Mathematics Pathways Pilot

Budget Language

$553,000 of the general fund—state appropriation for fiscal year 2024 and $553,000 of the general fund—state appropriation for fiscal year 2025 are provided solely for the office of the superintendent of public instruction to develop and implement a mathematics pathways pilot to modernize algebra II. The office should use research and engage stakeholders to develop a revised and expanded course.

Proviso Purpose

Funding was provided to create a mathematics pilot aimed at modernizing Algebra 2 to make the course more meaningful to students in both content and application to their postsecondary goals and accessible to all students, including students who need additional support to be successful in achieving core credits. Additionally, the math pathways pilot seeks to apply what was learned from the development of Modern Algebra 2 toward the creation of additional math pathways for high school students, equally grounded in meaningful content and teaching practices that center inquiry and student perspectives.

The mathematics pathway pilot continues to engage in research and discussion with interest holders to support course frameworks and third/fourth credit math course offerings aligned to student interest. The pilot continues to support professional learning for mathematics educators across the state to increase access to teaching strategies that have benefited students in the pathways pilot.

Services Provided

Continued funding made it possible to:

- Provide professional learning focused on teaching practices that promote discussion, inquiry, and connect mathematics to students' lives and communities,
- Collaborate with stakeholders to develop additional math pathways,
- Contract Modern Algebra 2 educators to revise course materials, and
- Engage contractors to deliver statewide professional learning, all with the goal of improving student learning in high school mathematics and Algebra 2.

OSPI facilitated community of practice professional learning for current educators of the Modern Algebra 2 course to build and deepen skills and understanding of equity -focused, student-centered mathematics instruction. OSPI contracted national leaders in research-based mathematics statewide professional learning grounded in the tenants of the Modern Algebra 2 course for all K-12 mathematics educators. OSPI contracted national leaders in K-12 data science teaching and learning to provide professional learning

across the state to prepare educators to teach modernized mathematics pathways in parallel with the revised 2025 mathematics standards. All professional learning opportunities support educators to improve student success in mathematics.

Math pathway development included contracting Modern Algebra 2 educators to update and revise the pilot instructional materials. Revisions were necessary to increase ease of use for educators and students by 1) making the math content of the course more clear, 2) articulating educator formative assessment support, and 3) clarified ways to facilitate Universal Design for Learning throughout the course materials.

Pathway development continued in collaboration with the state board of community and technical colleges on research-based math placement approaches in community and technical colleges based on students' math pathways in high school, as well as collaboration on foundations of data science courses as students move from data science math options in high school into postsecondary education.

Math pathway development also included collaboration with national partners to recruit schools to pilot an additional math pathway, Integrated Statistics and Quantitative Reasoning, that students can take as an additional 3rd or 4th credit math pathway option.

Criteria for Receiving Services/Grants

Services were available to districts, schools, and educators seeking professional learning to improve the student experience in mathematics including but not limited to: Tribal Compact Schools, schools with high free and reduced lunch populations, rural and remote schools, students in alternative learning environments, students of color, multilingual learners, and students receiving special education services.

Beneficiaries in the 2024-25 School Year

Number of School Districts:	172
Number of Schools:	220
Number of Students:	36,622
Number of Educators:	182
Administrators, TOSA, Instructional Staff:	29

Are Federal or Other Funds Contingent on State Funding?

No.

State Funding History

Fiscal Year	Amount Funded	Actual Expenditures
2025	$553,000	$343,951
2024	$553,000	$441,742
2023	$553,000	$185,972

Number of Beneficiaries Per Fiscal Year (e.g. School Districts, Schools, Students, Educators, Other)

Fiscal Year	Number of Beneficiaries
2025	37,225
2024	981
2023	1,417

Programmatic Changes Since Inception (If Any)

The 2025 fiscal year included updates to the Modern Algebra 2 instructional materials that maintained the purpose of the course aligned with the proviso but increased access and ease of use for districts, teachers, and students. The pilot version of the Modern Algebra 2 course had a sequence of learning that educators stated did not transition well from one chapter to the next and that the course was not helpful to students seeking STEM professions. The course was revised to create a clear progression of learning that increased clarity in content, and reinforced Modern Algebra 2 as a course for all students by clearly indicating alignment toward STEM careers while still maintaining the accessibility and choice within the course for all students, including those seeking humanities interests in postsecondary education.

Revisions included a focus on formative assessment throughout the Modern Algebra 2 course materials as well as access to Universal Design for Learning (proactive lesson design options to remove barriers to student learning). Including formative assessment and Universal Design for Learning within the course materials were paired with statewide professional learning for all mathematics educators across grades to increase student engagement and success in mathematics. The professional learning associated with the Modern Algebra 2 course was extended to mathematics educators across the state focused on formative assessment with flexible mathematics instruction across all grades, mathematics strategies to support all students, and how to connect mathematics standards within any grade to data science opportunities in the students' communities.

Program(s) Evaluation or Major Findings

With a shifted focus toward supporting teachers of the Modern Algebra 2 course through revising the instructional materials, 18 educators across 8 additional districts have adopted the

Modern Algebra 2 course in the 2025-2026 school year. Feedback on the revised materials is positive, including the information within the course is clearer, easier to use, and it supports students better.

Specific feedback from different Modern Algebra 2 educators includes:

> *"With MA2 offered, we are able to expand the amount of math offerings at the high school. This supports our students who are seeking to advance in math. Additionally, through participation in MA2, our students were able to deepen their understanding of complex math concepts, which is essential for STEM-related careers."*
>
> *"Our students were able to make connections with math to real life. There was more engagement in mathematics based on the problems presented. We also saw*
>
> *some examples of students becoming more career and college ready as their math confidence increase."*
>
> *"MA2 ties in with our CTE programs"*

Specific feedback and findings from statewide professional learning opportunities:

> *"The content reminded me of the importance of allowing curiosity to drive learning and allow exploration to support the standards"*
>
> *"At the high school level, I have a lot of students that just want to copy one single way to do any problem without thinking their way through it… I can better provide opportunities for students to think and reason their way through problems."*
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> *"My students in the Algebra support class were amazed by the Gapminder questions and activated their curiosity on how important is to predict, compare, and use the data. With these kinds of examples my students realize how important is to have or create credible sources of data that will help in the decision-making process."*
>
> *"It surfaced a need to call attention to data science in all grade levels and gave me encouragement for bringing this to teachers in my region."*
>
> *"It gave me a lot of new resources to help reinforce math skills in my classroom. It also gave me more knowledge about what fluency is and how it develops in students so that I can deepen students understanding."*

"It really reminded me of what I need to be doing for kids and inspired me to be excited about math again. I added more strategies, and it was great to see the engagement on the kids' faces."

"I have been shifting my practice for a while now but made connections and deepened my understanding. I would like to take this learning and apply it to tier3 work in my building as a coach."

Major Challenges Faced by Program(s)

A pre-existing challenge faced by the program as shared by a school using Modern Algebra 2 materials was stated as, "One of the challenges we faced centered around foundational skills. Through the semester, we identified that some of our students were missing some foundational algebraic skills necessary to successfully complete our MA2 course. This led us to focus on creating interventions within the course to fill in those gaps." This challenge was addressed this fiscal year through contracting Modern Algebra 2 educators to revise the course to ensure Algebra 2 skills were present and robust and increase ease of use and accessibility within the materials.

Open approaches to sharing out about the Modern Algebra 2 course and statewide professional learning opportunities mitigated challenges of previous fiscal years related to programmatic growth. The Modern Algebra 2 course was advertised directly to educators and school staff this year resulting in an increase in 8 new school districts adopting the materials in 2025-2026 and 18 new educators participating in the upcoming community of practice for Modern Algebra 2.

Professional learning reached a significant number of educators across the state, though a challenge was finding a good time of year to ensure the greatest level of access to educators to maximize participation. Educators shared that they appreciated the access to professional learning on mathematics strategies, teaching practices, and folding data science into their teaching, but indicated that it is difficult to meet between 3:00 and 4:00 with varying access across the state due to diverse school schedules. Educators also indicated that spring is a very busy time of year, and they would have preferred professional learning opportunities to have occurred earlier in the school year.

Collaboration with the state board of community and technical colleges on data science math pathways was very successful but a remaining area of focus includes clearly articulating what student engagement in data science looks like in K-12, CTC, and 4-year institutions of higher education and how to mitigate gaps in opportunities for students as they move from one education system to another.

Future Opportunities

This proviso was consolidated going forward into section 501(4)(a) of the budget. Multiple provisos were added to the statewide program section of the budget, and the total amount appropriated in FY 26 and FY 27 is less than the total previous funding of the individual items consolidated, which may impact this work moving forward.

Other Relevant Information

As OSPI adopts revised mathematics learning standards the professional learning tenants of Modern Algebra 2, including discourse-driven and student and community-grounded instruction, will continue to be an important component of professional learning for mathematics educators statewide as a step toward improving mathematics outcomes for all students.

Additionally, the adoption of revised standards supports additional mathematics options in high school including statistics, integrated statistics and quantitative reasoning, data science, and additional CTE-math equivalencies to increase access to 3rd and 4th credit math options aligned to a student's High School and Beyond Plan.

Schools/Districts Receiving Assistance

Click here to see a list of all OSPI grant recipients in the 2025 Fiscal Year.

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