

## **Biggest Challenges**

1. Special needs populations – ELL, Special Ed, Math Literacy; expand strategies to enhance learning for all
2. Leadership and communication – understanding changes in mathematics; finding leadership strategies that help teachers stay focused, positive, improving, energized
3. Infrastructure and support – Small schools, HS redesign
4. Assessment – How to use data, formative and summative
5. Alignment and transitions – PK – 16; create a vertical vision of mathematics
6. Certification requirements – for middle school math teachers and ability for colleges to deliver coursework
7. Resistance to change – especially at the high school
8. Acceleration
9. Data reporting system
10. Change the culture of teaching mathematics
11. Small schools – exacerbates all other challenges
12. Coherence of content
13. Focus over time

## **Promising Practices**

1. Rigorous materials
2. Vertical teaming
3. Meaningful collaboration with higher ed
4. Middle school certification in mathematics
5. Summer step-up program for 8<sup>th</sup> graders
6. Cohesion

7. Coaching
8. Use of assessments for instruction
9. Variable use of time
10. Intervention around literacy
11. Looking at student work together
12. Preparing k – 8 teachers for algebraic thinking
13. Creating an expectation that all teachers will continue to learn.
14. Research design and data collection