

Mathematics Programming and Curriculum Adoption Process

October 3, 2024



Alignment

Alignment to Strategic Plan 2027

Goal Area 1 - Instruction

 Effective and consistent instructional practices that meet the needs of all students

Strategic Initiative 1a.3

Develop programs to increase opportunities for underrepresented students to reach high levels of academic success

Background

- Curriculum adoptions are usually conducted according to the cycle of approved Curriculum Frameworks outlined by the California Department of Education
- Approved curriculum is dependent on a state approved
 Framework as it contains evaluation criteria for the adoption of materials
- California finally approved a revised Mathematics Framework in June of 2023 after a four year delay
 - The delay was due to a variety of factors including:
 Covid-19 pandemic and the need for multiple revisions due to feedback and criticism
- This delay is also delaying the District's plan to update math programming and materials

Background

- An approved list of mathematics materials is not expected until November of 2025 and this timeline is subject to change
- MVWSD adopted Eureka Math K-8 in June 2015
- Materials are usually updated every 6-8 years
- MVWSDs math materials are 9 years old
- Math placement assessments and criteria have not been adjusted since 2021-22
- A middle school mathematics placement appeals process was added in 2023-24

Additional Information

- Districts are able to adopt new materials without an approved list as long as a majority of members of the committee are teachers
 - MVWSD adopted new K-5 ELA materials without a list in 2023-24
 - 13 Districts in California have adopted new mathematics materials K-5 since 2020 according to a report from the Center For Education Market Dynamics
- Ed. Reports does have a list of mathematics materials that have been rated for both alignment to standards and usability
 - this list could be used as a starting point for an adoption process and compared to the approved list from the California Department of Education when released



Current Mathematics Programming

Elementary Programming

Core Instruction

- K-5: Eureka Math, A Story of Units, Great Minds Publishing
 - Counting and Cardinality (Kindergarten only)
 - Operations and Algebraic Thinking (K-5)
 - Number and Operations in Base Ten (K-5)
 - Number and Operations Fractions (3-5)
 - Measurement and Data (K-5)
 - Geometry (K-5)

Middle School Programming

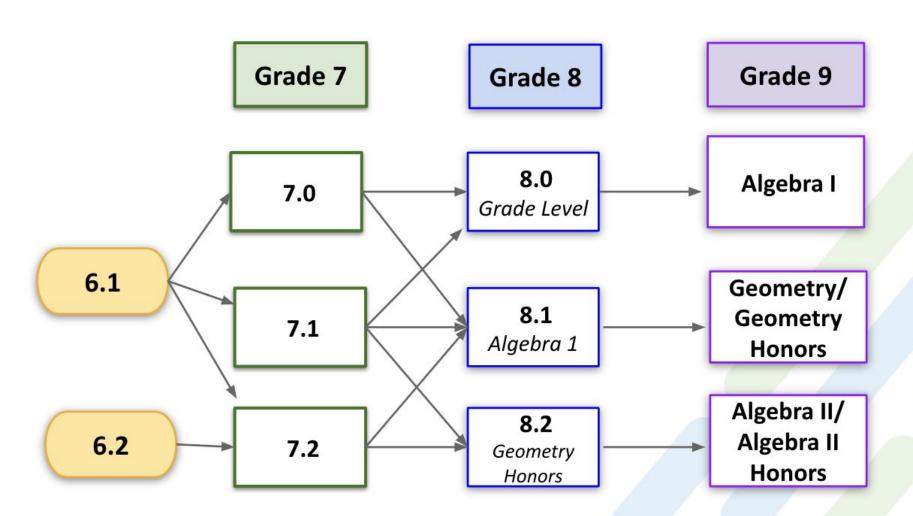
The 6-8 program builds on the foundation for higher levels of math with a focus on the following domains:

- 6-8 Eureka Math, A Story of Ratios, Great Minds Publishing
 - Ratios and Proportional Relationships (6, 7)
 - Expression and Equations (6-8)
 - The Number System (6-8)
 - Statistics and Probability (6-8)
 - Geometry (6-8)
 - Functions (8)
- Algebra 1: Eureka Math, A Story of Functions, Great Minds Publishing
 - Functions
 - Algebra
 - Statistics and Probability
- Geometry: Eureka Math, A Story of Functions, Great Minds Publishing
 - Geometry

Middle School Programming

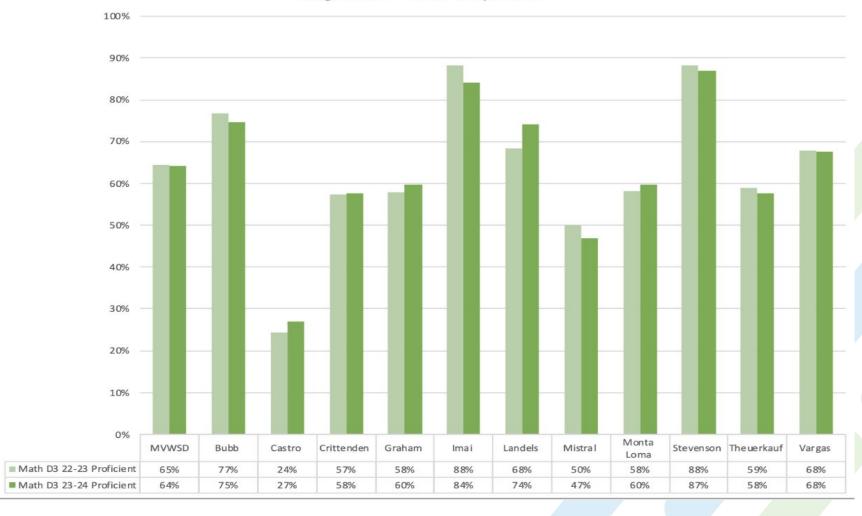
- MVWSD currently offers a variety of math pathways for students
- All pathways allow student to enter high school on a college preparatory or A-G track
 - Students are initially placed into math pathways based data from District i-Ready and state assessments given in May.
 - All students have the opportunity to adjust their pathway in August based on data from i–Ready which includes accelerating to a more challenging pathway or moving to a course better suited to their abilities.
 - In 2023-24, the district implemented a math appeals process to allow students and parents another opportunity to adjust their pathway

Middle School Math Pathways



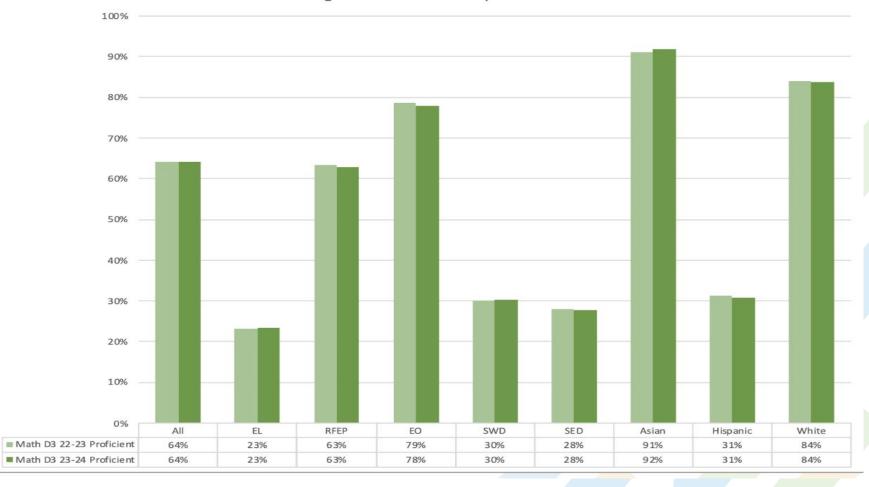
Overall Math Data - i-Ready

Math Proficiency - By School Diagnostic 3 - 2-Year Comparative

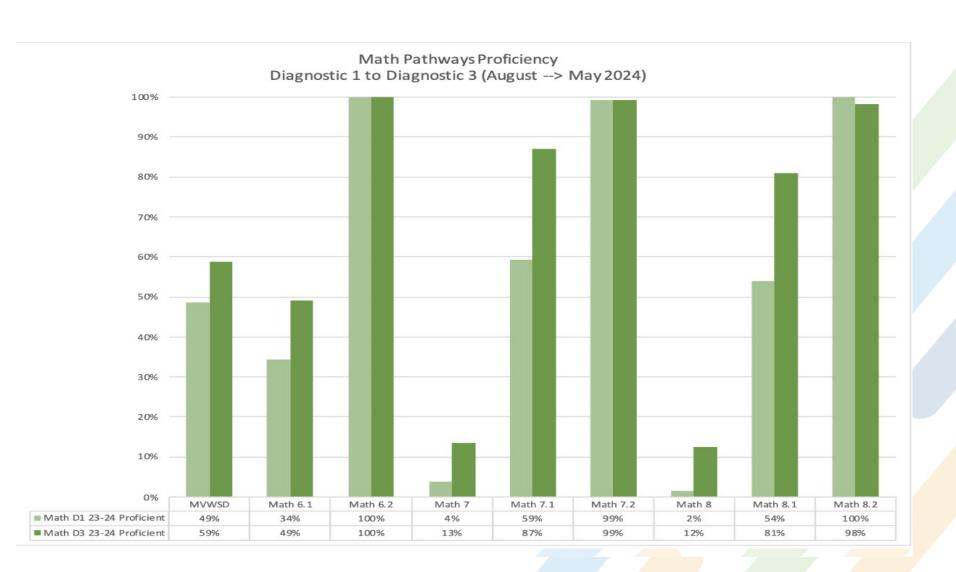


Student Group Math Data - i-Ready

Math - Student Subgroup
Diagnostic 3 - 2-Year Comparative



Middle School Math Data i-Ready



7th and 8th Grade Pathway Enrollment 2023-24

| Student Group | .0 Grade Level | .1 Accelerated | .2 Advanced |
|-----------------|-------------------|-------------------|----------------|
| Asian | 10% | 30% | 61% |
| Hispanic/Latino | 75% | 21% | 4% |
| White | 17% | 44% | 40% |
| SED | 74% | 21% | 5% |
| EL | 93% | 7% | 0% |

2023-24 - 7th and 8th Grade Accelerated Pathway Enrollment by Feeder School

| Feeder School | .1 Accelerated | .2 Advanced |
|---------------|-------------------|----------------|
| Bubb | 13% | 22% |
| Castro | 8% | 1% |
| Imai | 15% | 25% |
| Landels | 15% | 13% |
| Mistral | 14% | 4% |
| Monta Loma | 6% | 6% |
| Stevenson | 14% | 17% |
| Theuerkauf | 6% | 2% |
| Vargas | 9% | 10% |

Data Summary

- Overall, District i-Ready math results are flat with only 64% of students proficient at the end of the 2023-24 school year
- Math proficiency varies across school sites
- Large gaps in proficiency exist between student groups especially for traditionally underrepresented groups
- Proficiency for students in advanced pathways (.1 and .2) is high
- Not all student groups are accessing advanced math pathways
- Enrollment in advanced math pathways varies by feeder school



Considerations

Considerations

- All students deserve a strong mathematics program which provides opportunities for acceleration if desired
- Large achievement gaps in mathematics that were exacerbated during the pandemic persist
- Not all groups of students are accessing accelerated math pathways
- Mathematics materials and programming need to be updated
- Pathways, placement assessments and placement criteria need to be thoroughly reviewed and possibly adjusted
 - the i-Ready instructional pathway is no longer supported by the District, but the District still uses i-Ready results for placement
- Elementary math instruction lays a foundation for success in higher levels of math starting in middle school
- Elementary teachers need time to learn the new ELA curriculum before they can learn a new math curriculum



Mathematics Programming and Curriculum Adoption Process

Process

- District staff is beginning a process to update mathematics programming, pathways and placement and curriculum
- The process is estimated to take 2 years
- The exact length of the process could be lengthened by the adoption of the approved list of materials by the California Department of Education - now slated for November 2025

Process: Year 1 - 2024-25 Root Cause Analysis

- In year 1 staff will focus on the following:
 - Researching root causes of achievement gaps in math
 - Researching inequities in enrollment in pathways in middle school and potential solutions to support underrepresented student groups
 - Researching placement and pathway options used by other Districts
 - Seeking stakeholder (student, staff and parent) input related to mathematics curriculum, instruction, pathways assessments and placement
 - Updating the Board of Trustees and seeking direction based on information collected

Process: Year 2 - 2025-26

- Convene a Mathematics Programming and Curriculum Adoption Committee in Fall 2025
 - committee will be comprised of a majority of teachers as well as interested parents and District staff
 - committee will communicate progress and seek stakeholder input as needed
 - committee will look to review, pilot and recommend new materials for adoption pending release of the approved list of materials by the CDE
 - committee will also potentially recommend changes to pathways, assessments and criteria for placement in middle school

Questions for the Board

- What are trustees' thoughts on waiting for an approved list of materials from the California Department of Education (further delay the adoption of new materials by 6 months or one year?)
- What else should staff consider as we begin this process?
 - What is missing or needs to be included?



Next Steps

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- Begin year 1 process pending input collected from the Board
- Focus on collecting and analyzing data and input
- Communicate progress regularly over the course of the process