SCONYC's Annual Conference for NYC Educators

Shifting Standards: The Future is Now

Saturday, March 16, 2024, 9:00AM - 2:30PM
Clara Barton High School, 901 Classon Avenue, Brooklyn, New York 11225

Conference Session Agenda and Description

Registration* 8:30- 9:15

*coffee, snacks and networking

Session 1 (9:30-10:30)

1A *Teaching with Impactful Phenomenon (MS/HS)*

Presenter: Lissa Johnson, Mosa Mack Science

Not all phenomena are equal. How you kick off your unit sets the tone for the entire unit itself. Learn what makes a phenomenal phenomenon that keeps your students engaged. You'll learn how to choose and implement the best science phenomena. You'll also receive free access to Mosa Mack Science phenomena lessons.

1B *Hydroponics in the Urban Classroom (Elementary/MS/HS)*

Presenter: Becky Higgins, New York Sun Works

We will introduce participants to hydroponic technology, specifically focusing on the benefits of hydroponics in urban areas. Participants will then understand how hydroponics fits into themes of climate education and is connected to NGSS standards. Participants will create their own passive hydroponic systems using recycled water bottles they can bring home.

1C *Science and Engineering Practices for Culturally Responsive Teaching(MS/HS)*

Presenter: Ingrid Lafalaise, NYC DOE

We will explore how to build equity in the science classroom through students' engagement in science and engineering practices through select principles of culturally responsible sustainable education.

1D *Science Inquiry through Outdoor Learning (MS/HS)*

Presenter: Migdalia Sanabria, Columbia Secondary School for Math, science and Engineering

Teachers will learn how to use the outdoors as their classroom for Inquiry in Science. They will collect data on trees to help their students classify them using a dichotomous key and measure the amount of CO2 they have removed from the atmosphere. In addition, they will learn how to use inquiry, science, and math skills to allow their students to collaborate as a team of scientists.

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Session 2 (10:45-11:45)

2A *From Fins to Facts: Unveiling Stickleback Inheritance (HS)*

Presenter: Tanea Hibler, HHMI

Fish for freshwater sticklebacks, explore their traits and predict patterns of inheritance. Grab your card set and practice evaluating data from genetic crosses to write a claim supported by evidence and reasoning (CER). We can explore Chi Square Analysis as a data analysis tool if time permits. Join HHMI for an engaging workshop.

2B *Paper, Tape and Scissors - Low-Tech Innovations (E/MS)*

Presenter: Godwyn Morris, Dazzling Discoveries

Access to supplies is often a barrier to learning, yet amazing projects can be made with paper, tape, and scissors. Learn how to transform paper into creative roller coasters, catapults, windmills, and dozens of other hands-on engineering projects.. Using Engineering with Paper techniques, I will show you how you can confidently guide students through innovative, creative, curriculum-based STEAM projects in school or via online platforms. This workshop will get you cutting, folding, connecting, and building in minutes and be ready to implement new activities with students immediately.

2C *3D Printing using Tinkercad (HS)*

Presenter: Peter Tsun, Newtown High School

Participants will be introduced to Tinkercad where they can quickly design a physical experiment and run it with simLab. For example, one can design an inclined plane and place a block on it, and simulate it to measure the time of sliding down the incline. They will also be introduced to Code blocks where they can use programming principles to design a 3d object. Applications to physics and electronics to design electric circuits will be highlighted. Bring your laptop & unlock creativity!

2D *Trout in the Classroom (E/MS/HS)*

Presenter: Nicki Alexander, NYC DEP - Trout in the Classroom

This workshop will include an overview of NYC DEP, an overview of Trout in the Classroom (TIC), and a short activity to demo some of the curriculum used by the TIC program.

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Session 3 (12:00-1:00)

3A *Explore Resources with Science News Learning (Elementary/ MS/HS)*

Presenter: Maria Cheryl Diango, School for Classics High School

Come to this session to learn and explore all the Science News Learning program offers. Discover the extensive libraries of Science News Learning resources and explore lesson plans that connect these real-world issues to core curricula and science research. In this session, participants will dive into Science News Learning content and discuss the meaning and importance of developing scientifically literate students. Participants will learn how to incorporate Science News Learning resources into their regular curricula to support their students in meeting the NYSSLS (New York State Science Learning Standards).

3B *Buildings, Bridges, and Structures, Oh My! (E/MS)*

Presenter: Joan Gillman, The Browning School

In this workshop, participants will learn how I conduct an engineering unit with my lower school students, mainly using recyclable materials. In my classes, we cover skyscrapers and bridges. I will demonstrate how we celebrate the successes of many different countries and cultures regarding engineering. Videos will be shown and recommended. I will share how to incorporate diversity and equity topics around the engineering theme. Participants will be allowed to build a simple structure with their table partners. Have a blast as you try out your building skills!

3C *Data Literacy using Data Classroom (HS)*

Presenter: Stacy Goldstein, DataClassroom Inc.

Data literacy is an essential skill for teachers and students, especially when using NGSS to guide learning in the classroom. From asking questions, defining problems, analyzing and interpreting data, and engaging in arguments from evidence, we need to collect, visualize, and analyze data efficiently and proficiently. In this workshop, high school teacher Stacy Goldstein demonstrates how she has been using DataClassroom, a graphing and analysis tool that was pedagogically designed to aid the learning experience in her classroom. Stacy will work through examples of how to work with datasets from the student's point of view and how to handle the teacher's facilitation. This session is for anyone looking for a meaningful way to work with data in the classroom.

3D *Explore the Role of Reflection and Metacognition in Learning with Kognity (HS)*

Presenter: Sasha Ferreira, Kognity

Join Kognity as we explore the importance of having students share initial ideas, investigate, make sense, and reflect on their learning journey. In this session, we will dive deep into the impact of the practice of reflection and how metacognition plays a vital role in scientific understanding, as reflected in the shift in science standards in New York. We will discuss ways of implementing the skills of reflection and revision for both teachers and students while illuminating mindset shifts in and out of the classroom.

Panel Discussion/ Lunch*/ CTLE pick up (1:30 -2:30)

*Lunch will not be provided and can be purchased in the area.