

# Keynote

## *Developing a STEM Curriculum*

Gina Navoa Svarovsky, Ph.D.

*Assistant Professor of the Practice, Notre Dame Center for STEM Education*



Dr. Svarovsky is an Assistant Professor of Practice at the University of Notre Dame Center for STEM Education. For over a decade, she has been interested in how young people learn science and engineering in both formal and informal learning environments. Specifically, her research interests are focused on exploring how youth from traditionally underrepresented populations in engineering are able to develop engineering skills, knowledge, and ways of thinking as a result of participating in a variety of learning experiences. Dr. Svarovsky also holds a joint appointment in the College of Engineering at Notre Dame and teaches in the First-year engineering program.

Prior to joining the faculty at the Center for STEM Education, Dr. Svarovsky worked as a Senior Evaluation and Research associate at the Science Museum of Minnesota. She also taught physics at St. Petersburg Catholic High School for two years as part of the ACE Teaching Fellows program.

## *Developing STEM Leadership*

Celia Anderson

*Associate Professor of Instruction Curriculum Leadership, University of Memphis*



Dr. Anderson is an Associate Professor in the Secondary Education program area of the Department of Instruction and Curriculum Leadership. Her area of specialization is Mathematics Education. She holds a Ph. D. in Curriculum and Instruction from the University of Wisconsin-Madison, an M.Ed. from the Harvard Graduate School of Education, and a B.S. in Mathematical Sciences from the University of Memphis. Her scholarship focuses on equity in mathematics education; mathematics teacher professional development; and critical race theory in education.

## *Computer Programming and Coding*

Marcello Donato

*Systems Engineer, Christian Brothers High School*



Marcello Donato began programming in BASIC on an Apple ][e when he was 9 years old. He has been trying to bend machines to his will ever since (with varying degrees of success). He graduated from the University of the Ozarks with a Mathematics major and a Computer Science minor and is a Microsoft Certified Systems Engineer. Marcello has worked for the past 15 years at Christian Brothers High School as a website developer, database and server admin, and software systems integrator. He also helped implement the one-to-one laptop program at CBHS. In his free time he enjoys learning about 3D modeling and animation and teaching his three children about computers and programming. His wife Mitzi also works in technology as the webmaster at Saint Benedict High School.

## *Mathematics Across the Curriculum*

Dr. Drew Polly

*Professor of Mathematics Education, University of North Carolina at Charlotte*



Drew Polly is an educator, professional development facilitator, and educational researcher. He currently works at the University of North Carolina at Charlotte teaching courses in mathematics education, elementary education, and educational technology. His interests involve supporting teachers' use of student-centered strategies and learning technologies into their teaching of mathematics. Polly is a former fourth and fifth grade teacher who has facilitated workshops and worked in classrooms from Kindergarten through Grade 8.