

The opportunity to attend this conference was one of the best experiences I

have had since becoming the K–12 Math Coordinator four years ago in Livonia, Michigan. To be honest, I arrived unsure of what to expect and worried that I would be faced with three long days of sessions that were unappealing or way beyond anything I felt we could accomplish in my own school district. I left feeling that I had the wonderful experience of meeting and learning from the leading mathematics educators in the country, if not the world. I was re-energized and excited to return home to begin sharing all that I had learned with the teachers and other administrators in our district to increase mathematics learning for the students we serve.

There are three big ideas I took from this conference on which I will share my reflections:

1. Our district is already doing wonderful things in regards to improving math instruction for all students.
2. There are many things that our district can improve on—and I now have a better understanding of where to begin those improvements.
3. We are not alone on our journey toward ensuring that all students understand mathematics at a high level.

1. Our district is doing a lot right, striving to improve math instruction for all students.

- Beginning in the fall, we will have all students, grades K–8, using standards-based math programs as the basis for mathematics instruction. Having good problems students engage in is something that I heard over and over as one of the critical factors and the basis for enabling high student achievement. Marilyn Burns, Iris Weiss, and many others spoke to this and I was thrilled to realize that our district, while working toward this for high school students, will have this component in place to enable teachers and students to build a strong foundation of K–8 mathematics.
- I was re-inspired by the session, “Getting Serious About Making Higher Math Accessible to All Learners,” presented by Felecia Clark of the Los Angeles Unified School District. She discussed the need to close the achievement gap. This is something that we are working toward in my district—especially at the middle and high school levels. I have teachers that are meeting monthly to discuss this work as we also strive to ensure that students meet our state’s new high school graduation requirements for mathematics. Ms. Clark reminded me that that students who come to us with a lower ability or knowledge level need not to “go slower”—they actually need accelerated classes in order to catch them up to where they need to be and help them to move forward.

2. There are many things that our district can improve on and I now have a better understanding of where to begin those improvements.

- The first session I attended on Monday morning was “Math Coaches: Sharing the Journey,” presented by Sherry Beard. This session reinforced the idea that we need strong mathematical leaders in every building and that teachers need someone that they can easily turn to for

assistance and modeling. Ms. Beard reminded me that enabling all students to understand math at a high level requires us to make certain that teachers first understand—or at least have the support in place to help them understand—the math so that they can engage students in the process of learning.

- The session “Developing a Critical Mass of Teacher Leaders Without Using Coaches: Providing a Compelling Vision of the Possible,” facilitated by Cheryl Rectanus, Catherine Boyce and Rosamma Palmer, helped me define what we mean by teacher leaders. I realized that there are several teachers in our district who are leaders in many aspects of the role. However, our challenge is in moving our current “leaders” from being managers of books, messages and materials to the greater role of instructional experts and mentors. Several sessions provided me with strategies (see lesson study, below) on how to begin this work.
- I attended several sessions on lesson study ideas that inspired me to begin videotaping and discussing lesson that are happening in our district. The idea is so simple—tape students in a classroom working on a mathematical task and engage teachers in dialog about what they see happening. There is really nothing sophisticated about this to begin (besides being one of the most intimidating things we can ask others do), however, I believe that the impact of having teachers focus on the discussion, language, and mathematics that students engage in will dramatically influence lesson design in our district’s classrooms. I also realized that by having the segments focus on students’ dialog, rather than the teacher’s role, we can begin the conversations in a much less intimidating way.

3. *We are not alone on our journey toward ensuring that all students understand mathematics at a high level.*

- Linda Gojak’s session, “Leading to Make a Difference” focused on leadership lessons learned that I realized that reinforced for me that even the most experienced leaders, and people that I look up to, struggle with the same things I do as a beginning leader.
- NCSM’s new president, Dr. Timothy Kanold, spoke of the role of leadership in mathematics. As our organization’s President and a leader in mathematics education, I realized that he—at one of the most well-respected school districts in the country—once faced the challenges that I am facing in the district where I work. He shared a story about the challenge of lowering the number of D’s and F’s in his department when he began there several years ago. He spoke about the fact that it took the department 12 years to reach their goal of single digit D’s and F’s. And, he reminded us that even if we didn’t think we could accomplish the goals we had in mind for our own district, we had to at least begin moving toward it—that letting a bad situation continue because we are too overwhelmed by the magnitude of the change was not a reasonable option. I will take this back to my district and will continue the work of increasing student achievement by celebrating the small steps that will eventually lead to much larger gains overall.
- Many discussions I had with other’s I met at breakfast, lunch, or waiting for sessions to begin demonstrated to me that we are all working toward a common goal of helping teachers find ways to increase student achievement. This is a daunting task that often leaves me feeling overwhelmed. The fact that I am not the only person struggling to do this actually brings me much comfort. As I shared the struggles I face with other people, I was encouraged that the more we work together and learn from the small things we have each been successful in achieving in our own districts, we will eventually make a huge impact on how math instruction is delivered in our schools. This conference was a fantastic opportunity to begin to learn from one another and take the successes that others’ have achieved back to our own

communities. Without the chance to learn from one another during these types of experiences, our challenges would be much greater. I know that I will look forward to beginning to implement what I have learned at the conference in my district. I will look forward to the next opportunity I have to attend the NCSM annual conference and share and learn with others.