

47th Annual NCSM Conference, Boston, Massachusetts

Iris Carl Grant Recipient Reflection

The 2015 NCSM Annual Conference was an inspiring event for professional growth. Along with the friendly smiles from the NCSM staff and volunteers to the multitude of sessions, this learning opportunity allowed me to make connections with other leaders in math education, reflect on my current practice, and create a vision for how I will continue to enhance learning for my students. This reflection will focus on three of my professional goals from my adventure at NCSM Boston: acquire a growth mindset, embrace technology, and focus on best practices.

Acquire a Growth Mindset

Jo Boaler's presentation *The Mathematics Learning Revolution* provided a path for how teacher leaders can change learning mathematics in their classrooms. She promoted that we must stray from our fixed-mindset by providing greater opportunities for all students to succeed in mathematics using a growth mindset. As teachers, we must encourage our students to make mistakes. We must provide students with challenging work where they will make mistakes. Learning from their mistakes will encourage growth in our future mathematicians.

Embrace Technology

In the 21st century, there is no doubt that technology has transformed learning. As a professional, I have access to a global learning community through the use of online hangouts, chats, tweets, and webinars. Jacqueline Burns demonstrated in her presentation on *Creating a "Professional Learning Pangaea" Using 21st Century Tools & Technology* that educators must take advantage of online resources as part of their personal learning network.

Our students learn much differently than we did. The current generation of learners has not known a life without immediate access to information from the Internet using their handheld devices. As leaders in education, it is essential to use the power of technology to create meaningful mathematics tasks for our students. Not just through the use of games, but by productively engaging learners in the content through mathematical investigations. Paul Gray's presentation *Using Digital Open-Source Education Resources in the Secondary Classroom* focused quality learning resources for the math classroom such as Geogebra, National Library of Virtual Manipulatives, NCTM Illuminations, and PhET Interactive Simulations. Dan Meyer's presentation *The Future of Math Textbooks (If Math Textbooks*

Have a Future) challenged leaders in education to think outside of the box regarding the delivery of math education. When it comes to technological tools, he shared “Don’t make home use more like school use. Make school use more like home use.” Educators must start encouraging students to be resources for each other and consider how social media can be used to enhance learning.

Focus on Best Practices

Jennifer Wilson’s and Jill Gough’s presentation on The Art of Questioning: Transforming Your PLC reminded teachers why we ask questions: to uncover students’ thinking and to push or advance students’ thinking. It is the responsibility of educators to help students participate in meaningful mathematics discussions, which can be done through the art of asking good questions. Active questioning encourages students to understand problems at a deeper level, discover misconceptions, guide instruction, and make connections. Using Five Key Strategies for Effective Formative Assessment to Promote Formative Assessment Strategies in Schools presented by representatives from Boston Public Schools focused on the NCTM research brief on formative assessment. Formative assessment provides a pathway to collect evidence on classroom happenings so learning can be personalized to meet individual student needs. Teachers must transform their classroom into an environment that promotes students as owners of their learning and encourages students to serve as resources for each other throughout the learning process. The inclusion of classroom discussions, questions, activities, and task that challenge students to think and share their knowledge is a means for greater student achievement.

Final Thoughts

When I assumed my role as a mathematics department chair, my predecessor told me that if I had the chance to attend a NCSM conference that I need to go. He was correct. I am very grateful to NCSM and the Iris Carl Grant for the incredible opportunity to learn from and network with other leaders in math education. When you have a large group of professionals together that all strive for a better math education, the energy is simply contagious.

Sincerely Submitted by:

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