MMSA Symposium Agenda (DRAFT)

May 25, 2018
University of Maine Augusta
Jewett Hall

- **8:00 - 8:30 Registration**

- **8:30 - 9:00 Welcome and Keynote**

    - Building Community and Your Network
    - Anne Gauthier Recognition

- **9:00 - 9:45 Concurrent Lessons Learned Sessions -** led by educators, partners, and skill builders with MMSA Staff

1. *Giving Youth Voice and Choice* Perrin Chick
   Research shows that the more youth talk through STEM challenges, the more inclined they are to pursue STEM careers. How do we as educators foster this? Educators will see the skill in action, in a variety of educational settings. You will experience several engaging strategies and will leave with easy to adapt resources.

2. *Beyond "Hands on" Mathematics: Making shifts in secondary mathematics* Hannah Lakin & Renee Charette
   What does it take to move beyond "hands-on" math activities led by a teacher to a student-centered environment where students are doing mathematics in the field. From working on modeling wind power at the local wind farm to designing a school of the future, teachers from the Experiential Math Project will share some of their experiences facilitating math learning experiences beyond the walls of the classroom.

3. *The STEM Hub @ Roberts Farm: How MSAD 17 cultivates STEM learners Outside-of-School* Jennifer Atkinson & Jan Mokros
   Pat Carson from Oxford Hills School District will present on how MMSA has helped transition the school district's summer camp at Robert's Farm into a summer of STEM learning.

4. Skill Builder: *Host Your Own Family Code Night!* Stefany Burrell
   Family Code Night is a community event that engages children and their parents as they do their first hour of coding together. In this workshop, we'll look at the

original elementary programming and get a preview of the new middle school activities. You will leave this session with the tools and support you need to host a Family Code Night in your own school, library, afterschool program, or community center.

- **10:00 - 10:45 Concurrent Lessons Learned Sessions -** led by educators, partners, and skill builders with MMSA Staff

1. *Being a "STEM Guide" in the Classroom:* Jennifer Atkinson & Jan Mokros
   Alyson Saunders from Dexter High School will present about how she applies her STEM Guides "brokering" skills to her work as a classroom teacher. She'll share what she's learned about supporting her students in noticing and pursuing STEM learning experiences outside-of-school.

2. *The Art of Asking Purposeful Questions* Perrin Chick, Sue Allen & Scott Byrd
   When we reflect on the questions we ask youth, we often see that we are not intentional nor effective. Asking purposeful questions means first thinking about the purpose of a lesson, then planning out some of the questions we use to explore youth thinking. The ACRES project has been encouraging educators to record their teaching and reflect on their practice by focusing conversation on the art of asking purposeful questions.

3. Today's *Maine State Science Fair* Stefany Burrell
   Behind every great science fair project is a supportive teacher. Come meet some of our Teacher Fellows and hear how they've provided the opportunity for their high school students to present their own original scientific research and engineering design projects at the Maine State Science Fair. Teachers: Sarah Southam (Telstar High School) and Rad Mayfield (Old Town High School)

4. *"Learning About" to "Figuring Out:" Leading the Shift to Three-Dimensional Teaching & Learning* Lynn Farrin & Lisa Marchi
   Come learn about the shifts from "learning about" to "figuring out" as outlined in the Framework and NGSS. Hear how ME teacher leaders are applying their learning about the major shifts in their classrooms. Develop plans for how you might be able to lead the change initiative in your school! Teachers: Holly Patenaude, Stacey Woidt, Bethany Poulin, Diana Allen, Brock Sanborn

5. Skill Builder: *Computer Science 101* Renee Charette
   What is computer science and why is it important for all students to learn? How far along are we in implementing CS in schools across the US and in Maine? How can I

begin introducing my students to CS using available resources? This session will serve as a skill builder allowing participants to walk away with a deeper understanding of an important and relatively new topic in education.

- **11:00 - 12:00 Panel and Small Groups -** Building your Networks for continual professional development and learning

- **12:00 - 1:00 Lunch**

- **1:00 - 1:45 Concurrent Sessions -** led by educators, partners, and skill builders with MMSA Staff

1. *The Computer Science Landscape in Maine* Tom Keller
   Join a panel of teachers who are implementing computer science instruction, some as long-time CS teachers, some new to the task. Hear their stories about successes and barriers to their efforts, and about support for CS in their schools and finding quality professional development that supports their work.

2. *WeatherBlur: Helping teachers excel in place-based learning* Lisa Marchi
   Join a panel of WeatherBlur teachers who have developed and run place-based citizen science learning in their local communities. See examples of how teachers have led students through SMART questioning, forming protocols and investigations, collected and analyzed data about important issues for their schools and towns.

3. *Dispelling the Myths of "New Math"* Renee Charette & Hannah Lakin
   This session will include hands-on activities and discussion to allow participants to develop their conceptual understanding of various math topics, and to learn why these shifts in practice have a positive impact on math students. Guest teacher leaders from schools in Maine will share examples of how these shifts in practice have made a difference in their students' understanding.

4. Skill Builder: Zoom Perrin Chick
   Skype can be tricky to use, Google Hangout has its hang-ups, and Zoom is certainly not your father's Adobe Connect. Come learn about this versatile tool that is changing the way people come together. Whether you want to connect kids to geologists or you want to connect to colleagues on snow days, here's why Zoom is our preferred platform.

- 2:00 - 2:30 **Closing Group Activity** - Linking formal and informal education