



SACRAMENTO
STATE

Do the Math:

*Increasing Mathematics Readiness through
Collaboration and Professional Learning*

Sacramento

California Mathematics Readiness Challenge Initiative

Redefine the Possible™

The ESM Curriculum

EAP Senior Year Mathematics Course

Unit	Topic
1	Team Building & Problem Solving
2	Linear Functions
3	Quadratic Functions
4	Exponential Functions
5	Logarithmic Functions
6	Systems of Equations & Inequalities
7	Absolute Value & Piecewise Functions
8	Financial Mathematics

Pedagogical Strategies

1. Utilizing facilitative teaching approaches
2. Applying interactive and collaborative strategies in the classroom
3. Based on a quantitative reasoning approach to inquiry-based learning
4. Incorporating “Number Sense” in lesson plans
5. Implementing the “5 Practices for Orchestrating Productive Mathematics Discussions” by Smith & Stein (2011)
 - Anticipating
 - Monitoring
 - Selecting
 - Sequencing
 - Connecting

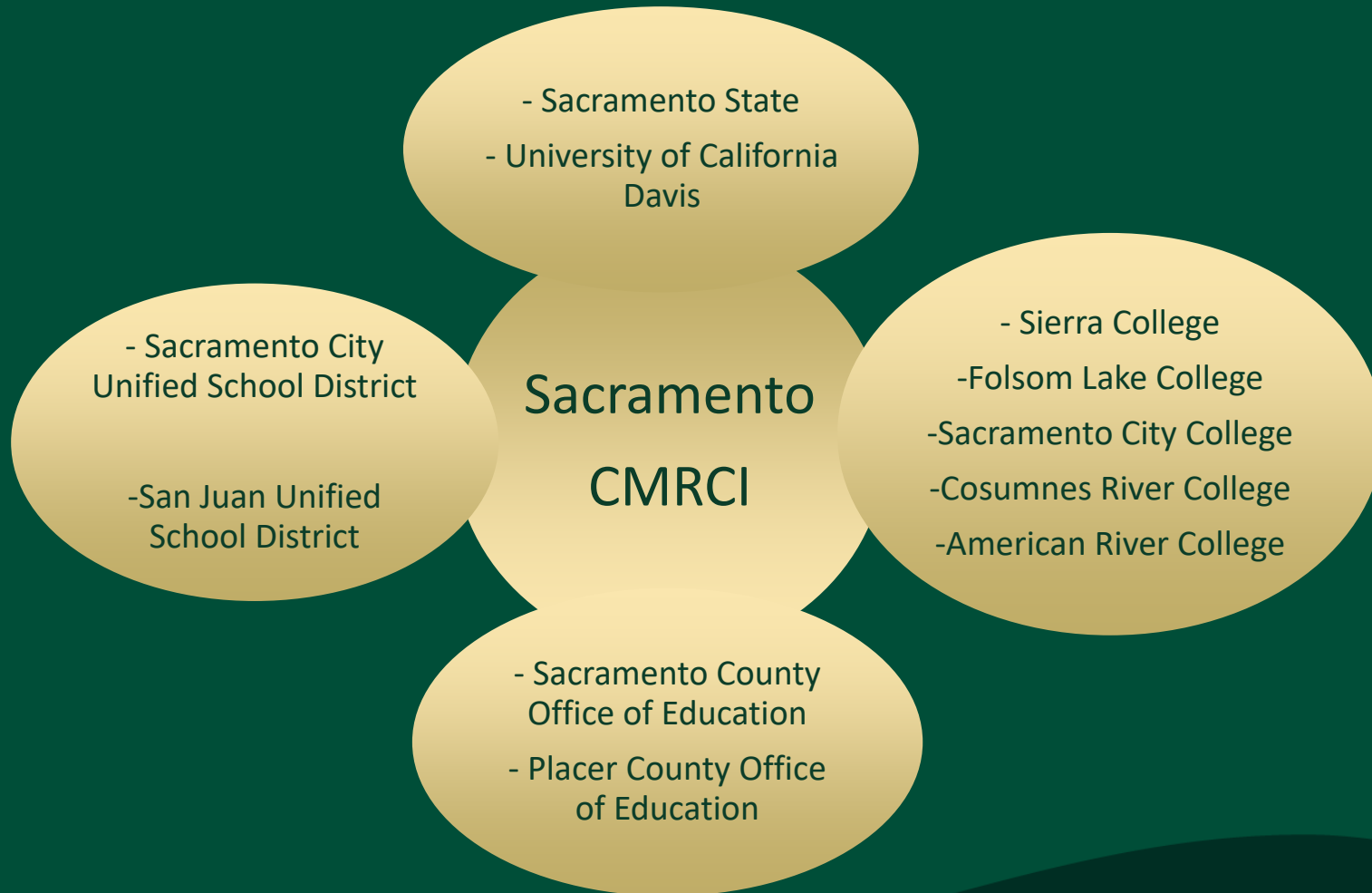


Professional Learning Program

1. Develop collaborations and cohesiveness as a team
2. Understand each person's role in the partnership
3. Learn the philosophy, pedagogy and structure of the ESM course
4. Experience and understand the mathematics content of the ESM course



Intersegmental Partnerships



The Evaluation Plan

Teachers	Did teacher content, pedagogy, and self-knowledge change?
Students	Were students able to do the work and out-perform non-ESM students?
Principals	Did Principals support ESM teachers as well as students?
Intersegmental	Did partnerships share responsibility of mathematics success? Did understanding of matriculation, readiness, and alignment change among the segments?

* IRB approval from the Sacramento State IRB Committee with 23 teachers & 11 principals participating

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