

2021 REPORT

Idaho Math Initiative



IDAHO STATE DEPARTMENT OF EDUCATION
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 Idaho State Department of Education (ISDE). 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 = 1,718,000 reduced 100, 000 from FY 20

Index Code 7206 HB 623 = 1,200,000

Additional projects funded through Index Code 7091 - Content and Curriculum

MATH INITIATIVE STRATEGIC PLAN 2020

The Math Initiative Strategic Plan was written in 2020 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 FY21 to guide work in FY22.

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

- A. Develop tools for formative assessment that support math vocabulary 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.
- 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
 - D. Facilitate collaborative conversations between stakeholders in each region.
 - E. Establish math leadership networks
- SDE Goal 4: Idaho attracts and retains great teachers and leaders.
 - A. Support new teachers through the Regional Math Centers
 - B. Increase availability of the state Teaching for Mathematical Thinking (TMT) course.
 - C. Clarify outcomes of TMT course and processes for statewide calibration of content
 - D. Clarify pre-service and new to state mathematics competencies aligned to TMT course
 - E. Increase opportunities for mathematics certified teachers to add a computer science endorsement to their credential.
 - F. Support teacher pipeline from pre-service to in-service
 - G. Establish math 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 math vocabulary development in Grades K-3.

Performance Report: The SDE provided a formative mathematics assessment for students in grades K-2 called i-Ready Math, published by Curriculum Associates. Seventy-nine schools in 29 different school districts used this assessment. 16,210 students took the assessment. While users indicated positive feedback on this assessment, the amount of funding for the mathematics initiative does not provide sustainable funds for this assessment to be provided equitably for all districts in Idaho over time. Therefore, these funds were reallocated to support increasing staffing costs at the Regional Math Centers for FY21. Moving forward, the SDE will work with Regional Math Specialists to develop alternative formative assessments for students in the primary grades.

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

Performance Report: The State Department of Education hosted a virtual K-3 Literacy Summit in May of 2021. 481 teachers participated in this event, which had a session on integrating language and math. In follow up to that event, 69 K-3 educators participated in a follow up virtual book study on the book *How the Brain Learns Mathematics* David Souza. The book for the course was mailed to all teachers who participated in the professional development. 94% of the follow up course participants who completed the course evaluation strongly agreed that this course gave them a better understanding of how young children develop number sense. Qualitative Course evaluation comments included feedback such as: “We need more of them just like this one! Wonderful learning experience! I am excited and looking forward to teaching math next school year! Thank you to the team of professionals who put it together. It was a success.” Feedback from course participants indicated that this type of statewide virtual workshop was well-received and similar courses will be developed in the future. All course materials are available to course participants to replicate the book study in their own districts. Note that funds for i-Stem were paid through the SDE professional development budget, not the math initiative budget. This project is noted in this report to demonstrate how multiple funding sources can overlap to support the Math Initiative strategic plan. After discussions with teachers in the book study and Regional Math Specialists, the wording of Action 1A has been reworded to say mathematics academic language instead of math vocabulary to encompass multiple aspects of language development.

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

Performance Report: Several staff members at the State Department of Education worked collaboratively to develop a framework for implementing Multi-tiered Systems of Support (MTSS) in Idaho. This framework will provide common vocabulary and structure for all state department staff supporting districts designing school systems that intervene for students who are struggling. This framework will be used in all Math Initiative professional development projects in the future when appropriate. It will also provide an organizational structure for organizing resources for mathematics intervention available through the SDE website.

Additionally, the SDE Math Coordinator worked with Imagine Learning math specialists to develop resources and a workshop on Using Imagine Math in a Multi-tiered System of Support available to Idaho school districts using Imagine Math in the 2021-22 School Year.

Imagine Math is 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. During the 2020-2021 school year 84 districts and 422 schools chose to implement Imagine Math 3+ across the state of Idaho. 49,818 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. In 2019-2020, 37,543 students used the program. The highest use of the program was in grades 3 through 6. Students were able to access a live certified teacher for 1-on-1 tutoring services at the exact time they needed assistance. This resource was used 8,083 times throughout the school year. Students were also able to access a hint or a tutorial on any problems they were struggling with 128,290 times in the school year. 2,227 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. The SDE Assessment Department is currently analyzing achievement data and Imagine Math usage to determine whether use of Imagine Math correlated to higher achievement on the Idaho Standards for Achievement test in Spring, 2021.

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 Regional Math Specialists across the state collaborated and agreed that the instructional framework published in the 2014 document Principles to Actions:

Ensuring Mathematical Success for All by the National Council of Teachers of Mathematics is a research based instructional framework that they all use as the foundation of their work. Rather than creating a new framework, the SDE will continue to use this document as a foundational document to guide conversations about high-quality mathematics instruction in each region. A summary of this framework will be added to the SDE math webpage at <https://www.sde.idaho.gov/academic/math>.

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 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 2020-2021 school year in spite of limitations on gathering in person, travel restrictions and substitute shortages throughout the state. In total, at least 1281 educators participated in professional development courses provided by the Regional Math Centers. IRMC's supported 28 regional professional development courses or workshops and one regional conference. They supported 46 lesson study teams and 24 book studies. Additionally, the IRMC's provided professional development for at least 108 local mathematics teacher leaders and instructional coaches to build capacity within school districts for supporting the implementation of the Idaho Content Standards in Mathematics through high-quality instruction. Course evaluation data indicates that the professional development opportunities offered by the IRMC's is exemplary and valued by course participants. Research on professional development suggests that the most effective professional development includes job-embedded coaching and expert support, engages a school, grade or department in collective participation of teachers and spans over time with at least 20 hours of contact time (Darling Hammond et al, (2017), Desimone (2009). In alignment with this research, the SDE is redefining the scope of the work of the IRMC contracts to move away from general regional workshops and courses to targeted, school-based, job-embedded professional development, with priority given to low-achieving and high poverty schools. Regional Math Specialists will work closely with Idaho Capacity Builders, ELA instructional coaches, Science coaches and school leadership teams to customize professional development aligned to school improvement goals. In addition, the Regional Math Centers will continue to support the SDE by providing the state approved mathematics course Teaching Mathematical Thinking (TMT), facilitating the work of the Math Transitions Network and building capacity to support mathematics instruction in local math teacher leaders and instructional coaches.

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 at the SDE researched several options for a technology tool to house teaching resources for different groups of educators in a central location. The Learning Management System Canvas is being used for this purpose to align to the LMS that will be used by most of Idaho’s colleges and universities. The SDE Content and Curriculum Department has purchased a license and is undergoing training to learn how to best centralize mathematics teaching resources in the Canvas platform. Once a virtual organizational structure is created we will begin to organize teaching resources created by the RMC’s as well as other SDE resources in the SDE central location.

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 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 Steering Committee members to represent K-12 education interests from all educational regions.
- Clarified the charge in 2021 Update on the Idaho Math Transitions Network document
- Created a Project Plan for 3, 6, and 9 months
- Wrote and administered a survey for Idaho High Schools. Key findings from 77 of 260 high schools:
 - 67.6% of responding high schools are interested in moving toward offering more integrated, applied math courses for juniors and seniors aligned to college and career pathways.
 - 61% of responding high schools use a traditional Algebra 1 – Geometry – Algebra 2 course sequence for their high school math pathway
 - 76.6% of responding high schools are offering trigonometry and/or pre-calculus as an elective for juniors and seniors.

- 1.3% of responding high schools are offering a course in data science as a math elective for juniors and seniors
- 3.9% of responding high school are offering the dual credit course Math in the Modern Society as an elective for juniors and seniors.
- 75.3% of responding high schools have had no professional development on integrating computer science into math courses.
- 53.2% of responding high schools would be interested in participating in a long-term, intensive professional development project (3 to 5 years) focused on creating a research-based high school mathematics program.
- Studied high school math pathways work from other states- Ohio, Virginia, Utah, Oregon
- Clarified the vision and goals of the work
- Analyzed Idaho policies in mathematics related to high school and college mathematics and noted areas schools may need support. Did not identify a need for any policy changes at this time.
- Connected the Idaho Regional Math Centers (IRMC) to the work and added time and support for the work in the FY21 RMC contracts.
- Established connections with the Division of Career and Technical Education (CTE) and added a steering committee member from that division.
- Created a rough draft of a Guidance for Idaho High Schools document
- Explored Ohio’s mentoring program as a way of supporting high schools through a process of transforming their mathematics course pathways.
- Offered a one credit, virtual professional development course on Catalyzing Change in Idaho High School Math for high school educators and leaders that engaged 89 participants in readings and conversations. From these conversations and the course evaluations, we identified areas of needed support for Idaho high schools and planned two professional development courses for 2021-22 school year. Key points from course evaluation data include:
 - 94% of 54 responders strongly agreed or agreed that they gained a better understanding of the need to restructure high school mathematics programs from the course.
 - 94% of 54 responders strongly agreed or agreed that they enjoyed collaborating with teachers from across the state.
 - Eliminating tracking practices based on math ability and connecting math instruction to industry needs were identified as the two areas that high schools needed the most support for implementing.

- Qualitative data provided suggestions on how the MTN can support high schools in future work. Suggestions included:
 - Needs to be a statewide effort; classroom teachers cannot lead systemic change alone
 - Example units and curriculum using applied math projects
 - Data science courses curriculum and professional development
 - Cross walk Idaho Math Content Standard with CTE Standards
 - Professional development on strategies and intervention systems to eliminate ability tracking
 - More resources and information on connections between high school math and use in Idaho industries and careers.
 - Offer statewide math courses for small high schools that cannot provide a variety of courses for juniors and seniors
 - Build a collection of resources
 - Reduce the number of high school math standards to provide more focus and show examples of a variety of courses aligned to standards
 - Regional task groups
- Established a partnership with Idaho Council of Teachers of Mathematics (ICTM) to set up membership through them.
- Established a connection to the Stem Action Center through the Stem Ecosystem Career Pathway Exploration work group.

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

Performance Report: During the 2020-2021 school year, the SDE Executive Team engaged in conversations with SDE Department Directors, the Regional Math Center Directors, other university administrators and consultants who work with other states to consider the best ways to combine the work of the Idaho Building Capacity program, which supports low performing schools, with the work of the Regional Math Centers. The decision was made to maintain the Regional Math Center structure, but reframe the scope of the work in the contract from general regional professional development activities to provide targeted, professional development to identified schools. Educational research on professional development indicates that school-based, job embedded professional development that engages teachers in learning, sharing ideas and practices and collaborating over a long period of time is the most effective form of professional development. Regional Math Specialists will partner with an Idaho Capacity Builder to provide school-based support in partnership with the school’s principal, leadership team and in alignment with a school’s improvement plan.

This shift capitalizes on the strong relationships the RMCs have with school districts in their regions and their excellent work conducting professional development as well as their ability to develop deep content expertise in Regional Math Specialists. The Regional Math Centers do not have the staffing capacity to provide school-based, job embedded professional development to every school in their region. During the 2021-2022 school year, a project team of Regional Math Specialists from different regions will work collaboratively with the SDE Math Coordinator to develop a project handbook that will outline a systematic way to identify and support schools in need of targeted school support. This handbook will provide a structure for statewide implementation in the 2022-2023 school year.

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

Performance Report: The SDE Mastery Education Coordinator is supporting 40 Idaho schools implementing mastery-based education. Some teachers in those schools are specifically focusing on how mastery principles can work in a mathematics classroom. Multiple Idaho high schools have demonstrated promising practices specific to mathematics at the high school level. Future plans include learning from these schools and broadening the conversation through a virtual course that will bring secondary mathematics educators together to specifically discuss how mastery-based education can support and integrate into successful mathematics instruction. This course will be co-taught by the SDE Mastery Education Coordinator and the SDE Mathematics Coordinator.

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 assisted the Stem Action Center in recruiting presenters and supporting their development of content for seven math sessions offered virtually to all regions of the state in June, 2021. In total, 60 participants attended i-Stem sessions specifically focused on mathematics instruction. Note that funds for i-Stem were paid through the SDE professional development budget, not the math initiative budget. This project is noted in this report to demonstrate how multiple funding sources can overlap to support 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 2020-2021 school year, the Board of Directors developed an ICTM Strategic Plan, which complements the Math Initiative

Strategic Plan (see Appendix B). ICTM also recruited two regional representatives from each region and presently has a complete, engaged Board of Directors that meets virtually bimonthly. ICTM membership has increased from 62 to 103 members from August 2020 to August 2021. In August 2021, ICTM co-hosted the Virtual Superconference with Idaho Science Teachers Association, Idaho Council of Teachers of English and Idaho Association for the Gifted. 220 educators attended the conference, which included both a keynote speaker and 23 break-out sessions on mathematics instruction. Conference evaluation comments included the following:

- “I was very impressed with the quality and depth of the course offerings in the 2021 Idaho Super Conference. I truly appreciate all the hard work and dedication that went into producing such an outstanding conference. I also attended a virtual conference last week and though it was good, it could not even begin to compare with the offerings that were available at this one. My biggest problem was having to choose which sessions to attend as there were so many good choices.”
- “I absolutely loved this session! I have been to a few trainings the past ten years in RTI and have seen the growth of many students through it. However, I have never used the Imagine Math program and when I saw how this encompasses everything from the assessment piece, to using it to identify individual holes or strengths and fills those specific holes or to challenge individually and with support systems I was thrilled. I am going to use Imagine Math this year to help better meet the needs of my students. My plan is to have the students use it 3 times a week at 20 min. intervals and use the benchmark assessments and concept assessments to help each student set goals and grow.”
- “Thank you so much for offering this Super Conference 2021. I have learned so much and am so excited to implement what I’ve learned from the conference into my classroom!!”
- “Overall the conference was excellent. Along with learning new strategies and networking with other educators I found it to be just what I needed to inspire me for the beginning of a new school year!”

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 Content Coordinators and the staff at Idaho’s Regional Math Centers are frequently involved in conversations related to mathematics education with a variety of stakeholders. The Content and Curriculum department at the SDE work together to ensure that a content coordinator serves on each working group of the Stem Action Center

Ecosystem and communicate with each other. These working groups bring a variety of stakeholders together focused on the following four goals: Opportunities and Access, Communication and Public Awareness, Career Pathways and Exposure, and Educator Preparation, Training and Support. The Stem Ecosystem is the primary structure used to facilitate conversations with industry partners and other stakeholders about mathematics education. Additionally, the Regional Mathematics Center staff frequently meet with district superintendents and mathematics leaders in their regions. ICTM has planned to host mathematics-specific regional networking events that will be sponsored by Imagine Learning, but those plans have been postponed due to the pandemic. We hope to have those events in Spring of 2022 and engage regional stakeholders in conversations about mathematics education in Idaho. We will facilitate conversations around the following three questions:

- 1) What mathematical skills and competencies do students need for the Idaho work force in today's society?
- 2) How can we collectively support the implementation of the new Idaho Content Standards in Mathematics anticipated for 2022 adoption?
- 3) What types of professional development formats are helpful for teachers in today's virtual world?

Action 3E: Establish math leadership networks

Performance Report: Each Regional Math Center facilitated leadership development in their regions. Collectively, the Regional Math Centers supported at least 108 mathematics instructional coaches and teacher leaders who support mathematics instruction in their local schools and districts. During the fiscal year 2022, the leaders of these programs are working to create a consistent statewide program that capitalizes on what each region has learned from their innovative work with regional teacher leaders. Evaluation data from these programs suggests that building leadership capacity for mathematics in local districts has a high impact on school systems. Because these networks are operational in each region, this goal has been reworded to say “support” instead of “build” mathematics teacher leadership networks.

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

Action 4A: Support new teachers through the Regional Math Centers

Performance Report: *This goal was not addressed in the 2021 fiscal year.*

Action 4B: Increase availability of the state Teaching for Mathematical Thinking (TMT) course.

Performance Report: The pandemic impacted the number of in-person TMT courses the Regional Math Centers were able to host during the 2021 fiscal year. In 2020, the Regional

Math Centers taught 20 different sections of TMT. The majority of these courses were in person in the fall and early spring. In 2021, the Regional Math Centers taught 21 sections of TMT, collectively teaching 702 educators. Almost all courses were in a virtual format due to the pandemic. The pivot to online instruction for this course has provided the ability for the Regional Math Centers to continue offering TMT in a variety of delivery models to best meet the needs of Idaho's growing population. The Regional Math Centers are equipped to continue to offer TMT in person, in a hybrid format and fully online. The Regional Math Specialists developed common course materials that can be utilized by course instructors across the state to ensure course alignment in the variety of course formats. Moving forward, the Regional Math Centers will work collaboratively to plan a statewide schedule of courses that provides statewide access to online and hybrid courses each semester as well as an in-person course in each region at least once a year. We have also reworded the goal related to TMT to allow for the creation of additional TMT to develop teachers' mathematical content knowledge that supports the implementation of the Idaho Content Standards in Mathematics.

Action 4C: Clarify outcomes of TMT course and processes for statewide calibration of content.

Action 4D: Clarify pre-service and new to state mathematics competencies aligned to TMT course.

Performance Report for Actions 4C and 4D: The Regional Math Center staff worked with the SDE Math Coordinator to create a Frequently Asked Questions document about the state approved mathematics course. This document is posted on the SDE math webpage at <https://www.sde.idaho.gov/academic/math/files/faq/State-Approved-Mathematics-Course-FAQ.pdf>

This document publishes the outcomes for each grade band of TMT and the overall purpose of the course for teachers new to the state, administrators and pre-service teacher educators.

Action 4E: Increase opportunities for mathematics certified teachers to add a computer science endorsement to their credential.

Performance Report: Multiple meetings were held between SDE departments as well as with the Stem Action Center about this action. The 2021-2022 SDE Assignment Credential Manual posted on the SDE website at <https://www.sde.idaho.gov/cert-psc/cert> shows that a mathematics teacher can teach computer science without having a computer science endorsement. This goal will be reworded for future focus on providing professional development that equips high school mathematics teachers to teach Dual Credit computer science and integrate computer science principles into other high school math courses. This work will fall under the work of the Math Transitions Network and involve higher education

partners in program planning. This action will be reworded and moved to SDE Goal 2 for the FY22 Math Initiative Strategic Plan.

Action 4F: 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.

Action 4G: Establish math 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 = \$1,495,560*

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 FY21

Table 1 shows the contract amount for each IRMC for the 2020 Fiscal Year.

Contractor	Contract #	FY 2021 Amount
University of Idaho	21-3503	\$317,528
Lewis Clark State College	21-3500	\$207,778
Boise State University	21-3501	\$580,777
Idaho State University	22-3502	\$389,477
Total:		\$1,495,560

Math Transitions Network: *Project Cost = \$4,260*

The SDE contracted with both the Regional Math Centers and two Idaho high school master mathematics teachers to provide the Catalyzing Change in Idaho High School Math professional development course.

Table 2: Catalyzing Change Contracts FY21

Table 2 shows the contract amounts related to Math Transitions Network for the 2020 Fiscal Year.

Contractor	Contract #	FY 2021 Amount
Jerod Morehouse, Instructor	21-3507	\$2,130
Lanna Proctor, Instructor	21-3508	\$2,130

K-3 Literacy How the Brain Learns Mathematics *Project Cost = \$6,000*

The SDE contracted with both practicing and retired teachers to provide the How the Brain Learns Mathematics professional development course.

Table 3: How the Brain Learns Mathematics Contracts FY21

Table 3 shows the contract amounts related to How the Brain Learns Mathematics follow up book study.

Contractor	Contract #	FY 2021 Amount
Dr. Kelli Rich, Instructor	21-3961	\$3,000
Jana Estes, Grade level facilitator	21-3976	\$1,000
Ludee Vermaas, Grade level facilitator	21-3980	\$1,000
Angie Godfrey, Grade level facilitator	21-3974	\$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	21-3504	\$1,200,000

K-2 Math Screener by Curriculum Associates: *Project Cost = \$226,300*

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. See performance report under Action 1A.

Table 5: Curriculum Associates Contract FY21

Contractor	Contract #	FY 2021 Amount
Curriculum Associates	18-3562(3)&(4)	\$226,300

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.
 - G. Publish an Idaho Mathematics Instructional Framework
 - H. Offer research-based professional development opportunities to support the teaching of core content aligned to Idaho Content Standards in Mathematics.
 - I. Create a centralized repository for teaching resources developed by the Regional Math Centers.
 - J. Develop examples of exemplary, research-based high school course progressions.
 - K. Provide targeted support and technical assistance for low performing schools.
 - L. Develop exemplary models of mastery- based education in mathematics in Idaho schools.
 - M. 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.
 - H. Support new mathematics teachers through ICTM and the Regional Math Centers.
 - I. 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.
 - J. Support teacher pipeline from pre-service to in-service.
 - K. 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.