K-12 STEM TEACHER VIRTUAL CONFERENCE

Saturday October 3, 2020 | 9:00am—12:30pm

MERCY COLLEGE | CENTER FOR STEM EDUCATION

Mercy Center for STEM Education

@mercy_stem

https://www.mercy.edu/stem-learning

WELCOME 9:00AM

MERCY COLLEGE CENTER FOR STEM EDUCATION

We are excited to welcome you to our first *virtual* K-12 STEM Teacher Conference! The year 2020 has presented more challenges than any of us could have imagined and teaching has changed dramatically since this time last year. That is why we are grateful to be able to offer this conference to our wonderful community of teachers to learn, share, and come together to support one another and K-12 teaching and learning. We hope that you take away tools you can use with your students tomorrow and meet colleagues with whom you want to stay connected. As we all are feeling the 'Zoom fatigue,' we recognize that your decision to be here on a Saturday is significant and thank you for joining us online.

We wish you a great 2020-21 school year and hope to see you in person at one of our future STEM events!

Dr. Amanda Gunning and Dr. Meghan Marrero, Co-Directors

CENTER STAFF

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MISSION

The mission of the Mercy College Center for STEM Education is to create opportunities for groups typically underrepresented in STEM to engage in enrichment activities for learning, career readiness, enjoyment, and personal and community growth, which may not be available through school districts. The MCCSE is the only such academic center in the Westchester and Rockland region and hosts events, organizes activities, and conducts research related to STEM education. In an increasingly technology-oriented society, the importance of STEM education is paramount. Through the Center for STEM Education, Mercy College is situated to address these challenges and meet STEM education needs of underserved groups through research-based work with our own students and community

For login or other questions during the conference, please email Mary Ushay at mushay@mercy.edu

KEYNOTE 9:15-10:00 AM

Zoom A:

Classrooms Without Walls:

Connecting Students with Scientists, Rainforests, and Ocelots

In 2003, Jacalyn Willis and Katrina Macht co-created the interactive virtual program *The Rainforest Connection* to bring diverse scientists into K-12 classrooms, engaging in conversations about research questions and methods, as well as exploring the habitats and lives of ocelots and other wild creatures.

Dr. Jacalyn Giacalone Willis
Director, PRISM (Professional Resources In Science & Mathematics)
Montclair State University, NJ

Dr. Willis has 25 years of experience in K-12 science education and founded PRISM, a professional development center for teachers at Montclair State University. She is an innovator in the use of videoconference technology to connect K-12 classrooms with researchers at the Smithsonian Tropical Research Institute in Panama and with students, teachers, and researchers in Belize, Australia, Madagascar, and Thailand .

Dr. Katrina Macht
Co-creator, Rainforest Connection and Consultant, PRISM

Dr. Macht is a curriculum specialist, who is nationally recognized for her expertise in environmental education. Since 1993 she has served as a workshop facilitator and teacher-trainer for PRISM, for Next Generation Science Standards (NGSS) in New Jersey. For the past 20 years she has worked with PRISM to link scientists in the field to classrooms throughout the United States, by way of interactive video broadcasts from Panama.

SESSION 1 10:00-10:45AM

Zoom A:

DNA Learning Center Virtual Lab Field Trips

Cold Spring Harbor Laboratory's DNA Learning Center is now offering virtual lab field trips for students in grades 5-12. Come learn about special programming for this year and learn how students can do some hands -on activities at school or home. A demo of an "at home" human DNA extraction will be performed during the workshop.

Presenter: Melissa Lee, Educator, Regeneron DNA Learning Center
Moderator: Dr. Amanda Gunning, MCCSE

Zoom B:

Integrating STEM resources from NASA into Blended Learning Contexts

Explore NASA STEM@Home resources with Endeavor STEM Teaching Certificate Project teacher educators. Learn about resources specific to elementary STEM classrooms and discuss how to integrate mission goals and data into your integrated elementary teaching. Workshop presenters will model online teaching tools during the workshop to demonstrate how NASA STEM@Home resources can serve students learning virtually and in the face-to-face classroom. Workshop participants will learn of several NASA resources, gain access to resources pages, and have an opportunity to collaborate with one another and the presenters to make sense of the wide range of STEM@Home ideas provided through the NASA Office of STEM Engagement.

Presenters: Karen Woodruff, Director, Endeavor STEM Teaching Certificate Project and
Dr. Annie Arnone, Dean of Students, Endeavor STEM Teaching Certificate Project

Moderator: Dr. Meghan Marrero, MCCSE

Zoom C:

Using Technology to Teach Science

Learn to use the Socratic seminar method/variations with your current work; explore science internet resources and how to effectively display digital work assignments online. This workshop is intended for upper elementary teachers, but can be used in middle school and beyond.

Presenter: Aimee Ferguson, Jefferson Elementary School, New Rochelle and Wipro Science Education Fellow

Moderator: Dr. Kristen Larson, MCCSE

ROUNDTABLE SESSIONS 11:00-11:40AM

Zoom A: You will be placed in your registered roundtables

Storytelling in the STEM Classroom

Dr. Wendy Mages, Assoc. Professor, Childhood Education, Mercy College

This interactive, experiential, breakout session will begin with a brief user-friendly discussion on the neuroscience of storytelling and on ways you can use storytelling in the STEM classroom. Then, based on Hemingway's 6-word story, you will have an opportunity to experiment with crafting your own 6-word STEM story.

Classroom Culture in a Virtual Environment

Stephanie Rochester, PS 189x - Cornerstone Academy for Social Action , Bronx

One of the many challenges of teaching remotely is creating a classroom community while teaching from a distance. Join us for a roundtable discussion and exploration of strategies and tools that foster a sense of community and connection in virtual classrooms.

Family Learning and Outreach for Research and Education in STEM (FLORES): Family Science Outreach Nights (K-2)

Marcia Manzueta, Thomas A. Edison Elementary School, Port Chester and Wipro Science Education Fellow

This bilingual program aims to engage parents in STEM discovery with their children while learning how to promote questioning and investigation. Marcia implemented these 3-session evenings in her Port Chester school district and will discuss what it looks like.

Equity and Diversity in the Classroom

Dr. Amanda Gunning, MCCSE, and Marguerita Street, Math Teacher, Yonkers Public Schools, Mercy STEM Master Teacher Fellow and Sister to Sister International Board Member

It is always important to consider student diversity in the classroom, but given recent events these conversations can be emotionally charged. Join this round table to discuss supporting students and using Culturally Relevant approaches for STEM teaching.

Tech Tools for Elementary Education

Dawn Huston, Information Technology Facilitator, New Rochelle City School District

An exploration of the best tools for online learning for elementary students.

Teaching Math Remotely

Ileini Romero, Math Teacher, Park East High School, NYC

Teaching math remotely has its own unique challenges. Join us for a discussion of tips and tricks to make virtual learning of expressions, equations and figures more accessible to all.

Digital Interactive Activities for the Science Classroom

Dani Jackson, High School Chemistry Teacher, Subject Area Rep. Westchester STANYS

(Science Teacher Association of New York State)

Need to convert your activities to the virtual world? Want to step up student accountability while they are working remotely? Google docs, slides, interactive notebooks, card sorts, and webquests will actively engage students of any age. Bring a lesson you would like to work on!

SESSION 2 11:45AM - 12:30PM

Zoom A:

Teaching Statistics using Covid-19 Data

Find out innovative ways to effectively teach students using real-world contexts in a digital mathematics classroom. Through using data from COVID-19 pandemic, learn how mathematics, and more specifically statistics, can be critically important in understanding how to slow the spread of the virus and engage stu-dents.

Presenter: Christian Esposito, Math Teacher, Riverside High School Yonkers and Mercy College STEM Master Teacher Fellow

Moderator: Dr. Amanda Gunning. MCCSE

Zoom B:

Place-Based Education for Sheltering in Place

Long-time outdoor educator Elisa Caref will give tips, insight, and resources to help bring the environment into our homes. Attendees will be provided several methods to help teach about their students' local environments on and off the computer screen. This will be appropriate for K-12, as there will be websites, apps, and activities that can be molded to a large range of age groups.

Presenter: Elisa Caref, Dir. of Education, Sarah Lawrence Center for the Urban River at Beczak

Moderator: Dr. Meghan Marrero, MCCSE

Zoom C:

Integrating STEM into an Elementary Classroom: Voices from Different Districts

A panel of elementary teachers from three different high-needs districts discuss challenges and successes of implementing STEM in their classrooms.

Johanna Vasquez, Trinity Elementary School, New Rochelle, and Mercy College STEM Master Teacher Fellow

Lindsay Chudoba, Science Instructor for Port Chester Elementary Schools, and Mercy College STEM Master Teacher Fellow

Elyse Blueglass, John Paulding Elementary School, Tarrytown

Moderator: Dr. Elena Nitecki, Chair, Elementary Education, Mercy College

Thank you for attending our K-12 STEM Teacher Conference!