2023 SPARCC EdTech Conference

July 18, 2023 - In-person and Virtual - conference.apps.sparcc.org

---

Session Information

Title: Enhancing the Curriculum with Technology
Description: Learn how to use technology tied to the curriculum. Screencasting, Developing hyperdocs with extension to PBL, Productive Struggle /3-Act Tasks, Punctuated with tech-driven applications.
Grade Levels: Middle School (6-8), High School (9-12)
Technology Level: Novice - introduction / basics
Time: 8:00AM to 8:45AM EST
Room: T106
Meet Link: https://meet.google.com/civ-twnb-kqh

Presenter Information

Presenter(s): Mary Miller
Organization: Copley-Fairlawn City School District
Bio: This will be my twelfth year as a mathematics teacher at Copley High School (fourteenth year in education). I have been striving to successfully integrate technology in the mathematics classroom. Because mathematics education requires so much traditional "paper and pencil" work, it can often be a daunting task. I am seeking to transform the way we teach mathematics utilizing technology, specifically with respect to differentiating through problem/project-based learning with the integration of technology. Part of the differentiating has occurred through specifically structuring groups from a scientific model of group roles including project manager, scientist, engineer, and logistics. Using the SAMR Model, I have transformed and redesigned projects to integrate technology. Over the years, I have been able to develop individualized instructional strategies to enhance my students' learning and more recently has integrated the use of technology to be more effective. In in addition to my classroom experience, I have presented at numerous conferences in recent years including: NEOTech (2018, 2019, 2021, 2022,2023), SPARCC (2018, 2019, 2020, 2021). Copley-Fairlawn City School District PD (2016-present), GCCTM (2019), Learning Innovations Conference (2019), MEDA 3 (2022).

The Impact of COVID-19 on Teachers' Integration of Digital Technology.

Session Resources

Video Link:
https://drive.google.com/file/d/16ABs8Q2vfzdJbeblx3NDjySKXa2yf6h9/view?usp=sharing

Participants will learn how to use technology tied to their curriculum by highlighting the following:

Recording Lessons/Screencasting: -This will include the benefits and highlights of screencasting. It will include some resources and tutorials on the "how to" portion of screencasting but will primarily emphasize the uses, benefits, and higher-level applications of recording your lessons and making the curriculum accessible to students.

Developing hyperdocs with extension to problem-based learning: -Though I am a mathematics teacher, I will make this applicable to educators of all disciplines. Many of my examples come from mathematics-driven instruction, but I will include resources from other educators in my district from a variety of disciplines. The purpose is to create a bank of templates from which educators can pull from to engage students with the technology while adhering to the standards and time constraints of the curriculum.

Using technology concurrently with productive struggle. The premise is that challenging tasks lead to success. Integrating technology with 3-Act Tasks gives the following positive outcomes: Spark effective problem solving. Solution to developing conceptual change in thinking. Make newfound observations. Value in the challenge. Develops persistence, strong work ethic, and resilience.

Punctuating the curriculum with technology-driven applications: -In order to revolutionize feedback from students and encourage them to provide deep and meaningful thoughts and critique, I will conclude with some technology resources including Padlet, Flipgrid, Desmos/Geogebra, and the question feature on Google Classroom. Students can interact with both the teacher and peers, including video, pictures, and gifs.