinquish responsibility to students.	• Educator facilitates student-student discourse. • Educator encourages students to listen and share ideas of their peers (promote safe learning environment). • Educator helps students connect their discourse to the learning targets. • Educator establishes a culture where students are responsible for their learning and can safely share and critique the ideas of others.

Student Actions

When educators make these shifts in practice, you will see students:

- ✓ Initiate student-to-student discourse, seeing themselves as mathematics leaders who help shape each other's mathematical thinking in supportive, collegial ways.
- ✓ Focus on both the how and why—they connect and compare representations and ideas, working together to build a deeper and shared understanding of mathematics concepts.
- ✓ Listen to each other, ask questions, and explain their reasoning.

Teaching Practice 5: Pose Purposeful Questions

When planning a unit of learning, educators should thoughtfully select questions, recognizing that the depth of discussion is dependent on the questions asked. Purposeful questions are directly tied to meaningful discourse, move student learning forward, and provide feedback to educators on student learning.

Key Components

- Questions are pre-planned to:
  - Focus on learning goals and address anticipated misconceptions
  - Be cognitively demanding; they go beyond questions eliciting a yes or no response and instead require details and lean into "Why?"
  - Facilitate student work and thinking and focus attention on key mathematical concepts. [19]
- Question types are varied, including those that:
  - Assess student thinking - based on students' current work and approach
  - Advance student thinking - move students beyond current thinking by pressing them to extend what they know to a new situation
  - Probe thinking - students explain, elaborate, or clarify their thinking, including articulating the steps in solution methods or the completion of a task
  - Make mathematics visible - discuss mathematical structures and make connections across ideas
  - Encourage reflection and justification - students reveal their reasoning and actions, including making an argument for the validity of their work[20]
- Patterns of questioning are implemented, including:
  - Funneling: questioning that directs a student to a specific answer (How many sides does a triangle have?), does not promote reasoning, and can be harmful to learning if used inappropriately.

[19] Hufferd-Ackles et. al., 2004
[20] NCTM, 2024

  - Focusing: questioning builds students' thinking to lead them to the desired learning goal (promotes reasoning, sense making and boosts engagement).[21]

Common Misconceptions

- Misconception: Students can't be questioners during collaborative opportunities.

  Reality: When students are provided with resources (e.g., question stems) and practice using them during discourse opportunities, they become owners of their learning and build the capacity to question and learn from their peers.

- Misconception: The primary purpose of questions is to make sure students are paying attention or have the right answer.

  Reality: Questions are used to advance student understanding, while student responses should guide the educator's next instructional approaches and decisions.

Table 2.5A Teaching Practice 5 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: • Plans questions tied to the learning targets that assess and advance student thinking. • Plans questions for thinking that is complete, incomplete, and/or includes misconceptions. • Identifies opportunities in the lesson to ask varied, purposeful questions.	Educator: • Asks questions that advance or provide feedback on student understanding of mathematical ideas. • Poses questions that elicit students' explanations of their thinking. • Provides time for students to process questions before responding. • Monitors student conversations, evaluates their responses, and asks follow-up questions, if necessary.	Educator: • Reflects on posed questions and how students responded to them to guide future teaching.

[21] Herbel-Eisenmann & Breyfogle, 2005; Wood, 1998; NCTM, 2024

Table 2.5B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Educator asks and answers his / her own questions. • Educator asks fill-in-the-blank, yes/no, or low-level recall questions. • Educator facilitates a passive learning environment with little to no student engagement. • Educator does all of the summarizing and/or rephrases students' responses. • Educator continues to call on individuals until a student provides the preferred response.	• Educator asks good questions but is consistently the questioner; students do not critique their peers. • Educator offers opportunities for student reflection on learning, but questions do not elicit deep discussion. • Educator primarily asks questions focused on gathering information and explanation. • Educator gathers data during discussion, but relies on volunteers (does not select and sequence shares). • Educator serves as the primary source of validation for student thinking.	• Educator creates a classroom culture that fosters curiosity and sense making, as reflected in both the questions students pose to one another and their individual wonderings ("Does this always works?"). • Educator asks well-planned questions that probe student reasoning, connect different strategies, advance collective understanding, and push students to make progress towards learning targets. • Educator asks questions that encourage students to justify their reasoning and press toward generalizations. • Educator's questions are used intentionally to make mathematics visible and accessible for students.

Student Actions

When educators make these shifts in practice, you will see students:

✓ Coherently communicate and defend their mathematical reasonings.

✓ Engage in questioning their peers, and build upon each other's strategies / thinking.

✓ Think about efficiency and naturally wondering about generalizations

Teaching Practice 6: Build Procedural Fluency from Conceptual Understanding

Procedural fluency is built on a foundation of conceptual understanding, then the two develop together through experiences that deepen reasoning and strengthen connections. While conceptual understanding allows connections of prior knowledge and new ideas, procedural fluency enables students to engage in increasingly complex tasks.[22]

Key Components

- Conceptual understanding and procedural fluency develop interdependently, with explicit connections made between them.[23] Aligns with EAC.
- Fluency is developed through a multi-dimensional process requiring time and repeated opportunities for practice. Instruction reinforces all three dimensions of fluency: accuracy, efficiency, and flexibility.[24]
- Curriculum materials and assessments reflect a complete vision of procedural fluency that prioritizes understanding and strategic thinking. Assessments are offered using multiple modalities, opportunities to explain and justify strategies, and tasks requiring flexible application of procedures.[25]
- Educators use the SMPs as instructional goals alongside the academic content standards.
- A mathematics classroom culture is developed that values providing students with opportunities to productively struggle (SOS), honors errors as learning opportunities, and fosters students' ability to see themselves as capable mathematicians who can reason, justify, and communicate their thinking.[26]

Common Misconceptions

➢ Misconception: Repeated timed tests build procedural fluency.

➢ Reality: Timed testing is not an instructional tool and does not build fluency. Short, timed activities, however, can be one part of a multi-component intervention to support students in building fluency (accurate, efficient, and flexible) after students have worked on concepts over many lessons. Fluency is built through varied, meaning-making practice that develops accuracy, efficiency, and flexibility over time.

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[22] NCTM, 2024
[23] Fuson et al., 2005; Hiebert & Grouws, 2007; Pitsolantis & Osana, 2013; NCTM, 2024
[24] Canobi, 2009; Rittle-Johnson et. al., 2015; National Research Council, 2001
[25] Boaler, 2014; NCTM, 2024
[26] NCTM, 2018

➢ Students must master procedures before they can develop deep conceptual understanding.

Reality: Conceptual understanding is the foundation of learning mathematics. Gaining mathematics proficiency is not dependent on mastering a sequence of skills. Procedural fluency and conceptual understanding are interwoven and build upon one another.

➢ Misconception: Teaching procedures is more time-efficient than teaching with a foundation of conceptual understanding.

Reality: Teaching for conceptual understanding doesn’t mean slowing down or leaving students behind. Iterative and explicit instruction on the connections between concepts and procedures allows students to develop deep roots in conceptual understanding which improves retention and knowledge transfer to more complex topics.

Table 2.6A Teaching Practice 6 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: ● Analyzes student work to identify gaps in conceptual understanding that may hinder fluency. ● Plans tasks that connect prior knowledge to new learning, selecting problems that highlight conceptual structures. ● Sequences tasks to allow for multiple entry points and solution paths. ● Identifies ways to assess students’ ability to explain why a procedure works, not just use it.	Educator: ● Engages students in mathematics routines that promote strategy sharing, such as Number Talks, Notice & Wonder, Problem Strings, or Which One Doesn’t Belong. ● Makes explicit connections between representations and procedures (e.g., area models to distributive property). ● Uses targeted questioning to elicit reasoning and adapt instruction in real time. Normalizes error-making as a part of learning.	Educator: ● Uses student work and reflects on goals to inform future instruction and identify needs for small group support. ● Uses student work and formative strategies to identify strengths and gaps in students' ability to connect conceptual understanding to mathematical procedures. ● Reviews data from more formal assessment measures to determine whether students are developing accuracy, efficiency, and flexibility with procedures.

Table 2.6B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Educator focuses on procedural explanations, rules application, or use of definitions. • Educator guides students towards specific strategies. • Educator leads a teacher-centric demonstration of reasoning, mistaking student compliance for understanding. • Educator assesses fluency only with procedural quizzes or speed tests.	• Educator encourages students to make connections between procedures and concepts, but tends to channel students toward preferred strategies. • Educator asks questions that probe reasoning about mathematical relationships and push students to explain why solutions make sense. • Educator entertains alternative methods and solutions so long as students can justify their reasoning.	• Educator values all fluency components: flexibility, accuracy, and efficiency. • Educator asks students to justify procedures, connect strategies to concepts, and extend their thinking. • Educator ensures efficient procedures emerge from students comparing and generalizing their strategies. • Educator assesses students in multiple ways, including written and verbal explanations and tasks with multiple solution paths.

Student Actions

When educators make these shifts in practice, you will see students:

✓ Reflect on the reasons behind the strategies used and revise work based on feedback.

✓ Make connections between models, concepts, and procedures.

✓ Flexibly choose strategies that work best for the situation, striving to use procedures appropriately and efficiently.

Teaching Practice 7: Support Productive Struggle in Learning Mathematics

By grappling with mathematics individually or collectively, students gain a deep understanding of mathematical concepts, the structure of problems, and relationships among ideas. Educators who implement SOS and embrace the value of productive struggle nurture students who persevere in reasoning, sense-making, and problem solving, and can better apply learning to new situations.

Key Components

- Productive struggle is valued within the classroom culture.
- Students are expected to expend effort to make sense of ideas that are comprehendible but not yet well-understood. This process of grappling to solve mathematics problems leads to a deep understanding based on a process of constructing interpretations connected to prior knowledge or reexamination and restructuring of their existing skills.[27]
- Opportunities for productive struggle are planned.
- Students' misconceptions are anticipated. Supports are planned without simplifying the task or preventing the wrestle with ideas.
- Mathematics activities are structured to facilitate sense-making efforts, reasoning, and problem solving.
- Students are provided time, space, and opportunities to apply sustained mental effort and engage with important math.
- Discourse is promoted; students share ideas and clarify points of confusion.

Common Misconceptions

- ➢ Misconception: Showing students steps to a procedure and stating how to solve a task result in deep understanding.
- ➢ Reality: Grappling with a mathematics concept engages students in valuable learning that leads to changes in cognitive structures and deep understanding. Instructional shortcuts, such as providing step-by-step procedures or quickly revealing a strategy often results in superficial knowledge and a culture of learned helplessness, or student dependency on the teacher.
- ➢ Misconception: Grappling with mathematics leads to student frustration and lack of confidence; therefore, struggle should be avoided in the mathematics classroom.
- ➢ Reality: Productive struggle is a vital learning process that can be anticipated and facilitated with appropriate low-floor, high ceiling tasks, intentional questions, and key support. If students lack access to a task, they are not grappling with mathematics, they are stuck.

[27] Hiebert et al., 1996; Hiebert and Grows, 2007; Harris, 2025

- ➢ Misconception: Providing opportunities for struggle means giving students a task and stepping back until they are finished.
- ➢ Reality: Educators actively support students through all phases of the lesson by establishing shared access, providing purposeful questions and nudges, and maintaining the student's zone of proximal development without lowering the cognitive demand.

Table 2.7A Teaching Practice 7 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: ● Chooses tasks that promote reasoning and problem solving, such as assigning contextualized problems with multiple solution strategies. ● Develops lesson plans with adequate time for the tasks. ● Anticipates impasses and prepares supports, such as: ○ Questions that require extended responses ○ Visuals, manipulatives, etc. ○ Adjusts number sets in problems.	Educator: ● Promotes discourse around emerging ideas and points of confusion. ● Presses students to look for patterns and make conjectures. ● Provides support (e.g., using visuals, manipulatives, and adjusting number sets) when students are at an impasse. ● Encourages continued effort on tasks and allows time for students to work through emerging ideas. ● Honors students' contributions, including errors in thinking, as part of the learning process.	Educator: ● Reflects on whether tasks were accessible to most students. ● Identifies any aspects of student struggle that demonstrate a need for additional support. ● Examines the culture of the classroom to determine if: active listening is happening (by all parties), students feel safe making mistakes, students' thinking is honored.

Table 2.7B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Educator provides examples of how to solve the task before students engage with the problem. • Educator gives too many hints, answers questions for students and/or solves the problem for the students. • Summary and reflection consists of a whole-group share-out with inadequate time for processing or relies on a small set of student volunteers.	• Educator provides adequate individual think time, but not all students appear to be fully engaged in learning. • Educator prolongs the time used to pose the problem; as a result, students lose interest in solving it when given the opportunity. • Educator provides opportunities for exploration, but time constraints lead to the educator giving answers or solving the problem with/for the students.	• Educator creates a classroom environment where students are comfortable making mistakes, critiquing and questioning each other, and analyzing errors. • Educator provides adequate individual think time, which provides access and promotes productive contributions during group work. • Educator helps students see value in persevering through a challenge; students respond with determination.

Student Actions

When educators make these shifts in practice, you will see students:

✓ Collaborate with and support peers, discussing ideas and formulating solution paths.

✓ Persevere with their problem-solving efforts, take risks with responses and questions, even when uncertain, and are willing to revise their thinking.

✓ Reflect on aspects of the task that felt like a struggle, identifying what they learned and where they may need additional support.

Teaching Practice 8: Elicit and Use Evidence of Student Thinking

Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.[28]

[28] NCTM, 2024

Key Components

- Students are given tasks that require them to show reasoning and justify answers, providing strong evidence of understanding.
- Opportunities for students to demonstrate understanding are pre-planned.
- A variety of indicators of student learning are considered, beyond students getting the correct answer. Common patterns in student thinking, including common mistakes and misconceptions, are recognized.
- Educator reflections on students' progress and evidence of understanding are used to make instructional decisions and adjustments.

Common Misconceptions

➢ Misconception: Using evidence of student learning is primarily gathered from formal events, such as quizzes and unit tests.

Reality: Using evidence of student thinking to assess progress toward mathematical understanding is ongoing and begins with listening for what students know and adjusting instruction continually (moment-to-moment) in ways that support and extend learning.

➢ Misconception: The primary purpose of eliciting student thinking is to affirm student understanding based on correct or incorrect answers.

➢ Reality: Eliciting student thinking is about gaining evidence of understanding towards the desired mathematical goal(s). Acceptable evidence starts with careful planning of a lesson that includes questions that require students to explain, justify, and reason. During the lesson, educators can listen for what students know, such as common patterns of reasoning, as well as misconceptions or incomplete conceptions.

Table 2.8A Teaching Practice 8 – Practical Application

Before Instruction	During Instruction	After Instruction
Educator: ● Intentionally plans lessons to elicit evidence of students' progress toward the learning targets. ● Understands the learning progressions and anticipates student responses to guide learning and address common errors. ● Develops questions that elicit students to explain, represent, and justify their solutions.	Educator: ● Observes and interprets student work (verbal or written) to assess mathematics understanding and reasoning and makes in-the-moment instructional decisions. ● Based on evidence of learning, guides student engagement with the task and/or provides support to deepen understanding and move students toward the learning targets. ● Encourages students to reflect on their learning and identify assets and mistakes/misconceptions to improve their understanding.	Educator: ● Analyzes students' work and thinking and uses evidence to inform instruction. ● Reflects on the lesson to determine if the tasks required students to explain, represent, and justify their conceptual understanding and/or procedural skills. ● Considers whether questions posed and formative assessment strategies resulted in sufficient evidence of student learning.

Table 2.8B Shifts in Practice

Teacher Centered	Making Progress	Student Centered
• Educator relies on a consistent small group of volunteers to assess class understanding. • Educator assesses student understanding based on correct / incorrect responses on tasks focused on knowledge and procedural skill. • Educator collects evidence of student activity or engagement rather than evidence of learning.	• Educator gathers data during discussion, but relies on volunteers (does not select and sequence shares). • Educator expects students to engage in learning, but discussions do not typically result in student-led critiques or justification of strategies. • Educator offers opportunities for students to reflect on learning, but questioning leans more into procedures than underlying reasoning. • Educator uses formative and summative assessment practices.	• Educator anticipates and fully addresses misconceptions and often guides students to reflect on their learning. • Educator monitors learning and adjusts instruction based on student evidence. • Educator incorporates learning progressions in their analysis of student evidence and instructional plans. • Educator implements evidence-based assessment practices, uses a variety of tools to monitor student progress, and aligns learning targets and assessment types.

Student Actions

When educators make these shifts in practice, you will see students:

- ✓ Take ownership of their learning, seek to connect prior learning and new concepts, and work to monitor their progress toward learning targets.
- ✓ Identify evidence of learning and challenge peers to justify their methods and reasoning.
- ✓ Ask questions, respond to, and give suggestions to support their peers' learning.

SECTION 3: TIERED SYSTEM OF SUPPORTS IN MATHEMATICS

Overview: A Strong Foundation

High-quality instruction (HQI) in mathematics is essential for student success and foundational to building a tiered system of support in mathematics. The practices described in Section 2 should be used at each tier of the continuum. In order to provide HQI at all tiers, educators need to have deep content knowledge that incorporates connections across concepts and provides students with flexibility in solving problems. Implementation of HQI supports each student in demonstrating proficiency of grade-level content while engaging in meaningful mathematics. Effective HQI builds students' confidence in mathematics, highlights the relevance and value of math, and helps students see themselves as capable doers of mathematics.

High-quality instruction is the key component of a cohesive system that supports student learning. However, even when educators plan and implement effective lessons using the Mathematics Instruction Framework (MIF), this does not guarantee all students will meet the intended learning goals at the same time or to the same depth of understanding. A cohesive tiered system provides a structure to ensure every student receives what they need to be successful in mathematics.

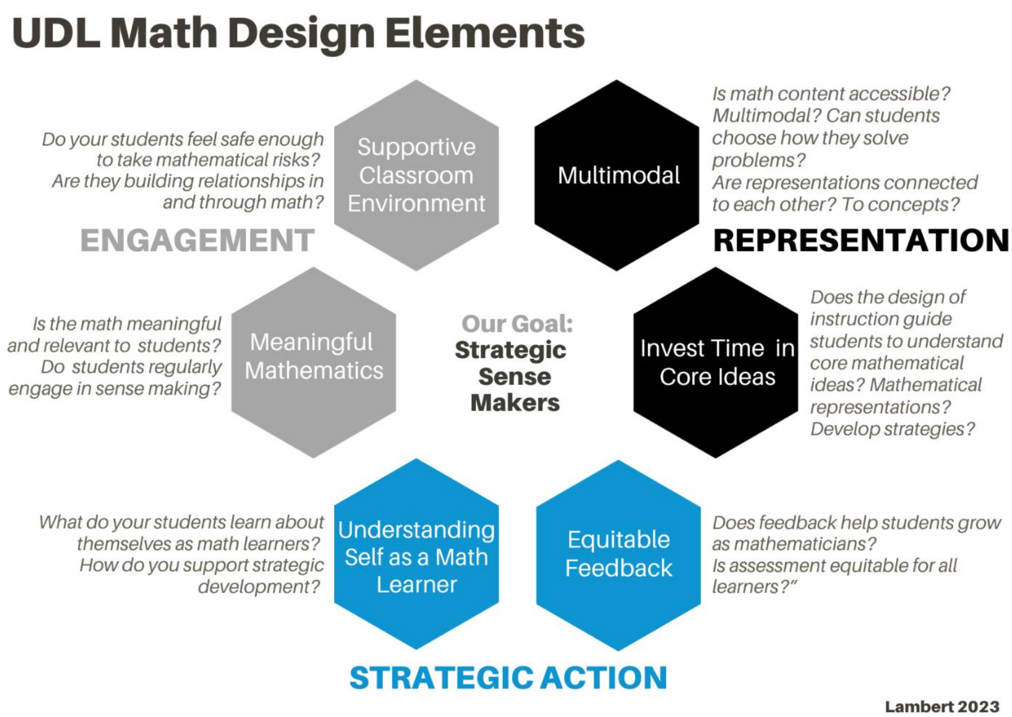
This section will describe how each of the four components of the ITSS framework can look in the content area of mathematics.

Universal Design for Learning

Universal Design for Learning (UDL) is ensuring all students have access to high-quality, standards-aligned core (Tier 1) instruction and a positive learning environment. There are many aspects of universal access in mathematics that differ from those in other subject areas. Examples include the importance of learning progressions and mathematics academic vocabulary development. Recognizing the variability of how students learn, providing access through multiple modalities, and having resources to provide supplementary support as needed are proactive approaches that prevent students from falling behind. Dr. Rachel Lambert[29] provides a framework for Universal Design for Learning in Mathematics. As shown in Figure 3.1, the UDL: Mathematics Framework has three areas of learning (engagement, representation, and strategic action), each with two design elements. Providing universal access requires consideration of all six design elements.

[29] Lambert, 2024

FIGURE 3.1 UDL: MATHEMATICS



UDL Math: Engagement

“To fully engage in mathematics, students need opportunities to work with meaningful mathematics that they find relevant as well as challenging.”[30] The Idaho MIF and UDL Math: Engagement work cohesively to activate the two engagement areas: Meaningful Mathematics and Supportive Classroom Environment.

Meaningful mathematics occurs when students see themselves in the mathematics they are learning, see themselves as capable doers of mathematics, and see value, or relevance, to the mathematics they are learning. If students are asked about why they are learning a current topic and the only answer they can share is to be prepared for future mathematics learning, then they are not seeing the relevance.

Clear goals, relevant tasks, and student thinking are essential to meaningful mathematics. All of these things together support students in feeling that they belong and contribute to a supportive classroom environment. Supportive classroom environments happen when student

[30] Lambert, 2024.

ideas and contributions are central and valued. Students learn to make connections and focus on sense-making to build conceptual understanding and procedural fluency.

UDL Math: Representation

UDL Math: Representation promotes connections between core ideas and multimodal methods for learning. More time is devoted to core ideas that help students understand essential mathematical concepts. Core ideas connect to multiple standards, are developed over time, and incorporate various strategies and representations that are learned and used as tools for solving problems. Incorporating multimodal methods means to teach mathematics in ways that ensure students:

- have access to content,
- have choice in how they solve problems, and
- encourages students to make connections between representations and the concepts they are learning.[31]

Mathematical representations are one of the six key recommendations in the *Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades Practice Guide*. Students deepen their learning when they choose a strategy and one or more concrete, semi-concrete, and/or abstract (CSA) representations to make sense of and use as tools to show their understanding.[32] In Idaho, these three representations are similar and are often referred to as enactive, iconic and symbolic based on Jerome Bruner's original theory.

Concrete (Iconic)

Concrete representations are three-dimensional (3D), physical materials or actions that students can organize, act upon, or manipulate to better understand mathematics content (e.g., regrouping with base 10 blocks, using fraction tiles to compare two fractions, using algebra blocks to multiply polynomials, role playing a problem situation). Concrete representations may help students better understand mathematical concepts when they physically model with the manipulatives or act out problem scenarios to make the underlying mathematical concepts visible and less challenging to interpret.

Semi-concrete (Iconic)

Semi-concrete representations are two-dimensional (2D) visual depictions such as bar models, tape diagrams, simple drawings, tables, arrays, graphs, and number lines that

[31] Lambert, 2024
[32] IES, 2021

may help students organize information. Semi-concrete representations are often used as a transition from concrete manipulatives. For example, moving from building an array with square tiles into drawing a picture representing the same concept is more efficient once students understand the concept.

Abstract (Symbolic)

Abstract representations are mathematical notations that can include numbers, equations, operations, relational symbols, and expressions. This representation is often seen as the most efficient, however, it can also hide the "why" behind the mathematics. Using an abstract representation along with a concrete or semi-concrete representation can show the connections between them and deepen student understanding.

In addition to Bruner, there have been several iterations of vocabulary and purpose of mathematical representations over the years. While not exactly the same in meaning, they all impart the importance of students engaging with problems using a variety of representations, or ways to express mathematical thinking. Other vocabulary includes concrete, representational and abstract (CRA), from the Council for Exceptional Children and special education practitioners. NCTM has used a model that includes physical, visual, physical, contextual, and verbal representations, and emphasizes the connections between these representations (described in the Use and Connect Mathematical Representations in Section 2). Both organizations have also used Concrete, Semi-concrete, and Abstract in publications.

It is important for students to experience concrete representations, and that explicit connections between concrete and semi-concrete to abstract representations are made concurrently so that students make connections between them. When students experience representations as a continuum, the sequence can often "cause a disconnect where students do not see the relationship(s) between the concrete materials and abstract symbols."[33] Additionally, fluency is not about using a specific representation or strategy, but varies depending on the situation. For example, sometimes a semi-concrete representation such as a number line or table of values can be more efficient or highlight aspects of mathematics more than an abstract representation of an equation or function. When educators intentionally integrate a wide variety of models and representations, students will have the opportunity to build deeper understanding and address misconceptions while gaining flexibility and a willingness to persevere.

[33] Jitendra et al., 2024

UDL Math: Strategic Action

In UDL Math: Strategic Action, our instruction considers productive ways to give students feedback. Being intentional with feedback can assist students in growing as mathematicians and helps them develop strategies in self-awareness and executive functioning.[34] The Latin word for assessment is *assidere*, or to sit beside. When educators are sitting beside students on their learning journey, and providing feedback that expands their sense-making and creativity in mathematics, students are more likely to see themselves as mathematics learners.[35] The opposite effect can occur if students' experience with feedback in mathematics focuses only on right or wrong answers.

Vocabulary Instruction

An additional component of UDL in mathematics instruction is intentional support for learning the academic vocabulary of mathematics. Many students do not use mathematical vocabulary outside of school. Thus, incorporating mathematical vocabulary development into core instruction and helping students use it in meaningful ways is helpful for many students. Some strategies for doing this include:

- asset-based routines such as Think-Write-Pair-Share, Math Language Routines, Notice and Wonder, Which One Doesn't Belong, etc.,
- accessing background knowledge,
- ensuring students have a choice of strategies and representations when solving problems,
- identifying how students might organize their thinking (e.g., graphic organizers, anchor charts, Interactive Notebooks),
- facilitating student discourse about mathematics, and
- word walls.

Culture of Collaboration

Building a tiered system of supports in mathematics works best when teachers do not work in isolation. Teachers who work and learn together in teams capitalize on the power of collective efficacy[36] to ensure that all students receive the supports they need to learn grade level

[34] Lambert, 2024
[35] Steele & Honey, 2024
[36] Hattie, 2012; Ronfeldt et al., 2013; Stronge, 2013

mathematics standards. When educators collaborate to identify and implement student supports, both educators and students benefit.[37]

Collaborative educators work together to:

- determine the grade-level concepts and skills students need to master,
- study the developmental learning progression of the mathematical big ideas of a unit - both within one grade level and between grade levels,
- discuss strategies and representations students may choose to show understanding,
- draw upon student assets to make connections between current learning and students' background knowledge, experiences, and strengths,
- determine how they will assess student understanding, both informally and formally, and identify needs for tiered instruction, and
- discuss how mathematics goals can be supported by other content areas, including elective and Career and Technical Education (CTE) areas.

Even when teacher teams are cross-grade level or inter-disciplinary in small schools, teachers can collaborate about mathematics instruction. Effective collaboration elevates outcomes for all students.

Data-informed Decisions

Data-informed decisions means using data systematically to make informed decisions at all levels of the system - district, school, grade, and individual student. There are many levels of data, and each serves a purpose. The Idaho Tiered Systems of Support Framework and Toolkit will provide detailed definitions of different types of assessment, guidance, and inventories for evaluating a school's assessment practices in mathematics.

In mathematics, there is a lot of data available, and recognizing when to use what data and for what purpose is essential for making the desired impact on student learning. In the book Street Data[38], these different levels are described along a continuum ranging from satellite or high-level systems data, to street data, which is data collected frequently in our classrooms and within our community. High level, or satellite data, such as National Assessment of Educational Progress (NAEP), known as "The Nation's Report Card," or the Idaho Standards for Achievement Test (ISAT), gives broad data as a system about what students know, and can assist in making

[37] NCTM, 2024
[38] Safir & Dugan, 2021

decisions to improve practice. There is value in this data, and it can be used to inform systems. However, this data is broad and not intended to ever be used to identify tiered instruction for students. For this guidance document, the MIG, the focus is zoomed in on street-level data.

To identify if targeted or intensive intervention or extension is needed, educators must be informed using specific street level data. This includes data centered on the current essential learning for students and is captured through informal and formal assessments. Assessments such as:

- observations during student discourse,
- anecdotal data,
- warm-ups/exit tickets, and
- student work samples.

Students are provided with multiple opportunities, over time, to make sense of the essential learning. In an asset-based learning environment, educators (and other members of the collaborative leadership team) assess from the perspective of working alongside students throughout their learning journey, paying attention to what students understand first before identifying what interventions/extensions may be needed.[39] By focusing first on data that shows what students already understand about the essential learning means better identification of the targeted instruction that best supports student needs.

For example, if a seventh-grade student is struggling with an essential concept such as proportional reasoning, it is best to start with assessing what the student already understands. Maybe they can create equivalent ratios and draw upon their prior knowledge or can fill out a table of values and show the relationship between values using context. Perhaps they can use manipulatives to show their understanding of proportionality by taking a ratio and doubling it. Whatever essential concept is being learned, it is important that those collecting the data have strong content knowledge and can use what students know to close the gap.

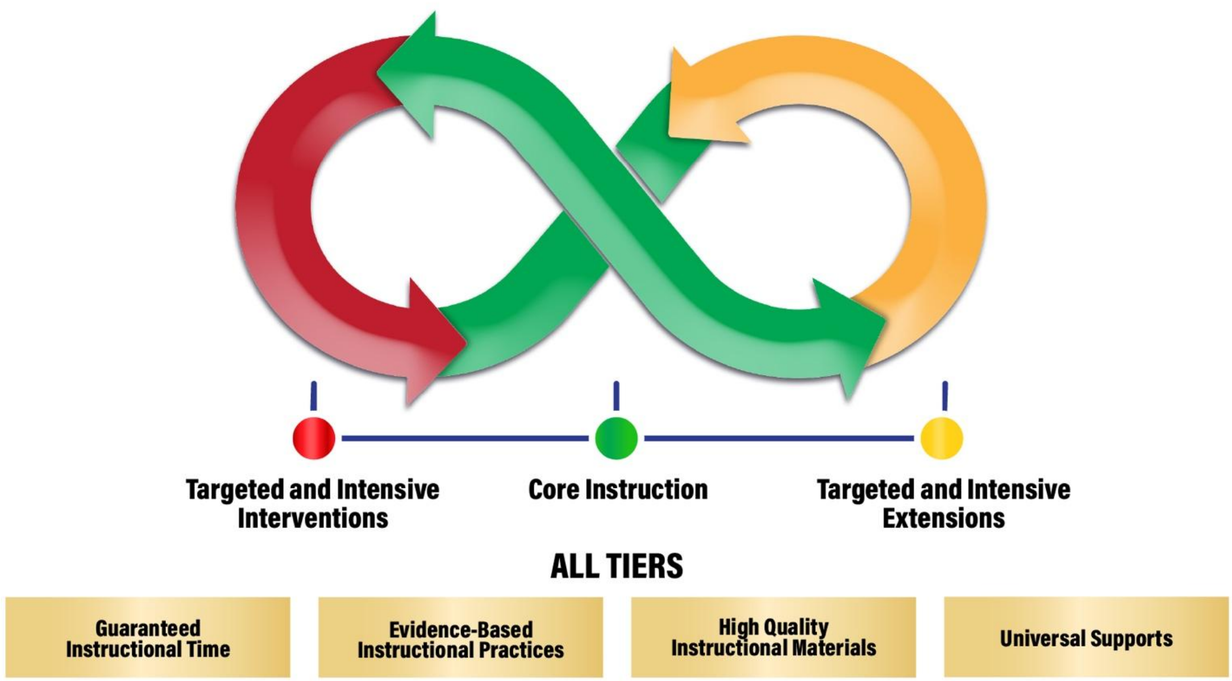
Overview: A Continuum of Tiered Supports

This section provides educators with information to support tiered instruction in mathematics. This includes Tier 1: Core, Tier 2: Targeted, and Tier 3: Intensive support. ALL students receive Tier 1 instruction, while Tier 2 and 3 supports are for students needing additional instruction, either for intervention or extension (Figure 3.2). Students identified for content specific Tier 2 support receive additional instruction beyond Tier 1, with the time allocated varying based on needs. Research on Response to Intervention provides evidence that students who receive an

[39] Steele & Honey, 2024

additional 20 to 30 minutes of intensive intervention three or four times a week can close gaps between them and their peers.[40] Tier 3 instruction is in addition to Tier 1 and Tier 2 instructional time. This often happens outside of instructional time designated for Tier 1 instruction.

Figure 3.2 Continuum of Tiered Supports



In Idaho's vision for tiered systems of support, every student receives Tier 1 Core instruction from a state-qualified teacher. Quality Tier 1 instruction provides a safe learning environment and increases each student's access to rigorous mathematics learning. Educators providing tiered support need to have a strong understanding of mathematics content and progressions, as well as the ability to identify individual student's strengths and needs.

High-quality mathematics interventions and extensions are aligned with the robust Tier 1 Core instruction described in Section 2 of this document and utilize the evidence-based instructional strategies from the *Idaho Mathematics Instructional Framework* (IMIF). During extended instructional time, interventions and extensions are tailored. Mathematics interventions use more explicit attention to concepts and learning supports to help students meet learning targets, whereas mathematics extensions provide a deeper understanding of concepts. This can happen through enhanced interdisciplinary connections, project-based learning, and the

[40] Nickow et al., 2024

creative application of mathematics in real-world contexts, including applications in CTE and Science, Technology, Engineering, and Mathematics (STEM).

Both interventions and extensions are informed by learning progressions and use high-quality curricular materials and formative assessments that are aligned to grade-level standards and consistent with core instruction. They should include cognitively demanding tasks, concrete, semi-concrete, and abstract representations of mathematics concepts, and academic language that connects mathematical symbolic notation to the words it represents. Across all tiers, students are encouraged to use strategies and representations of their choice to make sense of the mathematics they are learning and to become flexible and efficient over time. Tables 3.1 and 3.2 address unproductive and productive beliefs about interventions and extensions in mathematics.

Table 3.1 Mathematics Interventions

Unproductive Beliefs	Productive Beliefs
Students who struggle in mathematics should be provided with interventions immediately, even if it conflicts with core instructional time.	All students receive grade-level, Tier 1 Core instruction with peers in heterogeneous classrooms.
Ability grouping or tracking for core instruction meets students' intervention needs.	Research does not support ability grouping or tracking. Heterogeneous classrooms foster rich discourse and benefit all students.
Students can receive the support they need in mathematics through an online, adaptive mathematics program.	Intervention supports are best when provided by an educator. Online adaptive systems can support core instruction, with educators closely monitoring progress data.
Purchasing additional curricula/programs for mathematics interventions is necessary.	Interventions align with Tier 1 Core Instruction and are usually included with High-Quality Instructional Materials.

Table 3.2 Mathematics Extensions

Unproductive Beliefs	Productive Beliefs
Once students show competency of current grade-level mathematics content, the focus should be on providing them with content above grade level.	Students who have shown competency of grade-level content should be offered opportunities for extension to deepen their understanding.
Ability grouping, or tracking, for core instruction meets students' needs for extension.	Research does not support ability grouping or tracking. Heterogeneous classrooms foster rich discourse and benefit all students.

The ITSS provides detailed descriptions of the key indicators and helpful inventories for a school to evaluate mathematics instruction at each Tier. It also describes how to plan across all content areas for instructional cycles for both interventions and extensions. In mathematics, there are specific, careful considerations when identifying students, planning instruction, and implementation of tiered instruction. It is important to remember that tiered instruction is connected to the essential concepts being learned and students' continuum of learning as it relates to those topics. In other words, there is no such thing as a Tier 2 or Tier 3 student, but rather students who may be identified as needing tiered extensions or interventions for a particular concept. The following provides a good understanding of what each tier of instruction looks like in mathematics from these perspectives.

Tier 1: Core Instruction

Tier 1 Core Instruction is provided to all students using Idaho's MIF described in Section 2. It also includes differentiation of instructional strategies used by all teachers to ensure that every student in their classroom can access grade-level mathematics concepts. Tier 1 includes careful planning of everything that happens in the classroom, not just what mathematics is being taught. Intentional planning also includes, but is not limited to:

- identifying what asset-based routines to implement (e.g., Think-Write-Pair-Share, Math Language Routines, Notice and Wonder),
- accessing background knowledge,
- providing access to content (e.g., low floor, high ceiling tasks; proactive interventions)
- scaffolding and/or differentiating,

- ensuring students have a choice of strategies and representations when solving problems,
- identifying how students might organize their thinking (e.g., graphic organizers, anchor charts, Interactive Notebooks), and
- incorporating academic vocabulary and helping students use it in meaningful ways.

Implementation of Tier 1 Core Instruction emphasizes Idaho's MIF, with an understanding of the Mathematics Learning Progressions and Idaho's Content Standards for Mathematics. During Tier 1, students are provided multiple opportunities, over time, to demonstrate understanding of the most essential standards in a grade/course. Universal Design for Learning in Mathematics provides additional insights for planning and implementing Tier 1 instruction. This topic, along with data-informed decision making and collaborative teams, is discussed in Section 5 of this document. These tools are useful for teams, schools, and districts in understanding the continuum of tiered supports and in making decisions about students receiving additional support beyond Tier 1 Core instruction.

Throughout all Tiered Instruction, students are encouraged to self-assess their learning using established success criteria. The success criteria directly aligns to the learning intentions, goals, and outcomes of the essential concepts.[41]

Tier 2: Targeted Instruction

Tier 2 instruction occurs after data is collected for approximately 10% - 15% of students who need additional support either for targeted intervention or for deeper extensions. When more than 15% of a class needs targeted intervention, it is an indicator that core instruction may need to be adjusted or retaught.

Tier 2: Targeted Instruction- Extension

A small group of students may benefit from extension after they have shown deep conceptual and procedural understanding of current essential concepts. Tier 2 instruction that provides extension can take on many forms, including creative agency to build, explain, or construct new materials connected to the concept. The focus is to go deeper into content or to extend understanding of the concept in a broader sense. Extension in Tier 2 does not mean giving students above grade-level content.

[41] Fisher, et al., 2019

Tier 2: Targeted Instruction- Intervention

A small group of students may benefit from targeted interventions after they have been given multiple opportunities, over time, in Tier 1 instruction but are still struggling with learning current concepts. Before identifying students for intervention, ensure:

- Students have had multiple opportunities, over time, in Tier 1 instruction to learn the identified learning intentions of essential concepts.
- Students have been given a variety of strategies and representations to demonstrate understanding, and are given choice in how they solve problems and explain concepts.
- Educators have gathered data using multiple measures to determine what students know and identify one or more specific skills or gaps that need additional support for the student to be proficient with the essential concept.
- Educators (instructional team) work together to identify interventions to ensure clear communication is provided so that students and parents/caregivers know the targeted areas being addressed.
- Educators have structures in place to determine what proficiency looks like of the essential concepts, and will use this information to move students out of Tier 2 interventions once they show competency.

During Tier 2 instruction, where students receive targeted intervention, the following occurs:

- Scaffolds are provided for the grade-level content being taught in Tier 1. This typically involves more explicit attention to concepts.
- Reteaching of grade-level content with concrete materials and visual models provides better access to the essential content being learned in Tier 1.
- Assessments are specific, timely, can be informal or formal, and are used as data tools to further identify what a student does know and to understand next steps to meet proficiency.
- Alignment of Tier 1 and Tier 2 means providing “just-in-time” support of essential concepts. This is different from providing “just in case” remediation, where it is assumed that students do not have background knowledge related to the topic (intervention before it is identified), or from providing no intervention and having the student fall behind.
- Personalized learning experiences that build on student assets.

- Targeted interventions mean additional time is provided for students to engage with essential concepts, helping them build a strong understanding.

Throughout all Tiered Instruction, including in Tier 2, encourage students to self-assess using success criteria established for the essential concepts during Tier 1. The success criteria directly align to the learning intentions, goals, and outcomes.[42] It is important to remember that tiered instruction is connected to the essential concepts being learned.

Tier 3: Intensive Instruction

Tier 3 instruction may be provided to a very small group, less than five percent of students, who need more intensive, individually responsive instruction than provided in Tier 2. This support is in addition to, not in place of, Tier 1 and Tier 2 instruction and is available for either intensive intervention or extension.

Tier 3: Intensive Instruction- Extension

A small group of students may benefit from extension after they have shown deep conceptual and procedural understanding of current essential concepts and have exceeded expectations when given Tier 2 extensions. Tier 3 extensions are connected to grade level (or course level) content but include a broader perspective that can include knowledge and skills students typically learn at a later time. Projects, making further connections to other topics within and outside of math, and other opportunities that align with student interests are all possible with Tier 3 intensive extensions.

Tier 3: Intensive Instruction- Intervention

If students are struggling with learning current concepts in Tier 1, receive additional, targeted interventions in Tier 2, and still need additional support, then implementation of Tier 3 intensive interventions are the next step. Intensive interventions are individually responsive, have an increase of intensity, and require frequent use of assessment to obtain meaningful data.

The following occurs before moving students from Tier 2 targeted intervention to Tier 3 intensive interventions:

[42] Fisher, et al., 2019

- Students have multiple opportunities, over time, in Tier 1 universal and Tier 2 targeted interventions. Data indicate that the student is not meeting goals or responding to Tier 2 interventions.
- Educators identify pre-requisite content gaps that prevent students from being successful in Tier 2 interventions that align to success criteria.
- Educators engage students, parents/caregivers, the instruction team, and other stakeholders in evaluating previous interventions.

During Tier 3 instruction, where students receive individualized intensive intervention, the following occurs:

- Ensure consistent delivery of responsive instruction with the use of scaffolds to access grade-level content being taught in Tier 1.
- Reteach skills foundational to grade level concepts that are on or below grade level.
- Provide access to grade level content, but may include pre-requisite skills from prior grades. Tier 3 relies on deeply understanding a student's individual needs as discussed and determined by the school problem solving team.
- Use of spaced practice is intentionally implemented so that students can build knowledge to obtain competency with grade level content.
- Implement flexible grouping: Tier 3 interventions are highly-individualized to address specific student needs, so they are provided in small groups, one-on-two, or one-on-one.
- Consideration of time: Tier 3 intensive interventions should ideally be scaffolded on top of Tier 2 targeted supports.
- Implement formative assessment tools frequently to identify what students do know about essential concepts and to measure progress of what students don't know.
- Analyze results of ongoing assessment data and assess each learner's progress to inform decisions regarding additional instruction, interventions, and flexible movement in and out of Tier 3.
- Customize learning supports that may help the student succeed in Tier 1 and 2 instructions.

Throughout all Tiered Instruction, including Tier 3, encourage students to self-assess using success criteria established for the essential concepts during Tier 1. Just like in Tier 2 instruction, Tier 3 instruction is connected to the essential concepts being learned and students' continuum of learning as it relates to those topics. There is no such thing as a Tier 3 student, but we identify students who may need Tier 3 intensive interventions for a topic where they have shown a need for additional, intensive support.

The Continuum of Tiered Supports is one of four key components that will be outlined in the Idaho Tiered System of Supports Framework. Together, these components work cohesively to ensure a school system assists teams of educators as they provide access to meaningful grade level mathematics content to students, with support as needed. If students still need support and are not responding to Tier 2 and 3 interventions, there may be needs beyond what can be met within the continuum of tiered supports.

Beyond the Continuum of Tiered Supports

As soon as an educator begins to notice pervasive patterns of struggle in a student, it is helpful to create a portfolio of qualitative and quantitative evidence for an MTSS problem solving team to review when considering their recommendation for an evaluation. Feifer & De Fina[43] recommend using a range of evidence to build intervention plans that utilize a child's strengths while accommodating their needs. This portfolio of evidence can include multiple sources of data collected over time that demonstrate a pervasive pattern of struggle in mathematics, and it is recommended to also include student strengths. Examples of evidence include informal assessments, such as student work samples (warm-ups, tasks, exit tickets, etc.), formal assessments (diagnostic, online adaptive, etc.), anecdotal observations, student interviews, journal entries, etc. In addition, the following quantitative data can be included in a portfolio to build a student profile:

- Student level reports on state level assessments
- Universal screener data
- Student level reports from online, adaptive systems
- Grade book data including unit pre and post test data and formative assessment data
- Transcript or past report cards for longitudinal perspective
- Progress monitoring data
- Attendance data

[43] Feifer & De Fina, 2005

The information in Section 4: Supporting Students with Specific Learning Disabilities has helpful information and vocabulary to assist educators in discussing students they are concerned about.

When an educator and/or problem-solving team chooses to begin collecting evidence in the form of a portfolio, it is helpful if general education educators can use nationally normed assessments designed for progress monitoring on isolated mathematics concepts and skills. Up until this point in the mathematics intervention process, informal educator-created and curriculum-based assessments are sufficient and helpful for monitoring progress for tiered instruction. However, if a student is to be diagnosed with a Specific Learning Disability in Mathematics (SLDM), quantitative data comparing the student's performance to a nationally normed sample of same-age peers is needed to support a diagnosis. Another reason for more formal progress monitoring is to assess students' retention of learning over time. Notice the use of these two different terms:

Monitoring progress - ongoing, informal, formative assessments used to evaluate a student's response to instruction, provide feedback and inform instruction.

Progress monitoring - a formal process outlined in the Idaho Special Education Handbook ideally using nationally normed probes.

When choosing progress monitoring probes, consider these five criteria:

- Nationally normed
- Focused on a narrow range of isolated, foundational skills appropriate for the grade level
- Closely aligned to the intervention and core instruction the student has recently received
- Can be administered pencil and paper so that educators can analyze student errors
- Do not take more than 10 minutes for a student to complete

In addition to progress monitoring data, a portfolio of evidence (formative assessments, student work samples, observation notes, etc.) can be helpful for an MTSS problem solving team.

Section 4: Supporting ALL Learners

Throughout the Mathematics Instruction Guide, the focus is to provide guidance for all students. This section provides additional resources and information when supporting specific groups of learners.

Students with Specific Learning Disabilities

Students with disabilities can be very successful in general education mathematics classrooms when educators cultivate a culture of belonging in a mathematics learning community. While students with disabilities may have some learning challenges that impact mathematics achievement, they also have unique ways of seeing mathematics that can contribute thoughtfully to mathematical discussions. Removing students with disabilities from grade-level mathematics classrooms is rarely beneficial for them because it removes their opportunity to learn grade-level content with their peers.

Any student, regardless of other services received, may also need and receive Tier 2 or Tier 3 instruction. Students with Disabilities (SWD) must receive Tier 1 instruction and Specially Designed Instruction (SDI) as identified by the Individualized Education Plan (IEP). They may additionally receive Tier 2 or Tier 3 instruction (interventions or extensions) as determined by an individual student's needs. Tier names refer to instructional strategies or intensity of services, not the students' receiving instruction, the location of services, or the service providers. Having an IEP for mathematics is not a class placement. It defines how to individualize instruction for a specific student based on a diagnosed disability.

Diagnosing a student as having a specific learning disability in mathematics (SLDM) can be complex. Students can have low achievement scores and failing grades in mathematics for a multitude of reasons, and these external factors must be ruled out when in the process of considering whether a student has a learning disability.

- Systemic factors that can contribute to difficulties learning mathematics:
  - ineffective instruction
  - unclear learning targets
  - low quality instructional materials
  - not enough time or being removed from opportunities to learn grade-level content
- Student-level factors that can contribute to learning challenges in mathematics:

- emotional trauma
- mental health challenges
- executive functioning challenges such as organization or inability to focus
- not completing assignments
- mobility between districts/schools
- experiencing poverty, housing difficulties, or other home-based challenges
- limited language skills due to disability or being a multilingual student (English Learner)

Non-mathematics specific disabilities (e.g. dyslexia, ADHD, autism, depression, visual-spatial disabilities, etc.) and students' mindsets and confidence can impact their mathematics learning and achievement.[44] Thus, a student may have mathematics difficulty without having a biologically-based specific learning disability in mathematics.[45] As outlined in the Idaho Special Education Handbook, the term "specific learning disability in mathematics (SLDM)" is reserved for students who have been evaluated and diagnosed by a qualified professional. The term "mathematics difficulty" can be used to describe students who have low mathematics achievement for unknown, complex reasons. Universal screeners are designed to identify students who may experience a mathematics difficulty, not to diagnose an SLDM. Students who do have an SLDM may have a disability called Dyscalculia.

In a mathematics classroom, each student with a disability has their unique learning profile that includes both learning strengths as well as challenges. When teachers take the time to analyze student work, help students self-assess, have conversations about learning challenges, and design accommodations, students with disabilities can be very successful in a mathematics classroom. It is also helpful for general education teachers to educate themselves about the specific type of disability a student in their classroom may have. There is no "one size fits all" approach to all students with disabilities, even among students who have the same disability. As much as possible, keeping students in grade level mathematics instruction with their peers will best prepare them for the same bright future that we want for all students.

Some specific strategies that can be implemented in all mathematics classrooms that can be helpful for many students with disabilities include:

[44] Hattie, 2012; Boaler, 2015
[45] Mazzocco, 2005; Gersten et al., 2005

- Pre-teaching a mathematics task to provide a starting place before they work with a group
- Reteaching key content and mathematics vocabulary after group problem solving experiences
- Visual aids such as cue cards, multiplication charts, hundred boards
- Visual models and manipulatives
- Changing the numbers in a problem to make the problem simpler
- Color coding steps to a procedure
- Cue card that lists strategies for approaching a rich task
- Cue cards to help them remember steps to a procedure
- Interactive notebooks
- Foldables to organize relationships between concepts
- Schema diagrams to represent different types of mathematics operations
- Error analysis of work samples
- Strategy cards to help them remember tricky math facts and use facts they know to find the answers to facts they do not know
- Short comprehension checks after key learning experiences
- Providing directions visually, not just orally
- Support in finding the math in a word problem and translating the language to mathematical notation
- Explicit instruction on the notation of math to assist with attaching meaning to mathematical symbols
- Peer-assisted learning

Calculators and computer applications

In addition to the strategies mentioned above, it may be helpful for general education teachers to understand Dyscalculia, a learning disability specific to how the brain processes numbers and numerical concepts. General education teachers are the front line for recognizing pervasive patterns in students who may have a specific learning disability in mathematics. With this knowledge, teachers can confidently advocate for students who may need the extra support that Special Education can provide throughout a student's mathematics education.

Dyscalculia

"Dyscalculia is a difficulty in conceptualizing numbers, number relationships, outcomes of numerical operations, and estimation, that is, what to expect as an outcome of an operation."[46] An estimated 5 to 8 percent of children have this disability.[47] Dyscalculia can be developmental (present from birth) or acquired (developed after birth, sometimes from a brain injury or stroke). Developmental dyscalculia is characterized by difficulty subitizing, or quickly pairing a number word with an amount of objects.[48] The ability to subitize develops at a young age, allowing for this symptom of dyscalculia to be identified as early as first grade.

Students with dyscalculia may struggle to develop conceptual understanding of some aspects of counting, and as a result, learn to complete mathematical tasks using different strategies, such as sequencing and memorizing (see footnote 47 for reference). However, when the content gets too immense, their counting strategies may become cumbersome and inefficient. This often occurs in third and fourth grade as students encounter multiplication and operations with multi-digit numbers.

Dyscalculia has been categorized into three subtypes.[49] While researchers use different labels for them, this guide is using the naming of the subtypes established by Geary (see footnote 48 for reference): procedural, semantic, and visuospatial. While each subtype has specific types of challenges, students with Dyscalculia can compensate for things that may be difficult for them by learning mathematics through their strengths. For this reason, it is important for teachers who work with students who have Dyscalculia to strive to understand both a student's unique challenges in learning mathematics and also their unique strengths that can help them learn mathematics in meaningful ways.

For example, a student with the procedural subtype of Dyscalculia may have difficulty with remembering procedures, which is related to the inability to convert symbols to meaning. This student could be fluent in memorizing math facts, using visual models and has good number sense. A student with the semantic subtype of Dyscalculia may have difficulty counting and calculating and be very strong in determining magnitude and understanding mathematical vocabulary and concepts. A third student with the visuospatial subtype may have difficulty visualizing an internal number line and have poor sense of magnitude, demonstrated by difficulty ordering numbers. A student with this subtype can be very successful interpreting story problems and attaching language to symbols. These examples demonstrate how

[46] Sousa, 2014
[47] Geary, 2004
[48] Sousa, 1998; Von Aster & Shalev, 2007; Clements, 1999
[49] Sousa, 2014; Feifer & De Fina, 2005 ; Von Aster, 2000; Geary, 1993; Geary, 2004

differently Dyscalculia can look in a mathematics classroom. Intervention that helps teachers diagnose both strengths and struggles for these students is the best way to help them be successful. Capitalize on their strengths to accommodate for their struggles.

The different subtypes of dyscalculia, along with the fact that other learning disabilities can impact mathematics achievement, makes diagnosis of a specific learning disability in mathematics challenging. It is often difficult to identify the level to which cultural and linguistic factors or the pace of child development are impacting a student's mathematics performance. A child in the early primary grades who appears to have a SLDM may instead be delayed in the development of cognitive processes needed to mentally manipulate numbers. With appropriate early intervention, these students often move past their mathematics difficulties as their brain develops. Students with dyscalculia typically struggle with mathematics throughout their lives and will need strategically designed instruction and intervention to be successful in mathematics.

English Learners

Effective mathematics instruction for English Learners (ELs) should prioritize mathematical reasoning and communication skills. A valuable resource for this approach is the research-based framework "Principles for the Design of Mathematics Curricula: Promoting Language and Content Development" by Zwiers[50], developed at Stanford. This resource supports the development of both language and content knowledge. It outlines design principles and mathematics language routines that assist teachers in addressing the specific academic language demands inherent in mathematics lessons, such as reading, writing, speaking, listening, conversing, and representing mathematical concepts.[51] This framework is particularly effective in supporting linguistically and culturally unique students who are learning mathematics while acquiring English.

- The Design Principles include:
  - Design Principle 1: Support sense-making
  - Design Principle 2: Optimize output
  - Design Principle 3: Cultivate conversation
  - Design Principle 4: Maximize linguistic and cognitive meta-awareness
- The Mathematics Language Routines include:

[50] Zwiers et al., 2017

[51] Aguirre & Bunch, 2012

- MLR1: Stronger and Clearer Each Time
- MLR2: Collect and Display
- MLR3: Critique, Correct, and Clarify
- MLR4: Information Gap
- MLR5: Co-Craft Questions and Problems
- MLR6: Three Reads
- MLR7: Compare and Connect
- MLR8: Discussion Supports

Students do not need to understand a language completely before they can start making sense of academic content and negotiate meaning in that language. Language learners at all stages of acquisition can and should engage with grade-level content that is appropriately scaffolded. Students need multiple opportunities to discuss their mathematical thinking, negotiate meaning with others, and collaboratively solve problems, with targeted guidance from the teacher.[52]

Disciplinary language development occurs when students use their developing language to make meaning and engage with challenging disciplinary content understandings that are beyond students' current mathematical ability to solve independently. However, these tasks should include temporary support that students can use to make sense of what is being asked of them and to organize their thinking. Learners with emerging language – at any level – can engage deeply with central disciplinary ideas under specific instructional conditions.[53]

Students learning English benefit from being aware of how language choices are related to the purpose of the task and the intended audience, especially if an oral or written report is required.

Additionally, Moschkovich[54], notes the aim is to shift the focus from rigid language demands to a more holistic approach that recognizes the multiple ways in which students communicate mathematically. By emphasizing reasoning, encouraging multiple forms of expression, and valuing students' different linguistic backgrounds, educators can create mathematics classrooms where ELs feel empowered to participate and succeed in mathematical discussions.

[52] Cazden, 2001; Moschkovich, 2013
[53] Walqui & Van Lier, 2010
[54] Moschkovich, 2015

Key Points and Strategies[55]

1. **Emphasizing Mathematical Meaning Over Correct Language Use:** Focusing too much on linguistic correctness can hinder ELs participation in mathematical discussions. Instead, educators should prioritize students' mathematical reasoning and ideas, even if their language use is not entirely precise. By valuing their conceptual contributions, educators can create a more inclusive and productive learning environment.
2. **Encouraging Multiple Modes of Communication:** Mathematical understanding is conveyed not just through words, but also through gestures, symbols, diagrams, and objects. Allowing students to express their ideas using a variety of representations, as this can bridge language barriers and foster deeper understanding.
3. **Building on Students Existing Language Resources:** Rather than viewing ELs home languages or informal ways of speaking as deficits, educators can view them as assets, or valuable resources. Students should be allowed to use their first language, informal speech, or partial English phrases to articulate their mathematical thinking. Educators can then guide them towards more formal mathematical discourse over time.
4. **Revoicing and Expanding Student Contributions:** Educators can support ELs by revoicing or restating their ideas in a way that maintains their original meaning while incorporating more precise mathematical vocabulary. This helps students see how their informal explanations connect to formal mathematical language without discouraging their participation.
5. **Creating Opportunities for Peer Discussion:** Collaborative learning and peer discussions can be powerful tools for ELs. When students engage in small-group discussions, they have more opportunities to use and refine mathematical language in a low-pressure setting. This also allows them to learn from their peers through meaningful interactions.
6. **Focusing on Conceptual Understanding Rather Than Vocabulary Memorization:** Instead of treating mathematics vocabulary as a prerequisite for understanding concepts, embed it naturally within mathematical discussions and problem-solving activities. This approach ensures that language acquisition occurs in context and is meaningfully connected to mathematical thinking.

[55] Moschkovich, 1999

Students who are Mathematically Talented

When students who are exceptionally talented in mathematics demonstrate extraordinary aptitude beyond their grade-level peers, their data shows a need for Tier II or Tier III extensions. For these few students (typically less than five percent of the population), allowing exploration of more mathematics at a different pace than the rest of the class or using flexible, between-class peer-based grouping may be appropriate. Students are best served when depth is prioritized before acceleration. Even with depth, some advanced students benefit from a faster pace and other instructional strategies simultaneously (but not skipping grade level standards).

Students who are mathematically talented often think about mathematics in nuanced and complex ways.[56] This is why it is important that educators have deep pedagogical content knowledge and understand the underpinnings and connections to help students explore complex mathematics appropriately.[57] Schools should work to incorporate flexible grouping within and between classrooms for mathematically exceptional students.

Meeting the needs of advanced learners in mathematics intervention requires a thoughtful approach that challenges them while ensuring they continue to grow.

Key Strategies:

- **Differentiation:** Replace grade-level tasks with more complex problems, open-ended questions, and opportunities for deeper exploration.
- **Compacting:** Allow students to move ahead in the curriculum at their own pace, possibly through telescoping lessons and/or skipping redundant material.
- **Extension:** Introduce real-world applications, interdisciplinary connections, and project-based learning to keep them engaged.
- **Flexible Grouping:** Pair advanced learners with peers who share similar abilities or interests to foster collaboration and discussion. Avoid asking advanced students to support peers who are struggling.
- **Personalized Learning:** Use technology, adaptive software, or independent study projects tailored to their strengths and interests.
- **Encouraging Mathematical Thinking:** Focus on reasoning, problem solving, and creativity rather than procedural fluency alone.

[56] Leikin et al., 2017
[57] Goldin, 2017

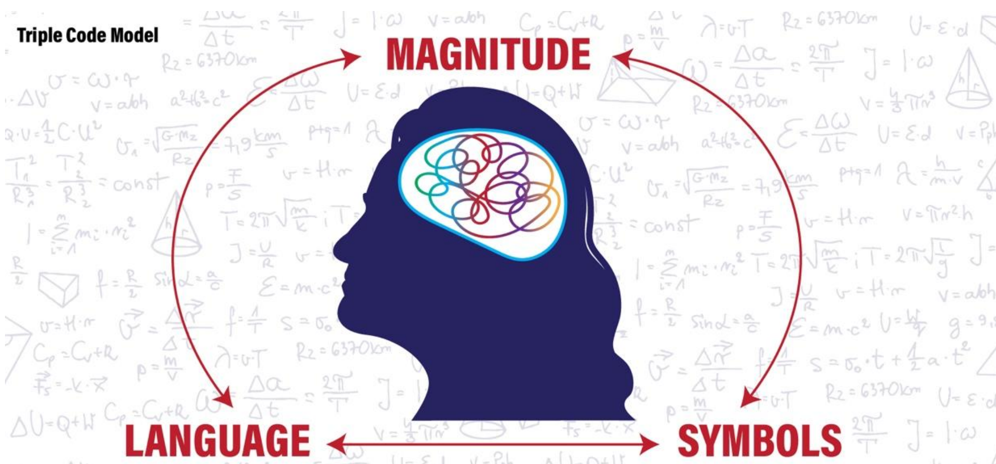
SECTION 5: RESEARCH IN MATHEMATICS

Overview: The Neuropsychology of Mathematics

The Science of Reading has been developed over decades of research across many different genres. Mathematics research does not have a comparable, vast body of research collectively known as the science of mathematics.[58] However, some neuropsychological research supports the conclusion that learning mathematics involves multiple parts of the brain.

Stanislas Dehaene is a French author and cognitive neuroscientist whose research provided the foundation for what is now known as the Science of Reading. Dehaene also conducted research on how the brain learns mathematics. In a seminal study involving patients with brain injuries, Dehaene and Cohen predicted which types of mathematical tasks would be difficult for patients based on the location of the injury.[59] As their predictions became more accurate, they developed what is now called the Triple Code Model (TCM) of number processing.[60] The TCM suggests that humans rely on the interaction between three cognitive systems to develop conceptual understanding of numbers and execute mathematical procedures: language, mathematical symbols, and the visualization of magnitude. Figure 5.1, a graphic created by the Idaho Department of Education, illustrates the interaction between these three codes.

FIGURE 5.1 TRIPLE CODE MODEL



[58] NCSM, 2025

[59] Dehaene and Cohen, 1995

[60] Dehaene & Cohen, 1995; Feifer & De Fina, 2005 ; Sousa, 2014; Von Aster, 2000; Von Aster & Shalev, 2007; Chiappe, 2005; Griffin, 2002; Geary, 2004

The TCM is similar to Jerome Bruner's 1960s theory of learning, which highlights the three stages of conceptual understanding: enactive, iconic, and symbolic.[61] For a number of years, this has been referred to as Concrete, Representational, and Abstract (CRA) in both mathematics education and special education research. Recently, both communities shifted to using the terms Concrete, Semi-concrete, and Abstract (CSA) in recognition that all three are mathematical representations.[62] A key difference between the two is that the Triple-Code Model describes this translation between coding systems as a constant interaction in the brain, whereas Bruner's theory sees the learning as a progression.

Research continues to emerge, but what is widely agreed upon and supported by neuroscience is that learning mathematics occurs through language and the visualization of the magnitudes associated with mathematical symbols. It also does not happen in a single part of the brain that processes numerical symbols.[63] The National Council of Teachers of Mathematics and Council for Exceptional Children[64] emphasizes the importance of students developing mathematical understanding through these representations and the connections between them. The practice of teaching with multiple representations is expanded upon in Section 2 under Teaching Practice 3: Use and Connect Multiple Representations.

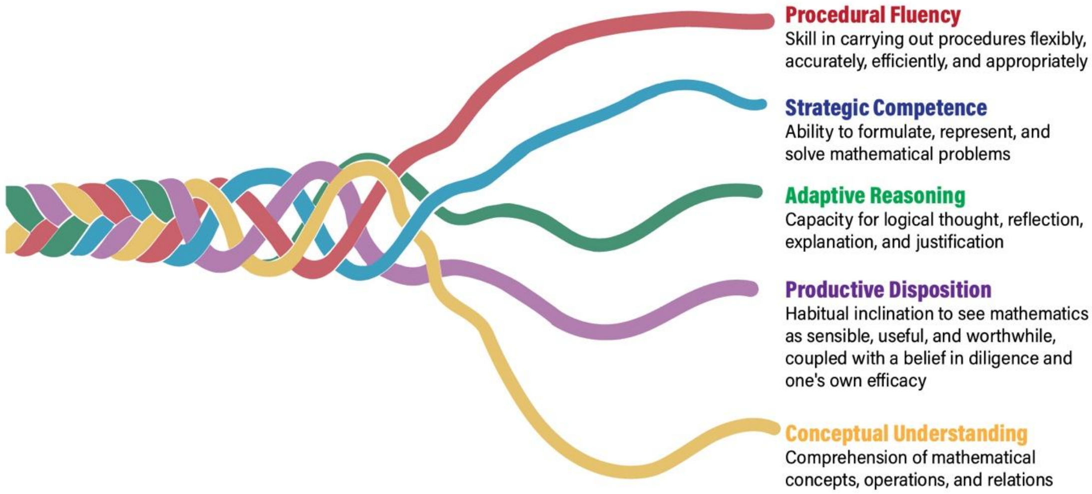
The Idaho Math Rope: Five Strands of Mathematical Proficiency

Idaho's K-12 mathematics goals focus on supporting all students in developing mathematical thinking and proficiency. In *Adding It Up*,[65] the National Research Council presents mathematical proficiency as five interwoven strands, which we have adopted as the Idaho Math Rope (Figure 5.2). In mathematics, the interwoven strands highlight that proficiency is about developing a flexible, connected understanding. A deep mathematical understanding occurs when learners make and use connections to build knowledge and solve problems. Reading also has a visual rope (Scarborough's Reading Rope) showing how multiple strands work together; however, reading proficiency is about a fixed sequence of skills. Unlike reading, mathematical proficiency is not about a fixed sequence of skills—it's about developing flexible, connected understanding. A deep mathematical understanding allows learners to connect pieces of knowledge and use these connections to productively solve problems. Understanding mathematics is more than mastery of arithmetic procedures. The *Idaho Comprehensive*

[61] Driscoll, 2005
[62] IES30, 2021
[63] Boaler et al., 2016
[64] NCTM & CEC, 2024
[65] National Research Council. 2001

Mathematics Plan (CMP) calls for educators to address all aspects of the Idaho Math Rope using the practices outlined in the MIF.[66]

FIGURE 5.2 THE IDAHO MATH ROPE



Educator and Student Actions to Deepen Understanding

Mathematical proficiency means more than just getting the right answers—it's about helping students truly understand and use mathematics in their daily lives. When students see mathematics as relevant and meaningful, they are better prepared to use it in school, at work, and in everyday decision-making. A strong education focuses on building skills for solving real-world problems so that students don't just memorize rules, but learn how to think and reason mathematically.

Parents, educators, as well as industry, employers, community members, and policymakers should have shared expectations regarding mathematics proficiency. This includes recognizing the importance of supporting children's understanding, not just their speed, and of balancing conceptual understanding, procedural fluency, and problem solving. Furthermore, mathematics education should promote deep, lasting learning rather than simply preparing students to perform on tests. Mathematical proficiency isn't just for the classroom—it prepares students for life by helping them think critically, solve problems, and build confidence in tackling real-world challenges. Recommended educator and student actions to support students' development are aligned to each strand of the Five Math Proficiencies in Table 5.1.

[66] CMP, 2025

TABLE 5.1 THE FIVE MATH PROFICIENCIES WITH ACTIONS[67]

Idaho Math Rope Strand	Educator Actions	Student Actions
Conceptual Understanding	• Make mathematics accessible to students through CSA representations. • Proactively facilitate multiple access points for students. • Elicit and use multiple representations while integrating and eliciting student thinking. • Ask students to give a visual proof of their solution.	• Demonstrate understanding of concepts in multiple ways. • Make connections between representations. • Understand rough draft math[68], or that revising our work is part of perseverance and the mathematical process. • Use multiple modes of communication to convey solution(s) and explain what the solution(s) mean in context.
Procedural Fluency	• Provide opportunities for spaced practice of concepts. • Frequently assess students' understanding using a variety of formats. • Help students identify flexible and efficient strategies. • Engage in games that involve strategy and the use of procedural fluency. • Use various modes of explanation, including written, verbal, and diagrams. • Use precise mathematical language when describing strategies.	• Accurately use a procedure on a novel problem or new number set. • Demonstrate flexibility in using strategies. • Recognize and justify when one strategy is more efficient than others. • Identify, use, and communicate multiple pathways to a solution. • Find and analyze errors in their work and others' work to show an understanding of the procedures and why they work.
Strategic Competence	• Develop content and pedagogical knowledge to use various strategies and	• Ask peers about strategies selected to compare with their own.

[67] NCTM, 2024
[68] Jansen, 2020

Idaho Math Rope Strand	Educator Actions	Student Actions
	progressions and allow multiple ways to solve problems. ● Provide class discussions on the efficiency of different strategies through questioning. ● Anticipate strategies that may arise during instruction and create intentional questions to engage and develop strategies. ● With an instructional goal in mind, create a problem that can be solved multiple ways. ● Provide feedback on student processes.	● Reflect on which strategies are best used and when to use them. ● Recognize that if they arrive at a solution that does not make sense, there is another strategy to try. ● Formulate mathematical problems, represent, and solve them. ● Explain other students' solution strategies and connect to their own.
Adaptive Reasoning	● Make connections to prior knowledge to further student thinking. ● Utilize protocols for students to justify their mathematical claims and respond to others'. ● Anticipate student strategies and plan responses. ● Listen and respond to student thinking. ● Create a classroom culture that values sharing initial thinking, think- alouds, and rough drafts.	● Find and correct errors, recognizing that mistakes can deepen their knowledge. ● Identify multiple strategies to approach a problem and justify the approach used. ● Justify changes to their approach. ● Provide informal and formal explanations and justifications. ● Apply what they learned from one idea or task to a new scenario. ● Ask and answer questions to clarify a task.
Productive Disposition	● Believe every student is capable of learning mathematics. ● Use contextual thinking tasks	● Believe they can use mathematics to solve problems in their community. ● Persevere in learning new

Idaho Math Rope Strand	Educator Actions	Student Actions
	and encouragement to support students' development of perseverance. • Help students demonstrate mastery through real world mathematics connections. • Model utilizing mistakes and multiple strategies through think-alouds.	concepts. • Recognize there are a variety of strategy options when approaching a mathematics problem. • Share their thinking and make sense of the approach taken by others. • Share how they have identified and corrected mistakes as a part of learning.

CONCLUSION

The *Comprehensive Math Plan*, the *Math Instructional Guide* and the forthcoming *Idaho Tiered Systems of Support Framework and Toolkit* documents provide Idaho schools and districts with a cohesive plan and a call to action to address systemic achievement in mathematics. We must examine whether it is truly the students who are failing mathematics, or whether it is our system failing our students. The Idaho Math Initiative acknowledges that high-quality education in mathematics is critical to provide a promising future for students individually, as well as collectively, to ensure a thriving Idaho.

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For Questions Contact

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SUBJECT

Praxis Steps Modular Assessment

BACKGROUND

Applicants seeking a Standard Instructional Certificate must demonstrate proficiency in their requested endorsement area, as required by IDAPA 08.02.02.015.01.d. Each candidate must meet or exceed the state qualifying score on the applicable content area assessment(s) approved by the State Board of Education (Board). The Educational Testing Service (ETS) Praxis subject assessments are Board approved content area assessments.

In June 2026, the Board approved the use of the new Elementary Fundamentals 8000 series developed by ETS for Idaho certification. Beginning in fall 2026, ETS will launch Praxis Steps for the Elementary Fundamentals 8000 series. Praxis Steps is a modular approach to completion of the content area assessments. Praxis Steps allows a candidate to take a Praxis test over time, banking results along the way. The result for each Step is applied toward the candidate's overall test score. If a candidate takes a Steps-enabled Praxis assessment in one sitting and does not pass, the candidate can retake only the Steps they did not pass.

PROPOSAL

The Idaho State Department of Education (Department) proposes Board adoption of the Praxis Steps modular assessment for educator candidate use beginning in the 2026-2027 academic year. The Department presented this option to the Professional Standards Commission (PSC), and the PSC voted to recommend Board approval.

The Praxis Steps modular assessment approach to licensure testing breaks the content exams into smaller, focused sections. Candidates can choose to take the full test at once or complete individual Steps over time, giving them flexibility in pacing and scheduling. There are differences in the costs associated with taking and re-taking the Praxis Elementary Education Fundamentals 8000 Series using these approaches.

Test Approach	# of Tests	Cost per Test	Total Elem. 8000 Series Cost	Retake Costs
Praxis Steps	4 content area tests split into 3 Steps = 12 Steps	$118.50 per content area ($39.50 per step)	$474.00	• Candidate retakes the Step Test(s) not passed. Step Tests are $39.50 each.
Praxis standard	4 content area tests	$79.00 per content area	$199.52 (discounted if purchased together), <u>or</u> $316.00 (purchased individually)	• Candidate close to passing (within 1 standard error): Praxis Bridge learning module(s) at $50.00 each. • Candidate not close to passing: full content area test at $79.00.

Praxis Steps is also beneficial to educator preparation programs, as it provides visibility into candidates' granular, Step-level data which can be leveraged for focused candidate remediation, curriculum refinement, and program improvements.

IMPACT

The Board's adoption of the Praxis Steps modular approach to testing will allow candidates the following test completion options beginning in the 2026-2027 academic year:

- Praxis Steps – completing the content area assessment in smaller sections during their time in educator preparation and banking their score.
- Praxis standard – completing the content area assessment or as a single, larger assessment at the conclusion of preparation.

Praxis Steps will initially only be available for the Elementary Education Fundamentals 8000 series. However, Praxis anticipates integrating the Praxis Steps approach into other content area assessments in the future.

BOARD STAFF COMMENTS AND RECOMMENDATIONS

Board staff are supportive of educator preparation candidates having multiple pathways to completion of Praxis content area assessments. If the Board approves the Praxis Steps approach, it will be important for the Department and educator preparation programs to be transparent in describing test taking options and associated costs.

Board staff recommends approval.

ATTACHMENTS

Attachment 1 – Praxis Steps Flyer

BOARD ACTION

I move to approve the Praxis Steps modular assessment pathway for approved Praxis content area assessments for teacher certification.

Moved by __________ Seconded by __________ Carried Yes _____ No _____

APPLICABLE STATUTE, RULE OR POLICY

IDAPA 08.02.02.015.01.d Standard Instructional Certificate
IDAPA 08.02.02.017.01 Content, Pedagogy and Performance Assessment for Certification

REFERENCE

April 2025	Board approved Praxis Bridge alternate content area assessment pathway, with three-year retroactive

	eligibility.
June 2025	Board approved the adoption of Praxis 8001 and its cut scores to replace 7001.
August 2025	Board approved the adoption of Praxis assessments and qualifying scores for 5589 Middle School Social Studies, 5758 ParaPathways: Reading and Writing, and 5759 ParaPathways: Mathematics.
June 2026	Board approved the adoption of Praxis assessments and qualifying scores for the Elementary Education Fundamentals series 8003-8006.

Praxis Steps: Expanding Flexibility and Insights with Modular Testing

Praxis Steps is a modular approach to licensure testing that breaks the exam into smaller, focused sections. Candidates can choose to take the full test at once or complete individual Steps over time—giving them flexibility in pacing and scheduling. Educator preparation programs and states gain actionable insights at each stage to help ensure teacher readiness, support progression, and uphold quality standards within the profession.

Benefits of Praxis Steps

Flexibility	Allows candidates the flexibility to take the full test at once or complete smaller "Steps" that align with coursework, empowering candidates to control their testing journey.
Targeted Retakes	Enables candidates to retake only the Step needing improvement, streamlining the path to licensure while saving time and reducing costs.
Data-Driven Insights	Offers more granular data at the Step level to drive program improvements and provide targeted support to help candidates master essential content.
More Ways to Succeed	Provides more options for candidates to take and pass their tests, reducing barriers to certification without sacrificing quality.

Get Started

Give your candidates—and your programs—the advantage of a flexible, innovative testing experience. Praxis Steps will launch with the Elementary Education Fundamentals tests. Connect with your Director of Educational Partnerships today!

One Test. Multiple Paths to Success.

Discover how Jordan and Taylor each achieve success with the Elementary Education Fundamentals Science (8005) test.

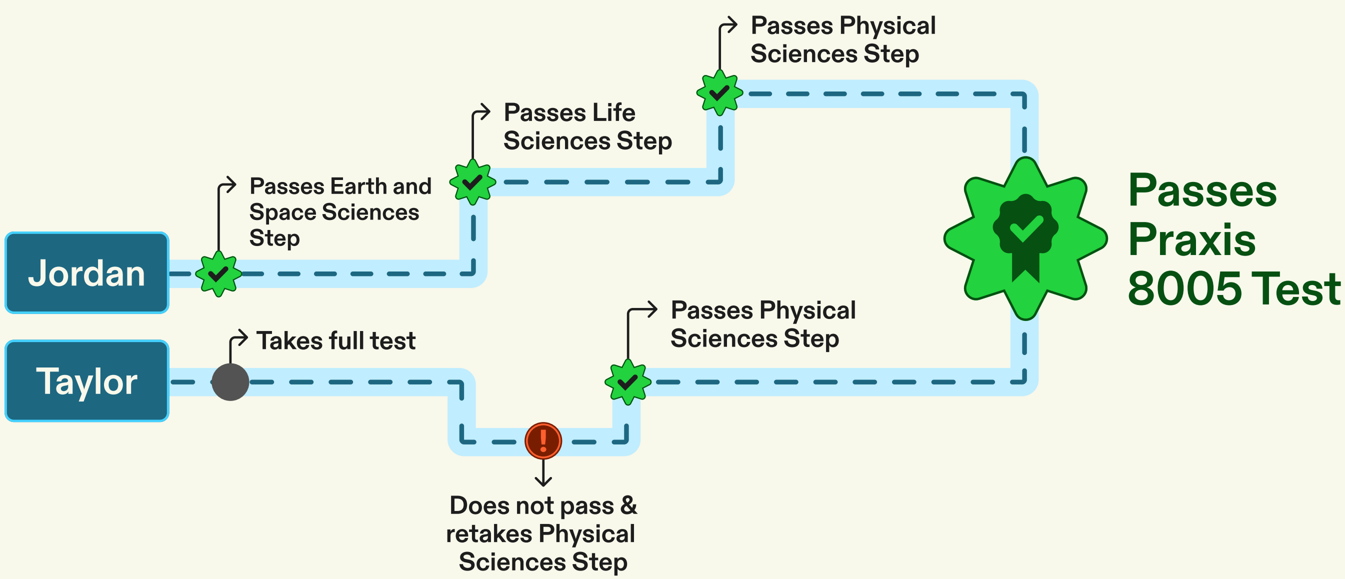
Progression Path

Jordan takes each Praxis Step as she completes coursework, banking passing scores along the way.

By graduation, all Steps are complete—and she earns her passing Praxis 8005 score.

Targeted Retake Path

Taylor takes the full Praxis 8005 test. He doesn't pass—but Praxis Steps shows exactly where he fell short. He retakes only the Step he needs, passes it, and earns his passing Praxis 8005 score.



SUBJECT

2026 Curricular Materials Review

BACKGROUND

The curricular materials review and adoption process is established in Sections 33-118 and 33-118A, Idaho Code and further defined in IDAPA 08.02.03.128, Rules Governing Thoroughness. Curricular materials are defined as textbooks and instructional media including software, audio/visual material, and internet-based instructional material (Section 33-118A, Idaho Code). Idaho is a multiple-adoption state and selects a number of materials in a designated subject area from a variety of publishing companies.

In accordance with IDAPA 08.02.03.128, Idaho adopts materials in the areas of reading, English, spelling, speech, journalism, languages other than English, art, drama, social studies, music, mathematics, business education, career technical education, counseling, science, health, physical education, handwriting, literature, driver education, and limited English proficiency.

The Curricular Materials Selection Committee (Committee) is made up of five Board-appointed members who each serve a five (5)-year term and is responsible for overseeing the curricular materials adoption process for the state of Idaho. The Committee's Executive Secretary is an employee of the Idaho Department of Education (Department) and a voting member of the committee.

The Committee consists of not less than ten (10) total members from the following stakeholder groups:

- Certified Idaho classroom teachers
- Idaho public school administrators
- Idaho higher education officials
- Parents
- Trustees
- Local board of education members
- Members of the Division of Career Technical Education
- Idaho Department of Education personnel

Certified classroom content specialists complete an individual review to evaluate all materials against Idaho Content Standards and specific course requirements. The Committee meets for approximately one week in June to review and audit all independent and consensus reviews for alignment to Idaho Content Standards and specific course requirements. The Committee then votes and provides its recommendations to the State Board of Education (Board). All meetings of the Committee are open to the public.

PROPOSAL

One hundred eight (108) content area specialists assisted eleven (11) Committee members in the evaluation of curricular materials and related instructional materials. The Committee's recommendations regarding adoption are catalogued in Attachment 1.

The subject areas included in the 2026 curricular materials review included:

- K-12 Arts and Humanities
- K-12 World Languages
- K-12 Computer Applications
- K-12 Computer Science
- Grades 9-12 Digital Literacy
- Driver Education
- Career & Technical Education
- AFNR: Agriculture Welding
- Ag Small Engine Repair
- Plant and Soil
- BME: Business Management
- ETE: Network Support
- Programming and Software Development
- FCSHS: Cosmetology
- HPPS: Nursing Assisting
- TI: Electronics Technology; Aircraft Maintenance; Welding.

IMPACT

The curricular review and adoption process helps to ensure that all Idaho school districts and charter schools, regardless of size, can purchase quality materials at a guaranteed low contract price for the length of the adoption cycle while maintaining local control in the choice of instruction materials.

If the Board accepts the recommendation of the Committee and adopts the materials, the Department executes contracts with the publishing companies and the listing of newly adopted materials is published in the Department's Curricular Materials Adoption Guide. In accordance with IDAPA 08.02.03.128, a state curriculum depository is maintained at Caxton Printers Ltd., in Caldwell, Idaho. Curriculum libraries are also maintained at seven (7) regional centers.

BOARD STAFF COMMENTS AND RECOMMENDATIONS

The process the Department uses for review and recommended adoption of curricular materials is thorough and aligned to applicable state laws.

Board staff recommends approval.

ATTACHMENTS

Attachment 1– 2026 Curricular Materials Review Recommendations
Attachment 2 – Curricular Materials Selection Committee Roster
Attachment 3 – Regional Center Locations

BOARD ACTION

I move to approve the recommendations of the Curricular Materials Selection Committee to adopt curricular materials and related instructional materials as provided in Attachment 1 for the following content areas: Arts and Humanities K-12; World Languages K-12; Computer Applications K-12; Computer Science K-12; Digital Literacy 9-12; Driver Education; and Career & Technical Education Agriculture Welding, Ag Small Engine Repair, Plant and Soil, Business Management, Network Support, Programming and Software Development, Cosmetology, Nursing Assisting, Electronics Technology, Aircraft Maintenance, and Welding.

Moved by___________Seconded by___________Carried Yes______No ______

APPLICABLE STATUTE, RULE OR POLICY

Idaho Code § 33-118, § 33-118A,
Adoption procedures IDAPA 08.02.03.128 – Rules Governing Thoroughness, Curricular Materials Selection and Online Course Approval
Board Policy IV.B.9.

REFERENCE

August 2022	Board approved recommendations made by the Curricular Materials Selection Committee for K-12 mathematics and K-12 English language learner curricular materials.
October 2022	Board approved recommendations made by the Curricular Materials Selection Committee for K-12 mathematics and K-12 English language learner curricular materials.
August 2023	Board approved the recommendations made by the Curricular Materials Selection Committee for curricular materials for K-12 mathematics.
August 2024	Board approved the recommendations made by the Curricular Materials Selection Committee for K-12 English language arts and health and K-12 health and physical education curricular materials.
August 2025	Board approved the recommendations made by the Curricular Materials Selection Committee for K-12 science and K-12 career technical education.

Attachment 1

Content	Publisher	Title	Rating
A&H: MA 9-12	Cengage	Adobe Design Collection Revealed	Basic
A&H: MA 9-12	Cengage	Adobe Photoshop Creative Cloud Revealed	Basic
A&H: Music 6-12	Pearson	Rock and Roll: Its History and Stylistic Development, 8th Edition	Not Recommended
A&H: Music K-5	QuaverMusic	QuaverMusic Kindergarten Idaho Curriculum	Comprehensive
A&H: Music K-5	QuaverMusic	QuaverMusic Grade 1 Idaho Curriculum	Comprehensive
A&H: Music K-5	QuaverMusic	QuaverMusic Grade 2 Idaho Curriculum	Comprehensive
A&H: Music K-5	QuaverMusic	QuaverMusic Grade 3 Idaho Curriculum	Comprehensive
A&H: Music K-5	QuaverMusic	QuaverMusic Grade 4 Idaho Curriculum	Comprehensive
A&H: Music K-5	QuaverMusic	QuaverMusic Grade 5 Idaho Curriculum	Comprehensive
A&H: Theatre 6-12	Pearson	Theater, Cinema, Film Production 1a/1b	Component
A&H: VA K-12	The Art of Education	FLEX Curriculum	Comprehensive
CS: HS CS	Cengage	New Perspectives Computer Concepts Comprehensive	Basic
CS: HS CS	Cengage	Discovering Computers: Digital Technology, Data, and Devices	Component
CS: HS CS	Cengage	CS: Programming Logic & Design	Basic
CS: HS CS	Code HS	Idaho High School Computer Science	Comprehensive
CS: HS CS	McGraw Hill	Exploring Digital and Information Technology: An Introduction to Computer Applications	Component
CS: HS CS	Pearson	Fundamentals of Computer Science, 1st Edition	Not Recommended
CS: HS CS	Pearson	Principles of Information Technology 1a/1b	Comprehensive

Content	Publisher	Title	Rating
CS: HS CS	Savvas	Outlier Computer Science 9-12	Component
CS: HS CS	Skill Struck	Skill Struck Voyage, Exploring Computer Science, Grades 9-12	Comprehensive
CS: HS DigLit	Code HS	Idaho Digital Literacy	Comprehensive
CTE: AFNR Ag Welding	Cengage	AFNR Ag: Welding: Principles and Applications	Basic
CTE: AFNR Ag Welding	CEV Multimedia	iCEV Agricultural Science Site - Agriculture Welding	Comprehensive
CTE: AFNR Ag Welding	McGraw Hill	Careers and Basics of Agriculture	CTE Pathway Supplemental
CTE: AFNR Ag Welding	Pearson	Agricultural Technology Welding and Fabrication, 1st Edition	CTE Pathway Supplemental
CTE: AFNR P&S	Cengage	Plant & Soil Science: Fundamentals and Applications	Comprehensive
CTE: AFNR P&S	CEV Multimedia	iCEV Agricultural Science Site - Plant and Soil	Comprehensive
CTE: AFNR P&S	Pearson	Introduction to Horticulture, Landscaping, and Floral Design 1st Edition	Basic
CTE: AFNR P&S	Pearson	Agriscience 2a/2b	CTE Pathway Supplemental
CTE: AFNR SER	CEV Multimedia	iCEV Agricultural Science Site - Agriculture Small Engine Repair	Comprehensive
CTE: AFNR SER	Pearson	Automotive Technology: Principles, Diagnosis, and Service, 7th Edition	Not Recommended
CTE: AFNR SER	The Goodheart-Willcox Co	Small Gas Engines, 12th Edition	Comprehensive
CTE: BME BM	Cengage	Principles of Business	CTE Pathway Supplemental
CTE: BME BM	CEV Multimedia	iCEV Business, Marketing, Finance, IT & Media Site	Comprehensive
CTE: BME BM	McGraw Hill	Dynamic business Law	CTE Pathway Supplemental
CTE: BME BM	McGraw Hill	Careers and Basics of Business, Marketing, and Finance	CTE Pathway Supplemental
CTE: BME BM	Pearson	Business Essentials, 1st Edition	Basic

Content	Publisher	Title	Rating
CTE: BME BM	Pearson	Management 1a/1b	Basic
CTE: BME BM	Savvas	Outlier Dual Enrollment Intro To Business	CTE Pathway Supplemental
CTE: BME BM	Savvas	Outlier Dual Enrollment Financial Accounting	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Digital Information Technology 1	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Microsoft Excel Expert	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Microsoft Word Expert	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Communication Skills for Business	Not Recommended
CTE: BME BM	Savvas	CTE 2026 Personal Finance	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Intuit Personal Finance	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Introduction to Marketing	CTE Pathway Supplemental
CTE: BME BM	Savvas	CTE 2026 Entrepreneurship and Small Business	CTE Pathway Supplemental
CTE: BME BM	The Goodheart-Willcox Co	Principles of Management, 2nd Edition	Basic
CTE: ETE NS	Cengage	Guide to Networking Essentials	CTE Pathway Supplemental
CTE: ETE NS	Savvas	CTE 2026 Networking	CTE Pathway Supplemental
CTE: ETE NS	The Goodheart-Willcox Co	Network Fundamentals, 4th Edition	CTE Pathway Supplemental
CTE: ETE P&S Dev	Cengage	Programming Logic & Design	Basic
CTE: ETE P&S Dev	McGraw Hill	Foundations of Programming: Software Engineering	Not Recommended
CTE: ETE P&S Dev	McGraw Hill	Skills and Pathways: Computing in Today's World	Not Recommended
CTE: ETE P&S Dev	Pearson	Computer Science: A Problem-Solving Approach, 1st Edition	CTE Pathway Supplemental

Content	Publisher	Title	Rating
CTE: ETE P&S Dev	Pearson	Programming 1a/1b	CTE Pathway Supplemental
CTE: ETE P&S Dev	Skill Struck	Skill Struck Voyage, Idaho Programming and Software Development (PCEP Prep Course), Grades 9-12	Comprehensive
CTE: FCSHS Cos	Cengage	Milady Package (contains Milady Standard Cosmetology	Comprehensive
CTE: FCSHS Cos	Cengage	CIMA ExamReady for the Cosmetology NIC National Exam	CTE Pathway Supplemental
CTE: FCSHS Cos	Pearson	Cosmetology 1/2a/2b/3a/3b	CTE Pathway Supplemental
CTE: HPPS NA	Cengage	Nursing Assistant: A Nursing Process Approach	Basic
CTE: HPPS NA	Cengage	DHO	CTE Pathway Supplemental
CTE: HPPS NA	McGraw Hill	Careers and Basics of Health Science	CTE Pathway Supplemental
CTE: HPPS NA	McGraw Hill	Essentials of Medical Language	CTE Pathway Supplemental
CTE: HPPS NA	Pearson	Nursing Careers: Foundational Concepts and Skills, 1st Edition	Basic
CTE: HPPS NA	Pearson	Nursing Assistant 1a/1b	CTE Pathway Supplemental
CTE: HPPS NA	Savvas	CTE 2026 Intro To Nursing	CTE Pathway Supplemental
CTE: HPPS NA	Savvas	CTE 2026 Health Science Foundations	CTE Pathway Supplemental
CTE: HPPS NA	The Goodheart-Willcox Co	The Nursing Assistant: Foundations of Holistic Caregiving 2nd Edition	Basic
CTE: TI Welding	Cengage	TI Welding: Welding: Principles and Applications	Comprehensive
CTE: TI Welding	Pearson	Welding, Level 1, 6th Edition	CTE Pathway Supplemental
CTE: TI Welding	The Goodheart-Willcox Co	Modern Welding 13th Edition	Comprehensive
CTE: TI Welding	The Goodheart-Willcox Co	Welding Fundamentals 7th Edition	Comprehensive
DE	Pass Drivers Ed	Idaho 30 Hr Driver Education	Comprehensive

Content	Publisher	Title	Rating
DE	AAA	How to Drive 15th Edition	Basic
I&CT: 3-5	Inquisitive K-5	Inquisitive K-6 Technology: 3-5	Component
I&CT: 3-5	Code HS	Idaho Computer Science: 3rd Grade	Comprehensive
I&CT: 3-5	Code HS	Idaho Computer Science: 4th Grade	Comprehensive
I&CT: 3-5	Code HS	Idaho Computer Science: 5th Grade	Comprehensive
I&CT: 3-5	McGraw Hill	Level Up Through Digital Discoveries Grade 3	Component
I&CT: 3-5	McGraw Hill	Level Up Through Digital Discoveries Grade 4	Basic
I&CT: 3-5	McGraw Hill	Level Up Through Digital Discoveries Grade 5	Comprehensive
I&CT: 3-5	No Tears Learning	3rd Grade: Keyboarding (Keyboarding Without Tears)	Component
I&CT: 3-5	No Tears Learning	4th Grade: 'Keyboarding Success (Keyboarding Without Tears)	Component
I&CT: 3-5	No Tears Learning	5th Grade: 'Can-Do Keyboarding (Keyboarding Without Tears)	Component
I&CT: 3-5	Skill Struck	Skill Struck Launchpad Grades 3-5	Comprehensive
I&CT: 6-8	McGraw Hill	Level Up Through Digital Discoveries Grade 6	Component
I&CT: 6-8	McGraw Hill	Level Up Through Digital Discoveries Grade 7	Basic
I&CT: 6-8	McGraw Hill	Level Up Through Digital Discoveries Grade 8	Comprehensive
I&CT: 6-8	Skill Struck	Skill Struck Voyage, Python Turtles, Grades 6-8	Basic
I&CT: 6-8	Code HS	Idaho Middle School Computer Science	Comprehensive
I&CT: 9-12	Cengage	Technology for Success & The Shelly Cashman Series, Microsoft 365 & Office Introductory	Comprehensive
I&CT: 9-12	Cengage	Technology for Success and Illustrated Series Collection, Microsoft 365 & Office	Component

Content	Publisher	Title	Rating
I&CT: 9-12	McGraw Hill	Level Up Through Digital Discoveries Grade 9	Comprehensive
I&CT: 9-12	McGraw Hill	Level Up Through Digital Discoveries Grade 10	Component
I&CT: 9-12	McGraw Hill	Level Up Through Digital Discoveries Grade 11	Component
I&CT: 9-12	McGraw Hill	Level Up Through Digital Discoveries Grade 12	Component
I&CT: 9-12	Pearson	Introduction to Computers and Information Technology, 4th Edition	Comprehensive
I&CT: K-2	Inquisitive K-5	Inquisitive K-5 Technology: K-2	Component
I&CT: K-2	Code HS	Idaho Computer Science: K Grade	Basic
I&CT: K-2	Code HS	Idaho Computer Science: 1st Grade	Comprehensive
I&CT: K-2	Code HS	Idaho Computer Science: 2nd Grade	Comprehensive
I&CT: K-2	McGraw Hill	Level Up Through Digital Discoveries Grade K	Component
I&CT: K-2	McGraw Hill	Level Up Through Digital Discoveries Grade 1	Component
I&CT: K-2	McGraw Hill	Level Up Through Digital Discoveries Grade 2	Component
I&CT: K-2	No Tears Learning	Kindergarten: 'Keys for Me (Keyboarding Without Tears)	Component
I&CT: K-2	No Tears Learning	1st Grade: 'My Keying Board (Keyboarding Without Tears)	Component
I&CT: K-2	No Tears Learning	2nd Grade: 'Key Power (Keyboarding Without Tears)	Component
I&CT: K-2	Skill Struck	Skill Struck Launchpad K-2	Comprehensive
WL: ASL	Pearson	American Sign Language 1a/1b	Component
WL: ASL	Pearson	American Sign Language 2a/2b	Component
WL: ASL	Pearson	American Sign Language 3a/3b	Comprehensive

Content	Publisher	Title	Rating
WL: French	Carnegie	ID T'es branche? 3e Level 1	Comprehensive
WL: French	Carnegie	ID T'es branche? 3e Level 2	Comprehensive
WL: French	Carnegie	ID T'es branche? 3e Level 3	Comprehensive
WL: French	Carnegie	ID T'es branche? 3e Level 4	Comprehensive
WL: French	Klett World Languages	Reporters Francophones 1	Comprehensive
WL: French	Klett World Languages	Reporters Francophones 2	Comprehensive
WL: French	Klett World Languages	Reporters Francophones 3	Comprehensive
WL: French	Klett World Languages	Reporters Francophones 4	Comprehensive
WL: French	Lingco	Lingco for French 1	Basic
WL: French	Lingco	Lingco for French 2	Basic
WL: French	Lingco	Lingco for French 3	Basic
WL: French	Vista Higher Learning	Chemins 2026 L1	Comprehensive
WL: French	Vista Higher Learning	Chemins 2026 L1A	Comprehensive
WL: French	Vista Higher Learning	Chemins 2026 L1B	Comprehensive
WL: French	Vista Higher Learning	Chemins 2026 L2	Comprehensive
WL: French	Vista Higher Learning	Chemins 2026 L3	Comprehensive
WL: French	Vista Higher Learning	Chemins 2026 L4	Comprehensive
WL: French	Vista Higher Learning	Daccord 2024 L1	Comprehensive
WL: French	Vista Higher Learning	Daccord 2024 L1A	Comprehensive

Content	Publisher	Title	Rating
WL: French	Vista Higher Learning	Daccord 2024 L1B	Comprehensive
WL: French	Vista Higher Learning	Daccord 2024 L2	Comprehensive
WL: French	Vista Higher Learning	Daccord 2024 L3	Comprehensive
WL: French	Vista Higher Learning	My Conversation Trainer - French 1 or 2	Component
WL: French	Wayside	EntreCultures French 1A	Comprehensive
WL: French	Wayside	EntreCultures French 1B	Comprehensive
WL: French	Wayside	EntreCultures French 1	Comprehensive
WL: French	Wayside	EntreCultures French 2	Comprehensive
WL: French	Wayside	EntreCultures French 3	Comprehensive
WL: French	Wayside	EntreCultures French 4	Comprehensive
WL: German	Klett World Languages	Das Reporterteam 1	Comprehensive
WL: German	Klett World Languages	Das Reporterteam 2	Comprehensive
WL: German	Carnegie	ID Deutsch So Aktuell 8e Level 1	Comprehensive
WL: German	Carnegie	ID Deutsch So Aktuell 8e Level 2	Comprehensive
WL: German	Carnegie	ID Deutsch So Aktuell 8e Level 3	Comprehensive
WL: German	Lingco	Lingco for German 1	Component
WL: German	Lingco	Lingco for German 2	Component
WL: German	Vista Higher Learning	Mosaik 2026 L1	Basic
WL: German	Vista Higher Learning	Mosaik 2026 L2	Basic

Content	Publisher	Title	Rating
WL: German	Vista Higher Learning	Mosaik 2026 L3	Basic
WL: German	Vista Higher Learning	Denk mal 4e	Comprehensive
WL: German	Wayside	InterKulturell German 1	Comprehensive
WL: German	Wayside	InterKulturell German 2	Comprehensive
WL: German	Wayside	InterKulturell German 3/4	Comprehensive
WL: Spanish	Klett World Languages	Reporteros 1	Comprehensive
WL: Spanish	Klett World Languages	Reporteros 2	Comprehensive
WL: Spanish	Klett World Languages	Reporteros 3	Comprehensive
WL: Spanish	Klett World Languages	Reporteros 4	Comprehensive
WL: Spanish	Klett World Languages	Generación AP	Comprehensive
WL: Spanish	Carnegie	ID ¡Qué chévere! 3e Level 1	Not recommended
WL: Spanish	Carnegie	ID ¡Qué chévere! 3e Level 2	Not recommended
WL: Spanish	Carnegie	ID ¡Qué chévere! 3e Level 3	Not recommended
WL: Spanish	Carnegie	ID ¡Qué chévere! 3e Level 4	Component
WL: Spanish	Lingco	Lingco for Spanish 1	Comprehensive
WL: Spanish	Lingco	Lingco for Spanish 2	Comprehensive
WL: Spanish	Lingco	Lingco for Spanish 3	Comprehensive
WL: Spanish	McGraw Hill	¡Así se dice! Level 1	Component
WL: Spanish	McGraw Hill	¡Así se dice! Level 2	Component

Content	Publisher	Title	Rating
WL: Spanish	McGraw Hill	¡Así se dice! Level 3	Component
WL: Spanish	McGraw Hill	¡Así se dice! Level 4	Component
WL: Spanish	Vista Higher Learning	Encuentros 2026 L1	Comprehensive
WL: Spanish	Vista Higher Learning	Encuentros 2026 L1A	Comprehensive
WL: Spanish	Vista Higher Learning	Encuentros 2026 L1B	Comprehensive
WL: Spanish	Vista Higher Learning	Encuentros 2026 L2	Comprehensive
WL: Spanish	Vista Higher Learning	Encuentros 2026 L3	Comprehensive
WL: Spanish	Vista Higher Learning	Encuentros 2026 L4	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L1	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L1A	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L1B	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L2	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L3	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L4	Comprehensive
WL: Spanish	Vista Higher Learning	Senderos 2023 L5	Comprehensive
WL: Spanish	Wayside	EntreCulturas Spanish 1A	Basic
WL: Spanish	Wayside	EntreCulturas Spanish 1B	Comprehensive
WL: Spanish	Wayside	EntreCulturas Spanish 1	Comprehensive
WL: Spanish	Wayside	EntreCulturas Spanish 2	Comprehensive

Content	Publisher	Title	Rating
WL: Spanish	Wayside	EntreCulturas Spanish 3	Comprehensive
WL: Spanish	Wayside	EntreCulturas Spanish 4	Comprehensive
WL: Spanish	Vista Higher Learning	My Conversation Trainer - Spanish 1 or 2	Component
WL: Spanish K-1 Phonics	Vista Higher Learning	La Cartilla 2022 Spanish Phonics K Mis Primeras letras y sonidos	Component
WL: Spanish K-1 Phonics	Vista Higher Learning	La Cartilla Phonics 1: Silabas palabras	Component
WL: Spanish K-1 Phonics	Vista Higher Learning	Avanza + Boost Reading with Phonics, Writing, Oral	Component
WL: Spanish| Heritage Speakers	Vista Higher Learning	Galeria 2025 A	Basic
WL: Spanish| Heritage Speakers	Vista Higher Learning	Galeria 2025 B	Basic
WL: Spanish| Heritage Speakers	Vista Higher Learning	Galeria 2025 C	Basic
WL: Spanish| Heritage Speakers	Vista Higher Learning	Galeria 2025 1	Comprehensive
WL: Spanish| Heritage Speakers	Vista Higher Learning	Galeria 2025 2	Comprehensive

Recommendation	Definition
Comprehensive Program	A program which consistently meets the focus, coherence, depth, and rigor of the Idaho Content Standards with minimal or no need for instructional adaptations and/or supplemental materials. A comprehensive program provides effective content progressions within and between grade levels.
Basic Program	A program which meets the focus, coherence, depth, and rigor of the Idaho Content Standards at a substantial level with some need for supplemental material. A basic program provides content progressions within and between grade levels, though they may be uneven.
Component Program **CTE Pathway Supplemental**	A program designed and intended to be used to supplement a comprehensive or basic program. A Component Program will support and/or enhance the focus, coherence, depth, and rigor of a comprehensive or basic program.
Intervention Program	A program designed and intended to target and support students' specific needs.

CTE : reviewer may recommend a title scoring less than 65% to be identified as a Supplemental, meaning the content would supplement another pathway/course in the program even though not aligned to the standards for which it was reviewed. The reviewer must have provided written justification, and it must be approved by the CTE member of the Selection Committee

Selection Committee
Curricular Materials

COMMITTEE LISTING

Committee Member	Stakeholder Group	Region
Sara Bell	Executive Secretary Idaho State Department of Education	
Adrian San Miguel	Program Services Idaho Division of Career Technical Education	
Matthew McDaniel Term Expires: April 16, 2031	Idaho Higher Education Official College of Idaho	3
Kaywin Cottle Term Expires: April 16, 2031	Idaho Higher Education Official Idaho State University	5
Kylee Guthrie Term Expires: April 16, 2031	Idaho Public School Administrator Boundary County School District #101	1
Christine Steele Term Expires: April 16, 2031	Idaho Public School Administrator Middleton School District #134	3
Bernadette Edwards Term Expires: December 13, 2028	Local Board of Education Member Mountain View School District #244	2
Holly Allen Term Expires: April 16, 2031	Local Board of Education Member Madison School District #321	6
April Giauque Term Expires: April 16, 2031	Certified Idaho Classroom Teacher School for the Deaf and Blind #596	4
Robyn Hill Term Expires: April 16, 2031	Certified Idaho Classroom Teacher Nampa School District #131	3
Schenlly Cooper Term Expires: April 16, 2031	Certified Idaho Classroom Teacher Bonneville Joint School District #93	6
Stacey Jensen Term Expires: April 16, 2031	Parent Pocatello/Chubbuck School District #25	5

Committee Member	Stakeholder Group	Region
Lynette Leonard Term Expires: April 16, 2031	Parent Lake Pend Oreille School District #84	1
Taushina Wilson Term Expires: April 16, 2031	Parent Lapwai #341/Culdesac #342	2
Darlene Dyer Term Expires: April 16, 2031	Educational Professional (retired educator)	4
Laree Jansen Term Expires: April 16, 2031	Educational Professional (retired educator)	4
Summer Cook	Content and Curriculum Idaho State Department of Education	

For Questions Contact
Content & Curriculum – Curricular Materials
Idaho State Department of Education
650 W State Street, Boise, ID 83702
208 332 6800 | www.sde.idaho.gov

Regional Centers

Curricular Materials

The Regional Centers serve as public depositories for curricular materials currently under adoption in the state of Idaho. Publishing companies are required to provide samples of approved materials for public viewing.

REGIONAL CENTER LISTING

Location	Contact
Boise State University Albertson Library 1910 University Blvd Boise, ID 83725-1430	Marlena Hooyboer 208-426-2132 marlenahooyboer@boisestate.edu
Brigham Young University–Idaho David O McKay Library, MCK 306 525 South Center Street (0405) Rexburg, ID 83460-0405	Holly Green 208-496-9539 greenh@byui.edu
Idaho State University Instructional Materials Center College of Education 638 E. Dunn Street Pocatello, ID 83209-8059	Dr. Shu-Yuan Lin, Ed.D. 208-282-3185 linshu@isu.edu
Lewis Clark State College Curriculum Library 500 8th Avenue Lewiston, ID 83501	Jennifer Cromer 208-792-2829 jjcromer@lcsc.edu

Location	Contact
Northwest Nazarene University John Riley Library 623 S. University Boulevard Nampa, ID 83686-5897	Sheryll Hampton 208-467-8357 sheryllhampton@nnu.edu
University of Idaho Gary Strong Curriculum Center College of Education, Health, and Human Sciences University of Idaho 875 Perimeter Dr. Moscow, ID 83844-3089	Marco Seiferle-Valencia 208-885-2504 marcosv@uidaho.edu curriculumcenter@uidaho.edu **Request shipment boxes to be less than 50 lbs each

For Questions Contact

Content & Curriculum – Curricular Materials
Idaho State Department of Education
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(208) 332-6800 | www.sde.idaho.gov