

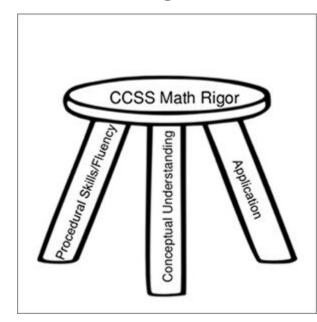


# Modernizing Our High School Mathematics Classroom Furniture

Facilities Committee-December 1, 2025

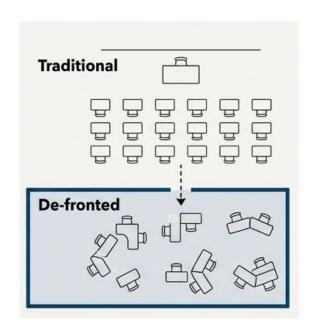
### Our Approach to Mathematics Teaching and Learning

- Our district's mathematics program is built on a modern, evidence-based foundation to sustain rigorous learning by developing fluency and procedural skills, conceptual understanding, and application of mathematics.
- Our instructional approach is guided by two key frameworks:
  - NCTM Principles to Action-Emphasizing tasks that promote reasoning, facilitate meaningful discourse, and support productive struggle.
  - Building Thinking Classroom (BTC)-A research-validated model designed to get all students thinking for longer periods. The model enhances not only thinking, but also collaboration, perseverance, and risk-taking.



### Students as active collaborative thinkers and doers of mathematics.

- This requires a classroom environment where
- Students frequently work in groups.
- Students are working on vertical, non-permanent surfaces (whiteboards) where their work is visible and collaborative.
- De-fronted furniture arrangements where flexible seating arrangements and groupings are made possible with modern classroom furniture.



# Furniture Limitations and Opportunities

- Our Current Furniture (1990's Tablet-Arm Chairs)
  - o Isolates students, hindering collaboration.
  - Restricts movement, making group work and access to vertical surfaces more difficult.
  - Less supportive to individual student needs.

### Flexible furniture

- Fosters collaboration through more flexible grouping of students.
- De-fronts the classroom
- Options for movement (standing desks, wobble stools) provides options for neurodivergent students, helping them focus their energy productively.
- A variety of ergonomic chairs and tables betters supports a range of body types and ensures every student can find a physically comfortable workspace.



### What a Modernized Math Classroom Includes



#### Movable, Modular Tables

Desks with versatile shapes that can be easily arranged into collaborative pods. Many feature writable dryerase surfaces.



### Versatile, Mobile Seating

Ergonomic chairs with casters, wobble stools, and standing-height options to provide choice and support movement.



### Abundant Vertical Work Surfaces

Large, wall-mounted whiteboards supplemented by mobile, double-sided whiteboards that serve as space dividers and workstations.



#### **Smart Storage**

Solutions like under-seat trays or backpack hooks keep floors clear and allow student belongings to move with them, supporting quick transitions.



### **Our Return on Educational Investment**



#### 1. THE INVESTMENT

Modern, flexible furniture and vertical work surfaces for our mathematics classrooms.





#### 2. THE ENABLEMENT

Unlocks the full potential of our district's research-backed pedagogy (Building Thinking Classrooms & NCTM Principles).





#### 3. THE RETURN

- √ Higher Student Engagement & Focus
- ✓ Stronger Collaboration & Problem-Solving Skills
- ✓ Improved Academic Achievement in Mathematics
- ✓ More Equitable & Inclusive Learning Environments



### How do we accomplish this?

- We currently have thirteen high school mathematics teachers and will have that number of mathematics classrooms in 2026-2027.
- Working number to update furniture is approximately \$25,000 per classroom.
- Over a longer period of time, incrementally update high school mathematics classrooms through High School and Secondary C&I budget carryover funds.
- Summer 2026, update high school mathematics classrooms comprehensively through district level investment
- Combination of the district and carryover investment to accelerate incremental replacement.



# Questions and Discussion

