



New York State STEM Education Collaborative
2018 STEM Education Summer Institute
July 28th to July 30st, 2019



List of Our 2019 Presentation Topics
Presentation Descriptions Will Follow Soon!

Double Sessions Are Shown in Red!

Theme: STEM Connects All: Never Too Early, Never Too Late

1. One and Done ...now teaching is fun!
2. **Inspiring Young Minds to Computer Networking and Cybersecurity**
3. A Global Look at Quadratics in Sports
4. The Next Step in STEAM
5. Time to Tinker: A Model for Introducing Engineering and Design Standards in Elementary Schools
6. E²- Engaging Events
7. Equity in STEM Education
8. **Using the power grid to solve technical problems**
9. Developing Perseverance in STEM Activities to Improve Reading
10. GETT Ready for Stem Camp
11. **Java Coding with Processing**
12. **Robot Virtual Worlds and cs2n.org**
13. **Teaching Statistics: Let's Stop Ignoring Nominal and Ordinal Scales of Measurement**
14. Getting Started with STEM Camps
15. Transitioning Concepts of Nanotechnology from Elementary to Secondary Students with Sand
16. Basics of Google Sheets: Tricks for Analyzing Assessment Data
17. Science: Transcending Boundaries and Supporting Students for Their Future
18. Teaching "Computational Thinking" in K-12
19. Articulating two different models of Engineering Design in STEM classrooms
20. Differentiated Knowledge within STEM education
21. Technology Education, Design Based Learning, and STEM Instruction
22. Demystifying the NY-NGSS: Use Phenomenon-based Learning to Make Learning Come Alive!
23. WeBWork and FishMath
24. **Engaging Students Through Desmos Activity Builder**
25. **Nerf Guns and More!**
26. Creatively Challenging Students in the STEAM Classroom
27. Mental Math Tips and Tricks: "You Mean Those Properties Can Be Useful?!"
28. History-infused Mathematics Instruction
29. Maps, Math, Media: Transdisciplinary STEM Projects
30. **Application of Math Equations in Architectural Engineering**
31. Professional Engineering Skills: Preparing Your High School Student To Enter A College Program and Beyond.
32. "Flipped" vs Traditional Teaching of Statics: Some Experiences from the Trenches
33. QFT - Questioning for Learning
34. See the poster
35. Jumpstarting I-STEM for All Children
36. Supercharging science instruction with real virtual science labs

Plenary Session

STEM Trivia

Three Tours: Clean Room, Agricultural Robotics, Nurse Training Facility & Labs.

Keynote Speakers

Dr. Anthony G. Collins

Dr. Robert Rogers –

Dr. Kristina M. Johnson –

President of Clarkson University

SUNY Fredonia Distinguished Teaching Professor

Chancellor of the State University of New York