

# **Delivering Technology & Engineering Education Instruction in Different Learning Environments**

BLaST IU17  
October 7, 2020

Brandt D. Hutzel  
[brhutzel@pa.gov](mailto:brhutzel@pa.gov)

- 3:30-3:45 – Brief overview of current challenges faced by Technology & Engineering Education educators in different learning environments and sharing of resources.
- 3:45-4:00 – Open discussion

March 2020 - Teachers were called upon to pivot to remote instruction. Technology & Engineering Education teachers faced delivering instruction, at times, without any access to equipment and resources.

August/September 2020 – Schools “reopened” and Technology & Engineering Education teachers were challenged to deliver instruction in remote, hybrid, and face-to-face learning environments.

## Remote Instruction

- Limited or no access to equipment and resources used before the pandemic (both instructor and students).
- Modifying the delivery of Technology & Engineering Education learning experiences that were primarily “hands-on”.

## Hybrid Instruction

- Many variations. Students may/may not have access to equipment and resources.
- Teaching two groups of students synchronous or asynchronous (remote/hybrid and face-to-face).
- Modifying the delivery of Technology & Engineering Education learning experiences that were primarily “hands-on”.
- Hybrid vs. F2F students may be receiving varying instruction.

## Face-to-Face Instruction

- Students may/may not have access to equipment and resources.
- Teaching two groups of students synchronous or asynchronous (face-to-face and hybrid).
- Social distancing and sanitation concerns in a lab setting.
- Hybrid vs. F2F students may be receiving varying instruction or experiences.

- [The International Technology & Engineering Education Association \(ITEEA\) - Open Access At-Home Resources](#)
- [Technology & Engineering Education Association of Pennsylvania \(TEEAP\) TEEAP/NJTEEA Collaboration](#)
- [PDE Technology & Engineering and STEM Resources](#)
- [Ideagarden](#)
- [PA STEM Toolkit](#)

1. What challenges have/are you facing in your Technology & Engineering Education classes?
2. What teaching strategies and/or resources have you found to be useful during these times?