



# **Curriculum Review Update K-12 Math Review Year 3**

## **August 18th School Board Meeting**

Presented By

Curriculum, Instruction & Assessment Team



## Background

2021 - 2022: Year 0 (Reviewing standard changes as published)

2022 - 2023: Year 1 Curriculum Review (Self-Study)

2023 - 2024: Year 2 Curriculum Review (Resource Review)

2024 - Fall 2027: Phased implementation, determined by District 197 review team

2027 - 2028: Full Implementation of 2021 K-12 MN Mathematics standards

### **K-8 Focus for 2024-2025**

Completing Resource Review Process.

### **HS Focus for 2024-2025**

Continued to develop consistency w/instruction as well as begin resource review process.



## Review Team

The curriculum review team was expanded to include K-12 teachers, building administrators, and district administrators. To improve efficiency, the team was divided into three groups:

- K-4 Review Team
- Middle School Review Team
- High School Review Team (with two MS staff)

There was one K-8 meeting throughout the year, on February 20th, so that the K-8 team could arrive on their recommendations for resources.





## Review Team- Elementary

The elementary team had 4 traditional review meeting dates (Nov, Dec, Feb and May) while also fully participating in the Science of Reading Training. Additional staff were added to increase grade level representation.

### Focus:

- Curriculum training and planning
- Reflecting on implementation of pilot curriculum
- Data collection on pilot implementation



Section 1 of 4

### Math Curriculum Review Rubric

Form description

Grade level of reviewer

- ☐ K-4 Classroom Teacher
- ☐ 5-8 Classroom Teachers
- ☐ 9-12 Classroom Teachers
- ☐ Support Staff



## Review Team - MS and HS

The middle school team had 5 traditional review meeting dates (not included on the PD calendar) in October, December, February (K-8), April and May.

Additionally, the middle school math team capitalized on the expanded PD opportunities in 24-25, with most of their **department meeting times** and **three half-day PD sessions** dedicated to supporting the review process.

The high school team met four times across the school year;

- November 4, 2024
- February 14, 2025
- April 1, 2025
- And April 25, 2025

The HS team expanded to include two middle school staff as well.

Date	Time	Outcomes
August 29	7:30AM - 11:00AM	August 29 MS Department PD
Sept 12	7:40 - 8:20AM	MS Schedule Support Sept 12 Dept Meetings
Oct 10	7:40 - 8:20AM	HMIS conferences - Camp St Croix
Nov 4	12:00 - 3:30PM	MS Schedule Support Nov 4 PD by Department
Nov 14	7:40 - 8:20AM	Core topic: 8th grade registration process MS Schedule Support Nov 14 Dept Meetings
Dec 12	7:40 - 8:20AM	MS Schedule Support Dec 12 Dept Meetings
Dec 20	12:00 - 3:30PM	12.20.24 PD Day Afternoon Plan
Jan 9	7:40 - 8:20AM	MS Schedule Support January 9 Dept Meetings
Jan 22	12:00 - 3:30PM	MS Schedule Support Jan 22 PD by Departm... Jan 22 MS PD Summary
Feb 13	7:40 - 8:20AM	MS Schedule Support February 13 Dept Me...
March 13	7:40 - 8:20AM	MS Schedule Support Marchg 13 Dept Meet...
April 1	12:00 - 3:30PM	MS Schedule Support April 1 PD by Departm...
April 10	7:40 - 8:20AM	
May 8	7:40 - 8:20AM	MS Schedule Support May 8 Dept Meetings  Intervention Recommendations - Reading and Math



# Product Exploration in 2024 - 2025

## Plan in August 2024

July 17	Sept.	Late Oct	Nov	Late Dec TBD	Jan	Feb Decide?	Mar	April /May TBD
Meeting 1 8:30-3 PM		MTG 2 8:30-3 PM		Meeting 3 8:30-3 PM		Meeting 4 8:30-3 PM		Meeting 5 8:30-3 PM
6 HR plan	3 HR Plan	2 HR Plan	3 HR Plan	2 HR Plan				
	Reflect Meet 1hr		Reflect Meet 1hr					
<b>Quarter 1 Product Exploration</b> K-5 iReady 6-8 In. Math				<b>Quarter 2 Product Exploration</b> K-4 Reveal 5-8 B Idea				

The team was given some requirements for the type of programs necessary for review in later phases. These requirements are listed below;

- Set of materials that span K-6 and/or a set of materials that span K-8
- Set of materials that span K-12

	K-?, ?-? Recommendation		
K	iReady	and Reveal	or Big Ideas
1	iReady	and Reveal	or Big Ideas
2	iReady	and Reveal	or Big Ideas
3	iReady	and Reveal	or Big Ideas
4	iReady	and Reveal	or Big Ideas
5	iReady	and Big Ideas	and Reveal
6	Big Ideas	and Into Math	
7	Big Ideas	and Into Math	
8	Big Ideas	and Into Math	
HS	Big Ideas and Reveal and envisionMath		



# Review Process Summary- Elementary

Year 2 Board Update



## Next Steps - Elementary

### Elementary (Kindergarten through Grade 4)

- **Conduct product explorations** for at least two program (iReady, Big Ideas, Reveal).
- **Arrive at consensus on which program to recommend for implementation** beginning no later than spring 2025.
- **Improve use and understanding of assessment** resources to best serve students with diverse needs.
- **Develop an implementation plan** that takes into account several factors, including but not limited to the following;
  - the final implementation year as proposed by MDE (2027-2028 school year)
  - Other new curriculums being implemented
  - the most beneficial strategy for bringing certain grades/grade bands into implementation before 2027
  - and the most cost-effective solution bridging current resource license expiration dates, the need for new resources, and the need for effective implementation

## 2024-2025's Major Efforts

The team performed extensive product explorations and evaluations of various math programs: **iReady, Reveal, Big Ideas, Illustrative**

Selected Curriculum for adoption

Planning and prep for partial implementation Fall 2025





# Review Process Summary - MS

## Year 2 Board Update



## Next Steps - Middle School

- **Conduct product explorations** for at least two programs (5th grade - iReady and Big Ideas; 6th-8th Into Math and Big Ideas).
- **Arrive at consensus on which program to recommend** for implementation beginning no later than spring 2025
- **Continue to track legislative requirements** related to computer science and personal finance
- **Develop an implementation plan** that takes into account several factors, including but not limited to the following:
  - the final implementation year as proposed by MDE (2027-2028 school year)
  - the most beneficial strategy for bringing certain grades/grade bands into implementation before 2027
  - and the most cost-effective solution bridging current resource license expiration dates, the need for new resources, and the need for effective implementation
- **Continued exploration of how to best serve students** who are;
  - at risk for future math difficulties
  - are simultaneously developing math and English language skills (EL students)
  - being served mathematics instruction in a special education setting or having IEP goals related to math
  - ready for learning math in an accelerated manner
- **Smoothen standards, content, and instructional differences found in the transition between 8th and 9th grade**
- **Professional development** as needed beyond materials training

## 2024-2025's Major Efforts

The team performed extensive product explorations and evaluations of **Big Ideas, Into Math and Reveal.**

Preparing for Fall 2025 implementation





# Review Process Summary - HS

Year 2 Board Update



## Next Steps - High School

- **Update the math pathways and registration materials** for the 25-26 school year to reflect the recommendations noted below;
  - Keep the Analysis course with some minor adjustments (including new resources)
  - Remove the requirement for juniors who intend to take AP PreCalculus to take Algebra II with Trigonometry. This would functionally allow students who take Analysis as juniors to take AP PreCalculus as seniors.
  - Retain the requirement that students who intend to take Calculus AB successfully complete both Algebra II with Trigonometry and AP Precalculus.
- **Continue exploring post-secondary college and career coursework opportunities**, particularly in concurrent enrollment options.
- Develop and implement plans over the summer and fall of 2024 to **restructure support for struggling students in Intermediate Algebra**.
- **Begin an instructional materials review process** as early as fall 2024
- **Arrive at consensus on which program to recommend** for implementation beginning, early as spring 2025.



- Development of Instructional Commitments
- Alignment with New Math Standards and Course Structure Planning
- Extensive Planning for Fall 2025 Implementation and Professional Development



# Data Collection - Elementary Decision

## Rubric Survey Data

	Reveal	Big Ideas	Illustrative
Instructional Materials	17.3	14.5	9.5
Instructional Supports & Usability	9.4	9	6.3
Culturally Responsiveness	8.3	9.6	5.8

## Math Review Rubric

## Standards Alignment

Implementation Surveys measured:

- Pacing
- Resource Utilization
- Differentiation
- Assessments
- Implementation Reflection

	Reveal	Big Ideas	Illustrative
K	😞	🔴	😞
1	✅-	🔴	😞
2	😞+	✅	✅-
3	✅-	😞+	🔴
4	😞	✅-	🔴



# Data Collection - Middle School Decision

	K-?, ?-? Recommendation		
K	iReady	and Reveal	or Big Ideas
1	iReady	and Reveal	or Big Ideas
2	iReady	and Reveal	or Big Ideas
3	iReady	and Reveal	or Big Ideas
4	iReady	and Reveal	or Big Ideas
5	iReady	and Big Ideas	and Reveal
6	Big Ideas and Into Math		
7	Big Ideas and Into Math		
8	Big Ideas and Into Math		
HS	Big Ideas and Reveal and envisionMath		

July Meeting (Math Training Academy)	August MS Schedule Train Academy PM	August MS Schedule Train Academy PM	August 29 MS Sch Support AM	Sept 12 Dept Mtg	August thru October Remainder of Training Acad
Big Ideas and Into Math Training	Big Ideas and Into Math planning time	Big Ideas and Into Math planning time	Big Ideas and Into Math planning time	Big Ideas and Into Math planning time	Finalize hours for training academy, conduct action research

Oct 22 or Oct 30	Nov 4 (MS Sch Support)	Nov 12 (Dept mtg)	Dec 4 (Curr Rev)	Dec 12 (Dept mtg)	Dec 20 AM (MS/HS Transition and 5-8 planning)
Reveal and Big Ideas Training / planning	Reveal and Big Ideas planning time	Reveal and Big Ideas planning time	Reveal and Big Ideas planning time	Reveal and Big Ideas Virtual Check-in	Reveal and Big Ideas planning time

K - 8 Math Timeline: Decision making + rest of the year				
Jan 9 (Dept mtg)	Jan 22 (MS Sch Support)	Feb 13 (Dept mtg)	Feb 20 (Curr Rev)	
Identify plan for Q3	Planning time for Q3	Complete Exp #2 Implementation Survey Planning time for Q3	K-8 Meet Compile results	
April 1 (MS Sch Support)	April 3 (Curr. Review MTG)	April 10 -ELEM Only (Curriculum Review MTG)	May 7 (Curr. Review MTG)	Summer 2025
TBD based on decision	TBD based on decision		Planning time for Q4	K-8 (+HS?) Math Training Academy





WEST ST. PAUL-MENDOTA HEIGHTS-EAGAN





## Data Collection - High School Decision

During the 2025-2026 academic year, the high school math team will embark on a year-long pilot program focused exclusively on the Savvas envisionmath resources, identified as the program with the most promising results.

This pilot aims to strategically determine the optimal integration of envisionmath components into the high school mathematics curriculum.

The team will thoroughly evaluate the effectiveness and suitability of various resources, including (but not limited to);

- student workbooks,
- hardbound textbooks,
- and the extensive suite of digital tools such as Savvy Adaptive, Successmaker, and MathXL, to identify which elements best support student learning and align with instructional goals.



# Four Way Equity Test

Does this help to provide opportunities for students who have historically been underserved, underrepresented, or disadvantaged by the current system?

Does this help to ensure equitable access for all?

Does this help to eliminate barriers based on gender, race/ethnicity, national origin, color, disability, age or other protected group?

Does this ensure the same rigorous standards for academic performance exist for all students?

Category/Role 3: Culturally Responsive					
Descriptor	Example	Observed Y=Yes S=Somewhat N=No Ex-Extensive			Notes
Student and teacher-facing materials support a wide representation of people, perspectives, and histories within the math images, names, lessons, activities, and assessments	Represent full, complex characters from marginalized groups so that students can have a more holistic understanding of themselves and others	EX	Y	S	N
Materials support a strong home-school connection	Does it include homework/at-home practice? Does it include a parent letter? Family support	EX	Y	S	N
Guidance is provided within the core materials on making real-life connections between academic content and the local neighborhood, culture, environment, and resources.	Is it authentic and engaging? Multiple points of student connection on their background knowledge				
Teacher guidance is provided on practices that support the learning, development, and engagement of students from diverse	EL support there a version of language available student (especially				

Grade	Courses			
	General Options	*Single Acceleration Options	*Double Acceleration Options	
7			Intermediate Algebra	
8	Linear Algebra (not a high school-level course)	Intermediate Algebra	Geometry	
9	Intermediate Algebra	Geometry	Algebra 2	Algebra 2 w/ Trigonometry
10	Geometry	Algebra 2	Algebra 2 with Trigonometry	AP Pre Calculus
11	Algebra 2	Algebra 2 with Trigonometry	Analysis OR *Algebra 2 with Trigonometry	AP Calculus AB
			AP Pre Calculus	AP Calculus AB
			AP Calculus AB OR AP Statistics	AP Calculus BC OR AP Statistics
			AP Computer Science	

16.2	10.9	13.0	Big Ideas	38.5
14.4	10.4	7.0	Everyday Math	33.8
14.6	9.5	11.0	Illustrative	33.8
13.0	8.8	9.0	Into Math	31.3
16.8	11.4	13.0	iReady	39.3
16.9	12.0	13.0	Reveal	40.8
<b>15.57575758</b>	<b>10.65151515</b>	<b>66</b>	<b>Grand Total</b>	<b>5254</b>

Standards/Rigor	Usability	Cultural Inclusivity	K-8 Total
Big Ideas 15.95238095	Big Ideas 11	Big Ideas 11.42857143	Big Ideas 39.0875
Everyday Math 17.25	Everyday Math 8.75	Everyday Math 8.5	Everyday Math 35.83333333
Illustrative 10.91666667	Illustrative 6.58333333	Illustrative 7.25	Illustrative 25
Into Math 15.875	Into Math 9.75	Into Math 9.25	Into Math 41.5
iReady 15.23809524	iReady 9.95238095	iReady 9.80952381	iReady 33.71428571
Reveal 15.65	Reveal 9.65	Reveal 9.25	Reveal 35
<b>Grand Total 15.21428571</b>	<b>Grand Total 9.87142857</b>	<b>Grand Total 9.539612245</b>	<b>Grand Total 36.68251968</b>

Grade 5-8	Rigor	Usability	Culturally Responsive	Total
Big Ideas	16.8	10.2	11.3	38.3
	10.7	5.9	7.0	23.6
	5.0	1.0	4.0	10.0

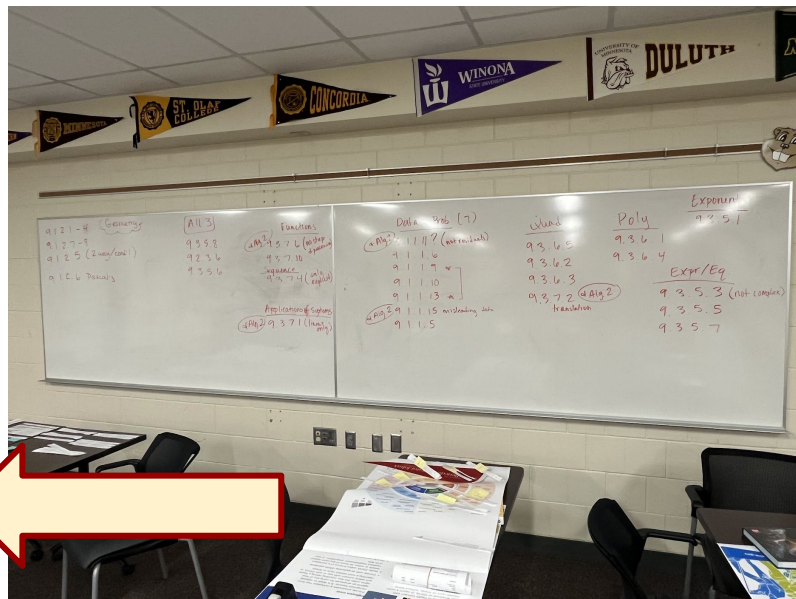
✦ **MINNESOTA TRIBAL NATIONS CONTEXTS:** Connect mathematical problem solving experiences and contributions to place, story, cultural practices, language and perspectives relevant to historical and contemporary Dakota and Anishinaabe communities. The four directions symbol (✦) represents Minnesota Tribal Nations Contexts.





# Outcomes

2022 Standards						
Grade	Strand	Anchor Standard	Code	Benchmark	Class	Unit
9-11	Data and Probability	Data Sciences: Identify, formulate and investigate statistical questions by collecting data, considering cultural perspectives, analyzing and interpreting data and communicating the results.	9.1.1.10	Create and analyze data displays, including scatter plots, histograms and boxplots using technology. (MP3) #	IA	Data & Prob
9-11	Data and Probability	Data Sciences: Identify, formulate and investigate statistical questions by collecting data, considering cultural perspectives, analyzing and interpreting data and communicating the results.	9.1.1.11	Identify, create and compare statistical models with linear and exponential functions, including linear regression. Assess the reasonableness of model fit using residuals and correlation coefficients. (MP4) # $\mu$	IA - Algebra 2	Data & Prob
9-11	Data and Probability	Data Sciences: Identify, formulate and investigate statistical questions by collecting data, considering cultural perspectives, analyzing and interpreting data and communicating the results.	9.1.1.15	Identify and explain misleading uses of data along with how to use spreadsheets, tables or graphing technology to recognize and analyze distortions in data displays. Use interactive data visualizations to support and influence different points of view. (MP3) # \$	IA - Algebra 2	Data & Prob
9-11	Data and Probability	Data Sciences: Identify, formulate and investigate statistical questions by collecting data, considering cultural perspectives, analyzing and interpreting data and communicating the results.	9.1.1.5	Analyze and explain when arguments based on data confuse correlation and causation. (MP3)	IA	Data & Prob
9-11	Data and Probability	Data Sciences: Identify, formulate and investigate statistical questions by collecting data, considering cultural perspectives, analyzing and interpreting data and communicating the results.	9.1.1.6	Compute using technology or estimate the correlation coefficient of a linear model. Interpret the linear model in the context of the data. (MP5, MP6) \$	IA	Data & Prob
9-11	Data and Probability	Data Sciences: Identify, formulate and investigate statistical questions by collecting data, considering cultural perspectives, analyzing and interpreting data and communicating the results.	9.1.1.9	Use statistics appropriate to the shape of the data distribution to compare the center and spread of two or more data sets. (MP4)	IA - Algebra 2	Data & Prob
		Measurement: Investigate measurement using a variety of tools, units, systems, processes and techniques in various cultures. Explain and reason with attributes, estimations and formulas to communicate measurement(s) and				



**School District 197**

WEST ST. PAUL-MENDOTA HEIGHTS-EAGAN



## Next Steps - Elementary



Feature	Why It Matters
<b>Standards-Aligned Quality</b>	Ensures consistency and rigor across all grade levels
<b>Equity, SEL &amp; Career Integration</b>	Supports diverse learners and builds confidence
<b>Blended Digital Access</b>	Enables adaptive instruction and data-informed pacing
<b>Metacognitive Routines</b>	Encourages ownership, deeper understanding, and discourse

**School District 197**

WEST ST. PAUL-MENDOTA HEIGHTS-EAGAN



## Next Steps - Elementary

**Reveal Math Training Academy 2025:** Teams of teachers will:

- Completed curriculum training- August 2025
- Co-created **scope and sequence**
- Developed **common formative assessments**
- Aligned and refined **grading rubrics**
- Trial digital platforms: **MH+ digital assessments & Aleks adaptive tool**

This group will implement the new resources this year and meet throughout the year to refine, monitor and adjust. They will help in the roll-out in April.





## Next Steps - Elementary

**April 24, 2026 (Professional Development Day)**

All Elementary teacher will receive Reveal Math training and have the option to implement the curriculum for the remainder of the 25-26 school year.

**2026-2027 school year full curriculum rollout in all K-4 classrooms.**







# Next Steps - MS/HS 25-26 Plans



## Data Collection - High School Decision

During the 2025-2026 academic year, the high school math team will embark on a year-long pilot program focused exclusively on the Savvas envisionmath resources, identified as the program with the most promising results.

This pilot aims to strategically determine the optimal integration of envisionmath components into the high school mathematics curriculum.

The team will thoroughly evaluate the effectiveness and suitability of various resources, including (but not limited to):

- student workbooks,
- hardbound textbooks,
- and the extensive suite of digital tools such as Savvy Adaptive, Successmaker, and MathXL, to identify which elements best support student learning and align with instructional goals.

## MS and HS Math Review Timeline; 2025-2026

	Training Academy Meeting 1	Training Academy Meeting 2	Training Academy Meeting 3	
<b>MS Math</b>	July 8	July 15	TBD	24 SEP 2025, WED 7:45am - 3:15pm 9-12 Math Review DO Training Room, District Office-1-DO-Training/Board Room (40)
<b>HS Math</b>	July 22	July 23	TBD	29 OCT 2025, WED 8am - 3:30pm 5-8 Math Review DO Training Room, District Office-1-DO-Training/Board Room (40)
				12 NOV 2025, WED 7:45am - 3:15pm 9-12 Math Review DO Training Room, District Office-1-DO-Training/Board Room (40)
				14 JAN 2026, WED 8am - 3:30pm 5-8 Math Review DO Small Conf Rm (8 - 10AM) DO Training Room (10AM - 3:30PM), D
				4 FEB 2026, WED 7:45am - 3:15pm 9-12 Math Review DO Training Room, District Office-1-DO-Training/Board Room (40)
				11 MAR 2026, WED 8am - 3:30pm 5-8 Math Review DO Training Room
				7 APR 2026, TUE 7:45am - 3:15pm 9-12 Math Review DO Small Conf Room or math classroom, District Office-1-DO-Com
Begin Action Research →				18 additional hours compensation

