

# Delano Public Schools

## K-12 Math Curriculum Review 6-12 Resource Adoption Report (2025) K-5 Adoption Report (2026)

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## Background on K-12 Math Programming in Delano Public Schools

### Historical Perspective

The last major program review for K-12 mathematics occurred in the 2004-05 school year, just ahead of the adoption of the 2007 MN Academic Standards for Mathematics.

- McGraw Hill's Everyday Math program was implemented over 30 years ago in K-4th Grades. The copyright of the program was upgraded along with the 2007 MN Academic Standards in Mathematics. Throughout the alignment of Everyday Math and the 2007 standards teachers noted the lack of rigor in Everyday Math and the gaps created by the continual spiral in the curriculum. Students were not achieving mastery of many mathematical concepts by the end of grade level. In Grade 4 in particular, the 2007 Everyday Math program is notably not well aligned with the MN Math standards resulting in a near total abandonment of the Everyday Math Program.
- Grade 5 began using Pearson enVisions in 2014. The enVisions program lacks an online component and published assessments do not accurately assess skills within the benchmarks. The program also is light in word problems for many of the math concepts.
- Grade 6 uses Prentice Hall Course 2 for more than 30 years and which is out of print.. While the math is rigorous, the materials are in poor condition and replacing worn books is no longer possible. Accelerated students in Grade 6 use the McDougal Littell Pre-Algebra book which is also out of print.
- Grade 7 uses Prentice Hall Course 3 which is out of print. 8th Grade Math uses Pearson Algebra 1 (2009) which is out of print. Grade 8 Advanced uses McDougal Little Algebra 1 which is out of print. This resource also falls short on covering the state standards so must be supplemented to a large extent.
- Grades 9 - 11 utilize the McDougal Littell Algebra, Geometry, Algebra 2 sequence. The particular copyright of this program is out of print.

## MN Academic Standards

The MN Academic Standards for Math have been revised and set into rule in 2025. The 2022 Standards demand a shift from knowing skills to applying mathematical knowledge and process in real world applications. The new standards incorporate a 2D (two dimensional) approach which requires the integration of the 8 Standards of Mathematical Practices and the 5 benchmark Contexts along with attention to the National Council of Teachers of Mathematics (NCTM) Effective Math Teaching Practices.

### Dimension 1: Standards of Mathematical Practices

These practices describe the behaviors and habits of mind that are exhibited by students who are mathematically proficient. Mathematical understanding is the intersection of these practices and mathematics content. It is critical that the Standards for Mathematical Practice are embedded in daily mathematics instruction. The mathematical practices are:

1. Make sense of problems and persevere in solving them.

2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

#### Dimension 2: Benchmark Contexts

This dimension focuses on using context to do and learn mathematics. All students should make sense and persevere in mathematical problem-solving experiences using local contexts of the learning community, within the context of Minnesota and in the contexts of our nation and the global community. The benchmarks noted with the symbols below represent opportunities to utilize the named contexts to teach the mathematics within the benchmark and standard.

- Minnesota Tribal Nations Contexts
- Financial Literacy Contexts
- Computer Science Contexts
- Modeling Contexts
- Real World Contexts.

#### Effective Math Teaching Practices

1. Establish Math goals to focus learning.
2. Implement tasks that promote reasoning and problem solving.
3. Use and connect mathematical representations.
4. Facilitate meaningful mathematical discourse.
5. Pose purposeful questions.
6. Build procedural fluency from conceptual understanding.
7. Support productive struggle in learning mathematics.
8. Elicit and use evidence of student thinking.

A major content change to the 2022 MN Math Standards is the specific emphasis on data science in the Data Analysis strand.

The inclusion of the two dimensions and emphasis on Effective Math teaching practices illustrate why we need to update our math resources. While the Math Practices have been included in most math curriculum for the past 10 years, our resources pre-date these publication updates.

The 2022 Math Standards are expected to be fully implemented by the 2027-28 School year

#### Assessments

Delano student performance on the Minnesota Comprehensive Assessment (MCA) has consistently ranked in the top of the state. The MCA III was first administered in 2011 and is set to sunset in 2027

when it will be replaced by the MCA IV in 2028. The below table reflects student proficiency rates for the past 5 years of MCA III Administration.

MCA III MATH PERCENT PROFICIENT (MEETS OR EXCEEDS)					
Grade	2021	2022	2023	2024	2025
3	76.4	79.6	73.6	76.3	72.0
4	82	79.8	72.2	84.8	72.4
5	68	71.1	80.8	65.8	66.9
6	61.9	76.9	88.3	68.8	75.4
7	61.9	70.9	73.5	82.4	60.3
8	68.7	74.6	61.5	78.6	75.8
11	71.2	58.8	50.6	60.1	49.7
DISTRICT	69.7	73.4	71.5	73.9	67.7
STATE AVERAGE	44.2	44.8	45.5	45.5	

#### Current Graduation Requirements and Pathways (as of 2024-25SY)

In Minnesota, students are required to complete two kinds of requirements by the time they graduate. Students must:

- 1) Satisfactorily complete all state academic standards or local academic standards where state standards do not apply.
- 2) Satisfactorily complete the state credit requirements under [Minnesota Statutes 2022, section 120B.024](#).
  - a) **3 credits of mathematics**, encompassing Algebra II, Integrated Mathematics III, or an equivalent in high school as defined by the high school math standards. Grade 8 students must complete Algebra as defined by the Minnesota Math Standards.

#### Credit Equivalencies

The following credit equivalencies, can be found in [Minnesota Statutes 2022, section 120B.024, subdivision 2](#).

- 3) A career and technical education credit may fulfill a mathematics or arts credit requirement under subdivision 1, clause (2) or (6).
- 4) An agricultural, food, and natural resources education teacher is not required to meet the requirements of [Minnesota Administrative Rules, part 3505.1150, subpart 2, item B](#), to meet the credit equivalency requirements of paragraph (b) above.

- 5) A computer science credit may fulfill a mathematics credit requirement under subdivision 1, clause (2), if the credit meets state academic standards in mathematics.

All students K-8 take a full year math course designed to achieve grade level benchmarks. Accelerated math courses are available to students beginning in grade 4 which allow students to begin taking advanced math courses in grade 7. Grade 8 Standard track students complete Algebra 1.

Students in grades 9-11 must take a minimum of 6 trimester credits in math, inclusive of completing the Algebra II course. Students may take 3 trimesters of math per year to allow for completion of higher level math courses. Within the math course offerings students have access to 5 courses offering college credit: CIS College Algebra, CIS Calc 1 and CIS Calc 2, CIS Stats, and CIS Computer Science.

### Summary of Curriculum Review Process

Initial work in the math review included reflecting on the mission, vision, values and goals of K-12 Math education in Delano Schools. The teacher reviewed the 2005 version of K-12 Math philosophy and updated the document to reflect a more contemporary view of math education. See Appendix A for K-12 Math Mission, Vision, Values and Goals.

The curriculum audit revealed a lack of coherence in math resources K-5 with EM, enVision, and a locally written curriculum in use across the grade levels. Coherence in instructional materials, language routines, and math learning strategies is desired and will be supported by the adoption of a K-5 curriculum from a single publisher.

Math educators began their review of resources by reflecting on the current student performance data including benchmark achievement trends and FAST scores. They then discussed the strengths and challenges to the curriculum resources currently in use across all grade levels. Due to the age of materials and the lack of alignment to the 2022 Math Standards, it was determined that new math resources would be necessary to continue to provide high quality instruction and learning sequences for our students.

Educators began the selection process by reading the edReports on several recently published math curricula, speaking with teaching colleagues in other districts and examining the list of local district math resources. Curriculum that made an initial review scored as “meets expectations” in both coherence and rigor on edReports. Teachers read the reports thoroughly to select a number for further examination. All products with the exception of Everyday Math 4 also included a formal vendor presentation. At all levels, teachers sought feedback from current users through classroom observations or teacher interviews. A teacher designed rubric was used to score the potential math programs on the following areas: Standards Alignment, Relevance, Accessibility, Pedagogical Features, Mathematical Rigor (Conceptual understanding, procedural fluency, real world applications), Student Engagement, and Currency, Cost. Teachers rated each program in each area to narrow selections.

K-5 Teachers examined 4 distinct programs  
7-12 teachers examine 4 distinct programs.

## Recommendations

Due to the time commitment of many of our K-5 teachers to the READ Act professional developments, it is recommended that K-5 delay adoption of new math resources to the 2026-27 school year. We will be adopting Reveal Math by McGraw Hill.

The K-5 Reveal Math adoption in year 1 will include MN Reveal Only. ALEKS is a supplemental resources that supports the development of math knowledge and skills tied to academic standards. Due to one year remaining on an IXL contract (a similar platform as ALEKS), and the heavy lift of implementing a new core resource, it was determined that ALEKS should be delayed a year for financial and capacity reasons.

Teachers in Grades 6 through the Algebra 2 course have selected Reveal Math by McGraw Hill. This program rose to the top due to the pedagogical features which include highlights of careers in math, highlight of the standards of mathematical practices, access to content above and below grade level, online component for student access, MH+ assessment and data features to support meeting student individual needs, professional development and implementation support and option to add on ALEKS for grades 6-8. ALEKS is an online supplement supporting individualized student needs for relearning or enrichment.

## Financial Implications

With a transition to online curriculum delivery, most publishers will extend a license for a maximum of 8 years. The purchase of the McGraw Hill Reveal Math will cover the 2025-26 to 2033-34 school years.

[6-8 Reveal Math](#)

[AGA Reveal Math \(HS\)](#)

[K-5 Reveal Math](#)

## Implementation Timeline for 2022 MN Math Standards and Reveal Math

### PROFESSIONAL LEARNING

#### 2024-25

- Identify and engage in professional learning that supports understanding of the shifts in the 2022 math standards.
- Build understanding of the Standards of Mathematical practice

#### 2025-26

- Implementation of new resources in 6- Algebra 2 courses.
- August 2025, Implementation/Onboarding with McGraw Hill
- October 2025 MH+ Assessment and Data Training

- Continue to build understanding of the Standards of Mathematical Practice and Benchmark contexts through early release PD and PLC work.

2026-27

- K-5 Implementation training on Reveal Math
- Build familiarity with anchor standard design and the two dimensions overlaying the benchmarks.
- Examine and self-evaluate needed professional development; share with school and district leadership teams.

## Evaluation

Evaluation of the resource adoption will be monitored in several ways:

- aMath screening scores will be monitored and analyzed at each benchmark screening period.
- MCA III scores will be monitored and Benchmark reports will be analyzed to determine gaps
- MH+ assessments and data reports will inform the fidelity of implementation
- Teacher input on the success and challenges of implementation
- Fidelity checks on integration of the standards of Mathematical Practices

## APPENDIX A

### Mission, Vision, Values and Core Beliefs

#### **Vision Statement:**

The Delano Mathematics department is committed to creating an inclusive and stimulating environment where every student is encouraged to develop a deep understanding and appreciation of mathematics. We strive to provide a supportive and challenging space where students can explore mathematical concepts, develop critical thinking skills, and become adept problem solvers. Through innovative teaching methods and real-world applications, we aim to foster curiosity, confidence, and competence in every student, preparing them for success in a rapidly changing world.

#### **Mission Statement:**

The mission of the mathematics department is to enable students with the knowledge, skills, and mindset necessary to excel in mathematics and beyond. We are dedicated to:

- Providing High-Quality Instruction: Delivering rigorous and engaging lessons that cater to diverse learning styles and abilities.
- Fostering a Growth Mindset: Encouraging resilience, perseverance, and a positive attitude towards learning and problem-solving.
- Incorporating Real-World Applications: Connecting mathematical concepts to real-life situations to enhance relevance and understanding.

- Promoting Critical Thinking: Developing students' ability to analyze, reason, and solve complex problems through a logical and structured approach.
- Cultivating Collaboration and Communication: Encouraging teamwork and effective communication skills to solve mathematical problems collaboratively.
- Supporting Individual Growth: Providing personalized support and resources to help every student achieve their full potential.
- Integrating Technology: Utilizing innovative tools and technologies to enhance learning and prepare students for the future.

By embracing these practices, we aim to inspire a lifelong love of mathematics and equip our students with the skills they need to succeed in a rapidly evolving world.

### **Values:**

- We believe in fostering a supportive and inclusive learning environment where the needs, strengths, and interests of each student are prioritized and respected.
- We value the development of analytical and logical thinking skills, encouraging students to approach problems creatively and thoughtfully.
- We promote a culture of teamwork and open communication, both among students and within our professional community, to enhance learning and professional growth.
- We are dedicated to ensuring that all students, regardless of background or ability, have equal access to high-quality mathematics education and the support they need to succeed.
- We are committed to continuously improving our teaching methods and integrating new technologies and approaches to enhance student learning.

### **Goals:**

- Mastery of Fundamental Concepts
  - Ensure that all students achieve a strong foundation in essential mathematical concepts and skills, enabling them to progress confidently through increasingly complex topics.
- Development of Critical Thinking and Problem-Solving Skills
  - Cultivate students' abilities to think critically, reason logically, and solve a wide range of mathematical problems, preparing them for academic and real-world challenges.
- Application of Mathematics to Real-World Situations
  - Encourage students to apply mathematical principles to real-life scenarios, enhancing their understanding and demonstrating the relevance of mathematics in everyday life and future careers.
- Promotion of Mathematical Curiosity and Engagement
  - Foster a love for mathematics by creating an engaging and stimulating learning environment that encourages curiosity, exploration, and a positive attitude toward learning.
- Preparation for Post-Secondary Success

- Equip students with the mathematical knowledge and skills necessary for success in higher education, vocational training, and the workforce, ensuring they are well-prepared for their future endeavors.