

FISCAL YEAR 2023 REPORT

# Idaho Math Initiative



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CONTENT & CURRICULUM | MATH INITIATIVE

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## LEGISLATIVE INTENT

Idaho Statute 33-1627 provides funding and guidance for the Idaho Math Initiative, led by the State Department of Education (SDE). The intent of this funding is to promote the improvement of mathematical instruction and student achievement through one or more of the following activities:

- a) Provide high quality professional development for teachers that is intensive, ongoing and connected to classroom practice that focuses on student learning, aligns with school improvement priorities and goals, and builds strong working relationships among teachers;
- b) Provide statewide online mathematical instruction programs that furnish mathematical tutoring, remedial instruction and advanced instruction;
- c) Provide formative assessments to assist teachers in identifying student mathematical skill levels, areas of deficiency and areas of advancement.

Additionally, House Bill 623 provides funding for digital, adaptive mathematics instruction.

## FY21 ALLOCATIONS

Index Code 7006 Math Initiative = 1,817,321

Index Code 7206 HB 623 = 1,200,000

## MATH INITIATIVE STRATEGIC PLAN 2021-2022

The Math Initiative Strategic Plan was written in 2020 and updated in 2021 to guide the future work of the Idaho Math Initiative. This strategic plan identifies goals specific to mathematics in alignment with the Superintendent of Public Instruction's Strategic Plan. The overarching mission of the Idaho Math Initiative is to support students to achieve in mathematics. The Math Initiative strategic plan outlines specific actions to support that mission. This report will summarize progress made on each area of this strategic plan. Appendix A shows revisions made to this strategic plan based on input through work completed in FY22 to guide work in FY23.

- SDE Goal 1: Ensure all Idaho children are reading on grade-level by third grade.
  - A. Develop tools for formative assessment that support mathematics academic language development in Grades K-3.
  - B. Develop workshops that help Grade K-3 teachers integrate math and literacy.

- C. Support development of resources for Multi-tiered System of Support for mathematics in collaboration with other departments at the SDE.
- SDE Goal 2: All Idaho students persevere in life and are ready for college and careers.
  - A. Publish an Idaho Mathematics Instructional Framework
  - B. Offer research-based professional development opportunities to support the teaching of core content aligned to Idaho Content Standards in Mathematics.
  - C. Create a centralized repository for teaching resources developed by the Regional Math Centers.
  - D. Develop examples of exemplary, research-based high school course progressions.
  - E. Provide targeted support and technical assistance for low performing schools.
  - F. Develop exemplary models of mastery- based education in mathematics in Idaho schools.
  - G. Provide professional development that educates mathematics teachers on how to integrated computer science into mathematics courses.
- SDE Goal 3: Collaborate with all education stakeholders to support student progress and achievement.
  - A. Support the Stem Action Center I-Stem professional development program
  - B. Support Idaho Council Teachers of Mathematics
  - C. Co-Facilitate the Math Transitions Network with State Board of Education.
  - D. Facilitate collaborative conversations between stakeholders in each region.
  - E. Support math leadership networks
- SDE Goal 4: Idaho attracts and retains great teachers and leaders.
  - A. Support new mathematics teachers through ICTM and the Regional Math Centers.
  - B. Increase content options for the state Teaching for Mathematical Thinking (TMT) courses to develop teachers’ mathematical content knowledge that supports the implementation of the Idaho Content Standards in Mathematics.
  - C. Support teacher pipeline from pre-service to in-service.
  - D. Support mathematics leadership networks.

**Goal 1: Ensure all Idaho children are reading on grade-level by third grade.**

**Action 1A: Develop tools for formative assessment that support mathematics academic language development in Grades K-3.**

Performance Report: *The SDE Mathematics Coordinator and Idaho's Regional Math Specialists collected input from multiple school districts on what resources would be helpful for supporting formative assessment for math in Grades K-3 in alignment with the implementation of the Idaho Content Standards in mathematics adopted in March, 2022. Funding to the Regional Math Centers for FY2023 includes the establishment of a project team that has allocated time to partner with school districts to provide regional workshops and create open educational resources for K-3 teachers in Idaho that can be used for formative assessments aligned to the 2022 Idaho Content Standards in Mathematics. It is anticipated that these workshops will be held in Fall of 2023 for K-3 teachers and leaders.*

*Additionally, the SDE facilitated an extensive Request for Proposals (RFP) process to evaluate several different programs with the funding from House Bill 623. Imagine Math won that contract and is offering an online, adaptive assessment with lessons for intervention for Grades Pre-K through 2 and Grades 3 through Geometry. The contract also includes Imagine Math Facts, which is designed for Grades 1 through 5. Data on the use of these products will be reported for FY23.*

**Action 1B: Develop workshops that help Grade K-3 teachers integrate math and literacy.**

Performance Report: *The SDE hosted the second annual K-3 Literacy Summit in May of 2022. At the summit, attendees were provided a children's picture book that had a math story from the Association of the Education of Young Children. 300 educators participated in this event, which had a session on integrating language and math. In follow up to that event, 44 educators are participating in a follow up professional development course on integrating mathematics and literature in grades K through 3. Educators participating will be designing math lessons that integrate mathematics and literacy development. This course is being offered in Fall, 2022 so evaluation data will be reported in the FY23 Math Initiative Report.*

**Action 1C: Support development of resources for Multi-tiered System of Support for mathematics in collaboration with other departments at the SDE.**

Performance Report: *The SDE framework for designing a Multi-tiered System of Support (MTSS) is published on the SDE website here: <https://www.sde.idaho.gov/topics/mtss>. It was introduced to districts at the Fall Connecting Curriculum and Assessment conference that was offered in each region of the state in Fall, 2021. The SDE continues to provide training on this framework for districts who request it. The SDE Mathematics Coordinator has worked closely with the Regional Math Centers and Imagine Math to develop additional resources and*

*professional development on how to utilize the resources available through the SDE for MTSS and math intervention. Additional work on this will continue in FY23.*

*Imagine Math was provided to Idaho students as a supplemental resource for mathematics instruction for all Idaho students. It complements any local math curriculum and provides both assessments and content that teachers can use to meet the needs of individual learners. It also provides live certified teachers that students can access for help with homework. During the 2021-2022 school year 82 school districts and 413 schools chose to implement Imagine Math in grades PreK through 10 across the state of Idaho. 49,542 students benefited from the program with its adaptive, interactive lessons that teach math concepts at the individual student's skill level, helping them learn something new, or practice what they have learned in the classroom. Use numbers are comparable to the 2020-21 school year. Due to the fact that this contract was under review through a request for proposal process, districts were hesitant to begin using Imagine Math if the contract was not going to continue. Therefore, very few new users were added during this school year.*

*During the 2021-22 school year, the highest use of the program was in grades 1 through 4, which is a shift from the previous school year where highest use was in grades 3 through 6. Students were also able to access a hint or a tutorial on any problems they were struggling with 110,099 times in the school year. Students completed all three benchmarks, providing impressive data across the school year. The average minutes on the program was 298 for each student across the state. The average number of lessons completed across the state was 12 per student, with a total of 593,062 lessons completed. Students who completed 20 or more lessons in Imagine Math had an average increase of 77 on their quantile measure. A preliminary analysis of data from districts with high use indicates that students who used Imagine Math and/or Imagine Math Facts three or more days a week had higher ISAT Spring 2021 ISAT scores in mathematics than students who did not. This preliminary finding will be researched more during FY23 with a larger sample size.*

*Imagine Math provided 80 professional development sessions to 495 educators across the state. The provided customized professional development for 23 districts. Professional development is provided both in person and virtual depending upon district needs and requests.*

*Through a rigorous Request for Proposal process (RFP), Imagine Math competed for the award of contract for the next five school years. The SDE Mathematics Coordinator will continue to*

*work with the company to expand support and professional development for district utilizing Imagine Math as a part of their MTSS processes.*

## **Goal 2: All Idaho students persevere in life and are ready for college and careers.**

### **Action 2A: Publish an Idaho Mathematics Instructional Framework**

*Performance Report: The SDE worked with the University of Idaho RMC to publish an Idaho Mathematics Instructional Framework to support the implementation of the 2022 Idaho Content Standards, adopted in March, 2022. This framework is posted on the SDE website here: <https://www.sde.idaho.gov/academic/math>*

*The framework identifies seven student-centered teaching practices for teaching mathematics that are supported by educational research. The seven practices are as follows:*

- Clearly communicate mathematics learning goals to students.*
- Engage students in high-level thinking through challenging mathematical tasks.*
- Support students in connecting mathematical representations.*
- Facilitate meaningful discourse about mathematics among students.*
- Help students demonstrate procedural fluency built upon conceptual understanding.*
- Encourage student effort and perseverance in learning.*
- Use evidence of student mathematical thinking to guide instruction.*

*The publication of this framework has created a common state-wide vision and vocabulary to engage stakeholders in conversations about high-quality mathematics instruction. This framework will be referenced in in the Teaching Mathematical Thinking course and all professional development in mathematics offered by the SDE, the Regional Math Centers as well as the Idaho Council Teachers of Mathematics. Because this action item was completed, Action 2A in this strategic plan will be reworded to say “Utilize the Idaho Mathematics Instructional Framework in all SDE sponsored professional development in mathematics.”*

### **Action 2B: Offer research-based professional development opportunities to support the teaching of core content aligned to Idaho Content Standards in Mathematics.**

*Performance Report: The State Department of Education and the four Idaho Regional Math Centers (IRMC) provided a variety of professional development opportunities supporting the teaching of the Idaho Content Standards in Mathematics during the 2021-2022 school year in spite of limitations on gathering in person, travel restrictions and substitute shortages throughout the state. Professional development activities included 18 sections of the Teaching Mathematical Thinking (TMT) course, which is taught by Regional Mathematics Specialists (RMS) and offered as face-to-face, hybrid or fully virtual. RMS also provided 2,226 hours of*

service in school-based work where they provided job-embedded, customized schoolwide math support in alignment with the school's improvement plan. Eight RMS worked with 68 school districts and 152 schools in collaboration with the Idaho Building Capacity program. In addition, RMS provided workshops for 58 high school mathematics teachers in data science and algebra in alignment with the Idaho Math Transitions project. 135 teachers participated in mathematics leadership development workshops taught by RMS. In addition, the SDE partnered with the Idaho Council Teacher of Mathematics to offer webinars and statewide virtual book studies on math instruction. 334 teachers earned professional development credit for participation in these book studies.

**Action 2C: Create a centralized repository for teaching resources developed by the Regional Math Centers.**

Performance Report: *The RMC websites, owned and managed by each university, have an abundance of math-related resources for teachers. The RMC websites are linked at <https://www.sde.idaho.gov/academic/math>. The Content and Curriculum Department has begun using Canvas for all professional development courses. When teachers take a professional development course, they then have access to all of the resources from the course indefinitely. After additional conversations and problem solving, the SDE staff has determined that the most efficient way to make resources accessible to Idaho mathematics educators is to capitalize on the already existing SDE website. The SDE Math Coordinator continues to work with the Regional Math Centers and other partners to create, post and connect resources on the SDE mathematics website that provide guidance and resources that support the implementation of the Idaho Content Standards in mathematics. Moving forward, this action item will be reworded as "Increase the resources for mathematics teachers and leaders available through the SDE mathematics webpage."*

**Action 2D: Develop examples of exemplary, research-based high school course progressions.**

Performance Report: *The Math Transitions Steering Committee is a group of mathematics educators guiding improvement in mathematics education in Idaho. They are focusing specifically on supporting a successful transition in mathematics education from the junior year of high school to the junior year of college. The committee is comprised of a mathematics professor from each Idaho public college and university, three high school mathematics teachers, one district superintendent, one principal and one curriculum director. This group represents all regions of the state. The SDE Mathematics Coordinator and the Chief Academic Officer from the State Board of Education co-facilitate the work of this group. During the 2020-2021 school year, the steering committee met monthly to accomplish the following:*

- *Added the Associate Director of the Division of Career and Technical Education (CTE) to the Steering Committee to connect the work in mathematics to Idaho's CTE programs.*
- *Eight Steering Committee members attended a national forum on High School to College Mathematics Pathways sponsored by the College Board for Mathematical Science.*
- *Published a messaging infographic to create a common statewide vision of exemplary high school mathematics programs posted at <https://www.sde.idaho.gov/academic/math>.*
- *Analyzed the 2022 Idaho Content Standards in Mathematics and aligned them to the three common general education mathematics courses taught by Idaho's public colleges and universities. A resource document for high schools will be completed during the 2022-2023 school year.*
- *Created a proposal for sharing and using relevant data from Idaho high schools with college mathematics professors for the purpose of accurate course placement at the college level. Initial conversations with multiple SDE and SBOE departments have been started on how this can be developed.*
- *Offered two workshops for high school educators which included information on exemplary course sequences. The courses focused on differentiation strategies for Algebra 1 and how to integrate data science into high school mathematics courses. Fifty high school educators attended these workshops.*
- *Created videos from Idaho industry partners on how they use mathematics in their jobs.*
- *Requested additional funding to add a high school Regional Math Specialist for each region through the SDE FY24 Budget request.*
- *Hosted a webinar in partnership with ICTM with a renowned national level leader, who is one of the authors of the book *Invigorating High School Math* (Heinemann, 2021).*
- *Secured funding from the non-profit organization, XQ, to develop a math badging assessment system for content usually taught in Algebra 2. These assessments will allow schools to move toward self-paced learning and integration with CTE courses for students to demonstrate mastery of what is typically Algebra 2 content. Funding from XQ is providing a half-time FTE for a Regional Math Specialist to lead the project as well as funding for schools to attend professional development and provide work time for teachers to pilot the use of the badge assessments. The CTE Division will assist the SDE to create a tracking system in Skill Stack for the Math Badges.*
- *Established a project team through the RMCs who are developing resources, providing professional development and supporting high schools through site visits. With this*

*support in place, we will continue to develop multiple examples of exemplary high school mathematics programs.*

**Action 2E. Provide targeted support and technical assistance for low performing schools.**

*Performance Report: During the 2020-2022 school year, seven Regional Math Specialists (RMS) spent 70% of their workload and one spent 50% of their workload providing Schoolwide Mathematics Support at the school level to schools in their regions. RMS worked closely with Idaho Capacity Builders (IBC) in their region to identify schools in need of specialized content support to implement their school improvement plans. Additionally, RMS reached out to other schools whose combined socio-economic status and ISAT achievement scores indicated that they may need support specifically in mathematics. Through collaboration with IBC and individual outreach efforts, RMS collectively worked with 152 schools in 68 school districts. They provided at least 2,226 hours of school-based professional development in alignment with school improvement plans. Additionally, the RMS team developed a handbook and process to guide a needs assessment and planning with a school. They attended professional development and collaborated, created resources and developed data collection tools that will ensure statewide consistency for this program and the ability to evaluate the program from a statewide perspective. This team will continue to collaborate throughout future school years and add to existing resources.*

**Action 2F: Develop exemplary models of mastery- based education in mathematics in Idaho schools.**

*Performance Report: During the 2021-2022 school year, the SDE engaged in conversations with XQ Institute, a non-profit organization dedicated to rethinking the high school experience. Those conversations led to Idaho being one of four states, along with Illinois, Rhode Island and Kentucky, chosen by XQ to pilot the use of Math Badges designed for high school mathematics to implement a mastery-based system of assessment in mathematics. XQ is providing funding for the creation of the Math Badge assessments in addition to a half-time Regional Math Specialist to serve as project lead. They are also providing funding to cover the costs for eight school districts to receive training and create time for school teams to plan together. Schools participating in this pilot will explore the use of the badges during the 2022-23 school year and provide feedback on them prior to implementing them fully in 2023-24 school year. The SDE is working with CTE to set up a tracking system in Skill Stack software. This project will allow CTE programs to integrate CTE course content with mathematics assessments and provide an assessment system for awarding mathematics course credit. The badges will be aligned to the three common general education mathematics courses available through Idaho's colleges and*

universities. We hope to have the badges available for statewide implementation in 2024-25 school year. During the 2022-23 school year, four RMS have time allocated for this project to support schools in their region who are participating in this pilot project.

### Goal 3: Collaborate with all education stakeholders to support student progress and achievement.

#### **Action 3A: Support the Stem Action Center I-Stem professional development program.**

Performance Report: *The SDE Mathematics Coordinator collaborates regularly with staff at the Idaho Stem Action Center and engages as a member and leader of the Stem Ecosystem. This involvement and collaboration provide a network of support for STEM Education both in school and outside of school. The I-Stem professional development program that occurs in June of each year in each region has a positive reputation among teachers for engaging, meaningful and high-quality professional development. The SDE Mathematics Coordinator will continue to assist the Stem Action Center in recruiting presenters and supporting their development of content for math sessions offered at the I-Stem events. In 2022, 235 educators participated in I-Stem. While no funds from the Math Initiative support I-Stem, this project is noted in this report to demonstrate how collaboration between SDE and Stem Action Center supports the Math Initiative strategic plan.*

#### **Action 3B: Support Idaho Council Teachers of Mathematics**

Performance Report: *The SDE Mathematics Coordinator serves on the Board of Directors for the Idaho Council Teachers of Mathematics (ICTM). During the 2021-2022 school year, the Board of Directors met bi-monthly to implement the ICTM Strategic Plan, which complements the Math Initiative Strategic Plan (see Appendix B). ICTM continues to maintain a complete, engaged Board of Directors that represents mathematics educators and colleges of education from all over the state. ICTM membership had 80 active members in August, 2022, which is an increase from 62 in August 2020 but a decrease from 103 members in August 2021. ICTM also supported BYU-Idaho in the establishment of the first pre-service student affiliate organization and hopes to continue building student affiliate groups at each university that has a teacher preparation program. These student affiliates will support the pre-service to in-service transition for new mathematics educators in Idaho. ICTM Membership has increased due to a strong partnership between ICTM and SDE. We jointly sponsored three virtual webinars on mathematics topics of interest during the 2021-2022 school year. 85 mathematics educators attended at least one of these webinars. Moving forward, the SDE will partner with ICTM to provide a statewide virtual book study as a follow-up to each webinar.*

*In August 2022, ICTM partnered with Idaho Science Teachers Association (ISTA) to host a Soaring with Stem Conference at Idaho State University. Sixty-eight educators and fourteen vendors participated in this conference, which included a variety of keynote speakers, break-out sessions and field trips to STEM related businesses in Regions 5 and 6.*

**Action 3C: Co-Facilitate the Math Transitions Network**

*Performance Report: See performance report on Action 2D*

**Action 3D: Facilitate collaborative conversations between stakeholders in each region.**

*Performance Report: The SDE Mathematics Coordinator and the staff at Idaho’s Regional Math Centers are frequently involved in conversations related to mathematics education with a variety of stakeholders. The Stem Ecosystem is the primary structure used to facilitate conversations with industry partners and other stakeholders about mathematics education. The SDE Mathematics Coordinator attended the in-person annual Stem Ecosystem Convening and participated in a variety of structured conversations about mathematics issues and resources with parents, industry partners, college and university faculty, and Idaho non-profits. The Regional Mathematics Center staff frequently meet with district superintendents and mathematics leaders in their regions. The Idaho Math Transitions Steering Committee (see report from Action 3C) supports collaboration with higher education mathematics faculty and the Division of Career and Technical Education. Some progress was made to increase communication between the SDE Mathematics Coordinator, RMCs and College of Education Math Education faculty with a goal of continuing to improve communication in FY23. Four virtual webinars on the 2022 Idaho Content Standards also provided a venue for conversations about the implementation of the new mathematics standards for a variety of stakeholders.*

**Action 3E: Support mathematics leadership networks**

*Performance Report: The Regional Math Centers supported mathematics leadership development for 135 practicing teachers and/or instructional coaches in FY22 in two different programs. The purpose of these programs was to equip teacher leaders to support mathematics instruction in their local schools and districts. During the fiscal year 2022, the leaders of these programs worked collaboratively to create consistent content, evaluation tools and branding for a statewide program that the SDE and RMCs are calling the Mathematics Taking Action Collaborative (MathTAC). This opportunity is a three-year mathematics leadership development program that will be available to all teachers in the state through an application process. It will have limited enrollment each year to ensure an effective instructor to teacher ratio. Sixty-three teachers were accepted into the program for*

*the 2022 starting cohort. The Presidential Award for Excellence in Mathematics Teaching (PAEMST) is another program that creates a cadre of mathematics teacher leaders. This program is supported through the SDE and ICTM.*

## Goal 4: Idaho attracts and retains great teachers and leaders.

### **Action 4A: Support new mathematics teachers through ICTM and the Regional Math Centers.**

*Performance Report: The SDE developed a new program during the 2021-22 school year called Idaho Mentor Teachers. This program is being piloted in the 2022-23 School Year with math teachers. Forty experienced math teachers were trained on how to provide content focused instructional coaching in mathematics. These teachers will now be paired with one or two new math teachers and provided with technology to allow them to mentor the new teacher virtually. The new teachers can record and upload lessons, and the mentor can watch and provide feedback on the lessons. Additionally, the SDE Math Coordinator and Content and Curriculum Director met with the Idaho Association of Colleges of Teacher Education (IACTE) and brainstormed ways to connect the content of SDE mathematics professional development with pre-service math methods courses. Each Idaho teacher education program has provided a math content person who will collaborate with the SDE Mathematics Coordinator on aligning preservice to in-service courses and recruiting. ICTM successfully launched its first student affiliate group at BYU-Idaho and hopes to support starting one on each college campus to get pre-service teachers involved with the Idaho mathematic educator community before they graduate.*

### **Action 4B: Increase content options for the state Teaching for Mathematical Thinking (TMT) courses to develop teachers' mathematical content knowledge that supports the implementation of the Idaho Content Standards in Mathematics.**

*Performance Report: The Regional Math Centers (RMC) collectively provided 18 sections of the state-required Teaching Mathematical Thinking. This course is a certification requirement for teachers of mathematics moving into the state and those on alternate route certification paths. The RMCs now offer this course each school year with fully virtual, hybrid or in-person delivery options. The University of Idaho is providing facilitation to create a state-wide schedule for each school year that ensures that a fully virtual option is offered each semester of the school year and that everyone who needs the course has access to it. RMC staff had two in-person work days and additional virtual meetings where RMC staff worked collaboratively to clarify essential content, designate grade bands and develop uniform instructional materials. The purpose of this work was to ensure consistency with course content regardless of delivery mode or location. Moving forward, these and other standardized resources will be available through the State*

*Department of Education Canvas platform for future TMT course instructors. University of Idaho Regional Mathematics Center personnel worked with other Regional Mathematics Center Directors and Specialists to provide training opportunities for and supervision of new course instructors. For example, an experienced instructor was hired to train and provide ongoing support to newly hired specialists in Regions One and Two during the contract period. Efforts were also coordinated for newer Regional Mathematics Specialists to observe and co-teach with more experienced Regional Mathematics Specialists. For example, the Regional Mathematics Specialist in Region Two co-taught the K-2 TMT course alongside a former and highly experienced Regional Mathematics Specialist in Region One. Throughout the state, apprentice opportunities were provided for new instructors to learn from those more experienced. In addition to physical presence, Regional Mathematics Specialists across the state were encouraged to meet with one another virtually for support with learning to teach TMT.*

*University of Idaho Regional Mathematics Center staff provided access to an online exit survey for all Teaching Mathematical Thinking instructors. Data was collected from 248 participants, representing 38.9% of the total number of individuals attending courses across the state. The course evaluation data is downloaded and delivered to each individual course instructor in timely response to the end of the course. Efforts to move the evaluation online and instruction on the process should result in increased participation percentages in coming years.*

### **Key Findings & Implications**

- *Teachers generally agreed that they better understood an array of pedagogical and content knowledge topics as a result of taking the Teaching Mathematical Thinking course.*
- *The broad support for a variety of delivery methods and current duration and spacing format suggests a continued need for interactive, synchronous components in all formats of the Teaching Mathematical Thinking course.*
- *Teaching Mathematical Thinking instructors are generally rated as knowledgeable, respectful, and as addressing participants' concerns promptly.*
- *Results strongly suggest a need for additional RMC offerings to be available to teachers across Idaho. Most respondents were interested in follow-up professional learning through Regional Mathematics Centers. Professional development topics in which most respondents were interested should be implemented at regional and local levels.*

*Future plans for this project include the development of one credit courses called Teaching Mathematical Thinking Level 2. These follow-up courses will focus on instructional strategies for a specific content domain in the Idaho Content Standards for Mathematics.*

### **Action 4C: Support teacher pipeline from pre-service to in-service.**

*Performance Report: The SDE Math Coordinator serves on the Board of Directors for the Idaho Council of Teachers of Mathematics (ICTM). ICTM has put collaborating with pre-service teacher educators to connect with pre-service elementary and secondary mathematics teachers as a focus of their strategic plan. The SDE will partner with ICTM to establish student*

*ICTM affiliates in Idaho's colleges and universities that have teacher education programs. Additionally, the Content and Curriculum Director and the SDE Mathematics Coordinator met with the Idaho Association of Colleges of Teacher Education (IACTE) and reviewed the work of the Idaho Math Initiative. Each college and university with a teacher education program in Idaho provided the SDE with a contact who will serve as a liaison between the SDE Mathematics Coordinator and their college or university. With this list of contacts established, higher education faculty who teach math education courses will receive information and be invited to mathematics professional development events and other opportunities such as serving on project working groups. The SDE Mathematics Coordinator and the Regional Math Center Directors hope to host a bi-annual virtual meeting to continue to improve communication and sharing of resources between pre-service and in-service mathematics educators.*

**Action 4D: Support mathematics leadership networks.**

Performance Report: *See report under Action 3E*

## **SUMMARY OF CONTRACTED SERVICES**

This section shows a summary of contracts awarded by the SDE under the legislative intent of the Idaho Mathematics Initiative.

### **Regional Math Centers: *Project Cost = \$1,487,977***

The Idaho Regional Math Centers (IRMC) provide high-quality professional development and school-based support in mathematics instruction for Idaho's teachers and leaders in alignment with part (a) of Idaho Statute 33-1627.

The IRMC's are housed within the four-year state colleges and universities in each region of the state. The State Department of Education has collaborative, positive partnerships with University of Idaho, Boise State University, Idaho State University and Lewis Clark State College. There are several advantages to this model of support:

- **Influence** - IRMCs have deep, long-standing relationships with stakeholders and credibility with teachers and district administrators
- **Expertise** -IRMC staff have experience, credentials, and local knowledge to design and deliver professional development at the highest quality across a variety of contexts
- **Capacity** - Universities provide space, facilities, equipment, and administrative capacity for events, registration, PD credits, accounting

- **Mission** - Universities are tasked by the State as centers for educational innovation, training, and professional development
- **Adaptability** - the IRMC model provides for annual and ongoing opportunities to adapt offerings to SDE goals
- **Multiplier effects** - University faculty conduct research, leverage IRMCs for large federal grants (at least \$10 million so far) that serve local teachers, allowing for many more teachers and students to be served
- **Increased Workload Capacity** - directors (and other faculty and staff) allocate their scholarship and service time to IRMC activities
- **Coordination** - programs are specific to region needs, but similar aspects of work are consistent across state; we support the teacher pipeline as prospective teachers transition into teaching positions
- **Research** - scholarly output demonstrates effectiveness of state-funded programs and raises the national reputation of math education in Idaho
- **Staff Recruitment** - highly qualified teacher leaders are drawn to University positions, often taking reduced pay in exchange for benefits (e.g., PERSI status, reduced tuition, health)

**Table 1: IRMC Contracts FY22**

Contractor	Contract #	FY 2021 Amount
University of Idaho	22-3503	\$356,223
Lewis Clark State College	22-3500	\$220,301
Boise State University	22-3501	\$537,430
Idaho State University	22-3502	\$374,023
Total:		\$1,487,977

### Math Transitions Network: *Project Cost = \$9,820*

The SDE contracted with the Regional Math Centers, Idaho high school master mathematics teachers and college professors to provide the Data Science and Algebra for All professional development courses. Table 2 shows the contract amounts related to Math Transitions professional development courses that were not embedded within the Regional Math Center contracts.

**Table 2: Math Transitions Contracts FY22**

Contractor	Contract #	FY 2021 Amount
Ann Abbott	22-3552	\$2,130
Susan Aydelotte	22-3554	\$2,130
Levi Jaynes	22-3555	\$1,000
Jennie McClain	22-3556	\$1,930
Jerod Morehouse	22-3557	\$2,130
Steve Leinwand	22-3558	\$500

**SDE Virtual Book Studies: *Project Cost = \$68,500***

The SDE contracted with practicing teachers, consultants and Regional Math Specialists to provide four virtual book studies.

**Table 3: Virtual Book Studies Contracts FY22**

Contractor	Contract #	FY 2021 Amount
Jonathan L Brendefur	22-3551	4,000
Veronica Blackham	22-3552	4,000
Keith Crone	22-3559	2,500
New Perspectives Learning (two book studies, included costs of books)	22-3550	58,000
Grading Support Marci Reddish	22-3560	\$2,680
Grading Support – Michelle Rowley	22-3561	\$2,460
Grading Support – Daniel Thomander	22-3562	\$1,000
Grading Support – Josh Greenwalt	22-3563	\$1,000
Grading Support – Katherine Prummer	22-3564	\$1,000

### Imagine Math: *Project Cost \$1,200,000*

The Imagine Math project is in alignment with part (b) of Idaho Statute 33-1627.

Funding for the project appropriated in House Bill 623 covers a statewide license for an online supplemental mathematics instructional program to support students in Grade 3 through high school Geometry content.

The project is managed by the ISDE Mathematics Coordinator, supported by the IRMC staff and integrated into the work of the Idaho Mathematics Initiative. See Action 1C for performance data on Imagine Math.

**Table 4: Imagine Learning Contract FY21**

Contractor	Contract #	FY 2021 Amount
Imagine Learning		\$1,200,000

### Standards Implementation Support: *Project Cost = \$30,000*

The SDE hired contractors to create documents for standards implementation support and for printing of standards booklets used for professional development.

**Table 5: Standards Implementation Contracts FY22**

Contractor	Contract #	FY 2021 Amount
Alexander Clark Printing		20,000
Development Mathematical Thinking Institute		10,000

### K-2 Math Screener by Curriculum Associates: *Project Cost = \$7,056*

The K-2 Math Screener provided a high-quality formative assessment tool for mathematics for students in the primary grades in alignment with part (c) of Idaho Statute 33-1627. This program was ended in 2021, but some residual costs were paid in FY22.

**Table 5: Curriculum Associates Contract FY21**

Contractor	Contract #	FY 2021 Amount
Curriculum Associates	18-3562	7,056

## APPENDIX A: REVISIONS TO MATH INITIATIVE STRATEGIC PLAN

- SDE Goal 1: Ensure all Idaho children are reading on grade-level by third grade.
  - D. Develop tools for formative assessment that support mathematics academic language development in Grades K-3.
  - E. Develop workshops that help Grade K-3 teachers integrate math and literacy.
  - F. Support development of resources for Multi-tiered System of Support for mathematics in collaboration with other departments at the SDE.
- SDE Goal 2: All Idaho students persevere in life and are ready for college and careers.
  - H. Utilize the Idaho Mathematics Instructional Framework in all SDE sponsored professional development in mathematics.”
  - I. **Utilize ~~Publish on~~ the Idaho Mathematics Instructional Framework in all SDE sponsored professional development in mathematics.**
  - J. Offer research-based professional development opportunities to support the teaching of core content aligned to Idaho Content Standards in Mathematics.
  - K. **Increase the resources for mathematics teachers and leaders available through the SDE mathematics webpage. ~~Create a centralized repository for teaching resources developed by the Regional Math Centers.~~**
  - L. Develop examples of exemplary, research-based high school course progressions.
  - M. Provide targeted support and technical assistance for low performing schools.
  - N. Develop exemplary models of mastery- based education in mathematics in Idaho schools.
  - O. Provide professional development that educates mathematics teachers on how to integrated computer science into mathematics courses.
- SDE Goal 3: Collaborate with all education stakeholders to support student progress and achievement.
  - F. Support the Stem Action Center I-Stem professional development program
  - G. Support Idaho Council Teachers of Mathematics
  - H. Co-Facilitate the Math Transitions Network with State Board of Education.
  - I. Facilitate collaborative conversations between stakeholders in each region.
  - J. Support math leadership networks
- SDE Goal 4: Idaho attracts and retains great teachers and leaders.
  - E. Support new mathematics teachers through ICTM and the Regional Math Centers.

- F. Increase content options for the state Teaching for Mathematical Thinking (TMT) courses to develop teachers' mathematical content knowledge that supports the implementation of the Idaho Content Standards in Mathematics.
- G. Support teacher pipeline from pre-service to in-service.
- H. Support mathematics leadership networks.

## **APPENDIX B: 2021 – 2025 IDAHO TEACHERS OF MATHEMATICS STRATEGIC PLAN**

The Idaho Council of Teachers of Mathematics (ICTM) 5-Year Strategic Plan identifies focus goals specific to the leadership role of ICTM.

Our mission is to be a voice for quality mathematics education in Idaho, empowering teachers and promoting student achievement.

Our goal as an organization is to provide educators with a forum to discuss mathematics and pedagogy.

Our efforts are to serve our members and to help them network with other educators throughout the state.

### **ICTM Goal 1: Continue to improve the network of and connections between Idaho mathematics educators.**

- Host an annual conference for members that features presenters from a wide range of professionals involved in mathematics education.
- Provide active webinars at least once a quarter which feature strategies for use in the classroom.
- Develop college affiliates at all 4-year colleges/universities in the state.
- Investigate options for an interactive platform that will allow members to ask/answer questions and connect with others.
- Increase ICTM social media presence to build name recognition and to advertise benefits of membership.

### **ICTM Goal 2: Foster a collaborative relationship with the SDE to promote high quality mathematics education & instruction in Idaho.**

- Support state department projects through ICTM board member participation on its committees and/or by contributing to professional development efforts.
- Co-plan events with SDE to promote networking among mathematics teachers and to increase membership in ICTM.
- SDE Math Coordinator will maintain active participation in ICTM.
- Promote the PAEMST program by tapping current and previous awardees for leadership.
- Support the SDE in educating the legislature about topics related to mathematics education as needed.
- Collaborate with the SDE Idaho Regional Math Centers (IRMC) and leverage their connections to strengthen mathematics instruction and professional networking across the state.

**ICTM Goal 3: Promote connections between mathematics educators, families, community businesses, and other groups invested in the mathematics learning of Idaho’s students.**

- Create resources and professional development for teachers to host classroom-based family math sessions.
- Host events to allow parents and local businesses to discuss challenges related to mathematics education in Idaho and brainstorm potential strategies to address them.
- Support development of summer workshops that include participant visits to Idaho businesses and which foster teacher learning about the specific mathematics skills required for successful employment in Idaho businesses.