MCKINNEY ISD

2024-2025

Every Student, Every Day!

"McKinney ISD is committed to providing math instruction that will **encourage** students to **make sense** of mathematical ideas and **reason** mathematically."

—McKinney Math Mission Statement

01 ELEMENTARY

2024-2025 Professional Development Focus	2024-2025 Actions
Introduce, train, and support planning, differentiation, and student growth through the use of **STEMscopes Math** in all K-5 Math Classrooms.	Created **District Checkpoints** to monitor campus and grade level growth for high leverage standards. Developed to **focus on instruction** and **student behaviors** when applying math knowledge.
Build teacher capacity in content knowledge by focusing on the importance of **unpacking standards** for clarity and calibration throughout the district.	Created **new Problem Solving resources** to ensure that all classrooms were learning Problem Solving through **rigorous** grade level Word Problems. Created “We are Mathematicians” process standards initiative to support critical thinking within math instruction.
Focus on developing and growing sound classroom practices in **Number Talks** and **Problem Solving** in grades K-5 that encourage student engagement and independent thinking.	Supported teachers in **plannings and instruction** to identify our strengths and weaknesses in the **PLC process** to provide a wider lens on specific needs for the Elementary Math Program.

02 SECONDARY

2024-2025 Professional Development Focus	2024-2025 Actions
Creating **intentional** opportunities for **student discourse** in the secondary math classroom for all students to engage in **reasoning and justifying** their thinking process.	Reviewed the importance of **communication** in the Process Standards in the Texas Essential Knowledge and Skills (TEKS). Provided professional learning with embedded **intentional student discourse strategies**. Utilized **campus learning walks** to highlight opportunities for student discourse.
Differentiating the learning **for our high-achievers** by answering PLC question #4, how can we extend learning for those students who have already learned it?	Provided professional learning opportunities for campus leaders and teachers to **enhance depth and rigor** for high-achieving students. Topics included timely feedback, higher order questioning, and hexagonal thinking **to make connections in the learning process.**
Using **quick actionable data** from District Checkpoints and NWEA MAP to inform teacher instructional practices **centered on student learning**.	Created District Checkpoints for all secondary math courses and provided professional learning opportunities for teachers to create and utilize data reports. Data reports were **used to facilitate conversations** on Campus and District PLC teams around student growth.

03

ELEMENTARY SUCCESSES

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Problem Solving

Supports the application of math content in real life problems. Exposing our students to **rigorous problem solving opportunities on a daily basis** has contributed to student **growth** as evidenced by our **MOY Map Data.**

"We are Mathematicians" emphasis on Process standards to support critical thinking.

STEMscopes Math

STEMscopes Math has increased the level of **student engagement** in our K-5 students. Students are learning math through **concrete and representational** lessons before moving to the abstract. This is building a foundational understanding to support academic growth.

District Checkpoints

The implementation of **District Checkpoints** in our **second through fifth** grade math classrooms has had a direct correlation to the improvement of instruction and how we are looking at data. In data meetings teachers are discussing the changes and shifts they need to make instructionaly for students to master standards.

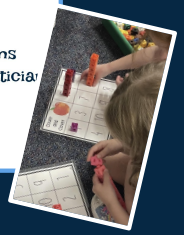
National Level PD

Greg Tang presented to all **Kindergarten through Sixth grade Math Teachers** during our October PD day. This PD exposed our teachers to sound math instruction and the learning that occurred during this PD continues to be evidenced in classrooms.

We are Mckinney! We are Mathematicians!

In McKinney we…

- Think like Mathematicians
- Write like Mathematicians
- Speak like Mathematicians
- Read like Mathematicians
- Represent like Mathematicians
- Solve Problems like Mathematicia



Representing
Like a Mathematician

What tools will you use?
- Real Objects
- Manipulatives
- Paper + pencil
- Technology

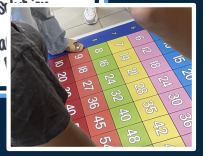
What technique will you use?
- Mental Math
- Estimation
- Number Sense

Show your work!
- Symbols
- Diagrams
- Graphs
- Math Language

Solving Problems
Like a Mathematician

In my everyday world!

- Analyze — analyze given information
- Plan — formulate a plan or strategy
- Solve — determine a solution
- Justify — justify the
- Evaluate — Eva



04

SECONDARY SUCCESSES

SECONDARY SUCCESSES

District Checkpoints

Implemented **District Checkpoints** in **all** of our secondary math classrooms including has helped guide best instructional practices and provide individualized learning opportunities for all students.

Checkpoints were new for Algebraic Reasoning, Algebra II, Precalculus, Statistics, Quantitative Reasoning, AP Statistics, and AP Calculus AB/BC this year.

Financial Literacy

Partnered with **First United Bank of McKinney** to provide quarterly workshops to the community on relevant financial literacy topics such as budgeting, paying for college, credit scores, and purchasing a car.

First United Bank also spoke to every 6th grade student on each of our middle school campuses about “Dollars and Sense”, the importance of budgeting and making good financial choices.

Thinking Classrooms

Secondary campus teachers and instructional coaches represented MISD at **Region 10’s Building Thinking Classroom Conference** in October, where they had the opportunity to attend a variety of sessions on BTC, including from Peter Liljedahl, author of Building Thinking Classrooms.

Brittany Nichols, an Algebra I teacher at McKinney Boyd High School, led a session about differentiation strategies in a thinking classroom.

Financial Literacy Workshop at the CEC

McKinney Boyd High School teacher, Brittany Nichols, presents at the Region 10 Building Thinking Classrooms (BTC) Conference.

MISD Secondary Math teachers at the Region 10 BTC Conference.

Cockrill MS 6th Graders learn about budgeting.

Johnson MS 6th Graders learn about ratios.

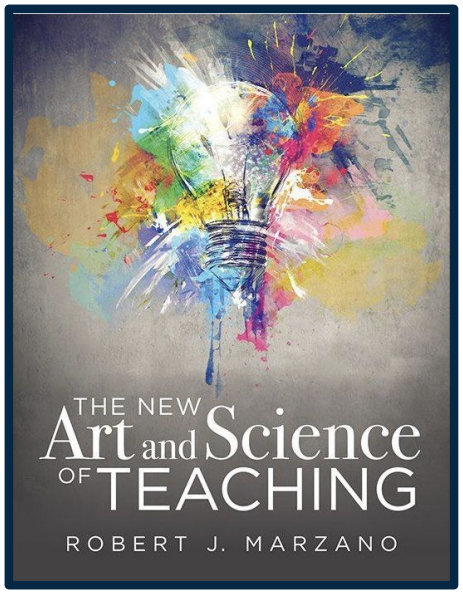
Dowell MS teachers with Peter Liljedahl at the BTC Conference.

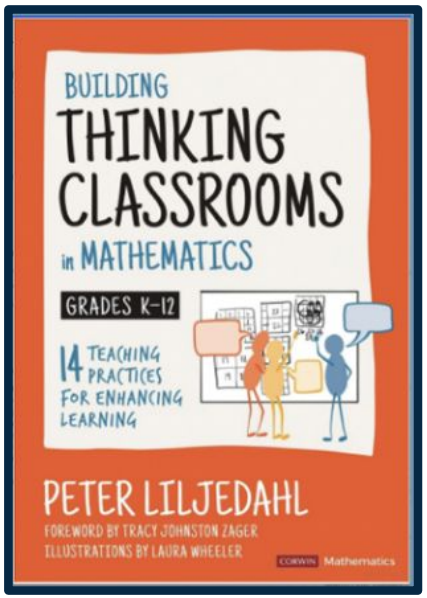
Next Steps

- Continue the work of creating a culture where thinking is not only valued but also necessitated-we will continue to build **Thinking Classrooms** in MISD.
- Deep dive into situating the content in the context of its use by developing a culture of **Problem Solvers** in McKinney ISD.
- Develop a mindset in which Math Educators are providing **actionable and descriptive feedback** to promote academic growth.

Resources


Principles to Actions
Ensuring Mathematical Success for All


THE NEW
Art and Science
OF TEACHING
ROBERT J. MARZANO


BUILDING
THINKING
CLASSROOMS
in MATHEMATICS
GRADES K-12
14 TEACHING PRACTICES FOR ENHANCING LEARNING
PETER LILJEDAHL
FOREWORD BY TRACY JOHNSTON ZAGER
ILLUSTRATIONS BY LAURA WHEELER
Mathematics