Santa Clara University
School of Education and Counseling Psychology

Milpitas Unified Instructional Leadership Collaboration in Mathematics Teaching with Santa Clara University

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Overview: At the heart of equitable mathematics teaching is supporting teachers to believe all students can be "good at math" and have valuable mathematical knowledge. Our recommendations below align to these principles and support teachers to:

A. View mathematics as a subject that is creative,
B. Design mathematical learning environments that consistently communicate growth mindset messages,
C. Develop a classroom culture in which there are multiple ways to be "smart" at math, and
D. Teach mathematics in ways that that go beyond rote memorization of procedures, and instead focus on conceptual understanding and strengthen students' mathematical sense making and problem solving skills.

Timeline: We suggest focusing on mathematics for **at least five** months, with two 1.5 hour sessions per month.

- During the **first session of the month** participating teachers will have the opportunity to learn about each topic. These sessions will focus on engaging teachers in mathematical tasks and identifying strategies for implementing activities related to each topic into their instruction.
- During the **second session of each month** teachers will have a time to share how they implemented ideas from the first session. This session will focus on discussing dilemmas of practice, analyzing artifacts of practice, and asking clarifying questions.

Monthly topic	Topics
1. What is mathematics & mathematical proficiency	- Mathematics Teaching for a Growth Mindset - Mathematical Engagement – Common Core Mathematical Practices - Student sense making
2. Number Sense	- Noticing & Eliciting Student Thinking - Notice -> Wonder -> Question
3. Number Sense (part 2)	- Number Talks
4. Designing/Adapting Tasks	- Cognitive Demand - Integration across curriculum
5. Designing/Adapting Tasks (part 2)	- Complex Math Tasks - Integration with technology

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