Iris Carl Report New Orleans NCSM Conference 2014 Mary Ann Sheridan

"You can do anything you want as long as you are willing to work for it!" said Patrick Sheridan, an avid reader, advocate for higher education while he himself was a high school graduate, blue collar worker and father of five. I realized during the *Building a Growth MindSet Community for Mathematics* session with David Dockterman and Lisa Blackwell that my father understood the power of encouraging mind growth in his children. Hence, here I am, a NYC housing-project kid, twice National Board Certified, and a teacher-leader who thrives on efficient effort. My joy of fostering an appreciation for mathematics in middle schoolers and collaborating with colleagues motivates me. I am grateful to receive the Iris Carl Travel Scholarship, and I have returned to my various educational communities in rural, northern California with a plethora of information to share.

This year's NCSM program strands provided me the opportunity to professionally grow, first and foremost, as a mathematics educator, but also as a teacher-leader/coach. As a classroom teacher, I attended sessions on MindSet and brain theory and hands-on sessions where we practiced strategies for supporting students with special needs in a mathematics class. Other sessions highlighted the importance of consistent conceptual mathematics instruction. As a teacher/leader I attended sessions that focused on planning professional development through the lens of the Progressions Documents for the Common Core Math Standards, while others focused on the technology tools available to support formative assessment. Of course all of these sessions will support my teaching and my collaborative work with colleagues. As we know collaboration is a core to the process of learning; I am excited to share these NCSM treasures with my students and colleagues while learning about mathematics.

As a teacher and as a coach to student teachers and new teachers, I recognize the importance of planning long-term units and short-term lessons. However an integral element of such planning is a means to support ALL students, some of whom struggle to express their mathematical thinking, but who have so much to share with all of us. Dr. Deborah Loewenberg Ball clearly demonstrated that explicit teaching does not equal direct instruction, and we as mathematics teachers can foster students' learning by making content visible, providing language and tools and supporting their explanatory talk and writing. This requires planning on the teacher's part and collaboration within a school site/district. Dr. Jo Boaler's presentation on inequality clearly stated that we need to remove the 5 barriers to high and equitable math achievement: In the center: Math without Sense Making, surrounded with Beliefs about students, Ability Grouping, Speed, Narrow Math. It is this talk that I bring to my local middle schools and high schools.

Last, but not least, another important and fun aspect of the NCSM conference was networking. I made connections with publishers and vendors to review their products. I even won a prize from The Math Forum@Drexel- a year's subscription to their problems. I shared sessions and meals with my Park City Math Institute Fellows, my colleagues from the California Math Council to the North and educators from every state and various educational communities whose main goal at this conference is to sharing our advocacy for challenging and attainable mathematics education. How invigorating and validating!

Since returning home, I have tried some strategies in my own classroom, created a Live Binder to organize my treasures from this NCSM conference and have been in contact with my colleagues in various educational communities discussing the best process for my sharing.

I immediately showed some videos on neuroplasticity to my students as part of a minilesson and class discussion on mind growth prior to working on the Smarter Balance Practice Questions. My students responded with a willingness to persevere on the problems and grow their brain pathways. I have since shared information about Jo Boaler's upcoming class for teachers and students with colleagues in my district, county, and our regional beginning teacher program.

I must say it was the sessions on MindSet that inspired me to build my own Live Binder. Originally it would include only tabs referring to building a growth MindSet, but I realized a Live Binder was the best way for me to organize and share all the information digitally with others. Who knows? Maybe I am adding new neuron connectors in my brain. It is a work in progress (our brains and my Live Binder); I am open to feedback and collaboration. In closing, I hope my binder is helpful, and I will see you again on the pathway of mathematical education.

Here is the link to my Live Binder: <u>http://www.livebinders.com/edit?id=1325306</u>