

#### An Array of Technology to Engage and Enhance Learning Tech Connect 2020



Dennis Dahlquist Sac State (CSU Sacramento) Engineering and Computer Science





Outcomes for this session:

- How technology can help create an agile flexible learning environment
- Using a chat channel can help students provide comments and questions in a more facilitating manor.
- How multiple applications can be used to improve the classroom learning environment.









- Utilizing streaming and presentation technology allows courses to be agile and flexible providing students choice to participate in the class the best way that fits their learning needs.
- Students do not need to be locked into only a face to face, hybrid, or online format.
- Students may choose any or all formats and change throughout the course. They may want to start off as face to face and then switch to hybrid or online, or any combination that meets their learning needs.









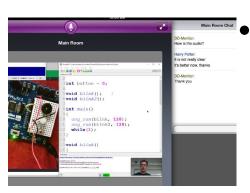


- Some software applications like Zoom may provide a better online tele-presents than actual face to face course.
- With presentation software like Zoom, everyone in the Zoom session is able to see the screen presentation the same, instead of a classroom with a projector in the front of the room where students in the back are not able to see the same level of detail.









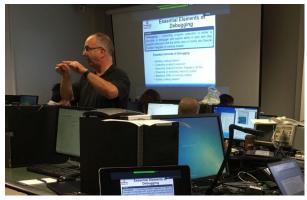
 The chat feature in presentation software allows students to ask questions or comment in a parallel format (either in the physical room or the virtual classroom), rather than a standard classroom where students can only ask question one at a time in a serial fashion.



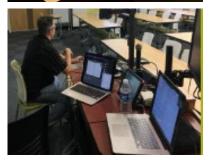
 Class discussions can be streamed and recorded. This allows students to participate online and in the physical room, and with the recordings catch up or review.











- With tools like Zoom guest presenters or student presentations can be done from the presenter's native computing device (even their phone or tablet).
- In some cases, multiple streaming devices can be used to enhance the learning environment. Utilizing a MediaSite equipped classroom for streaming and recording class sessions, with Zoom to facilitate presenter's native computing device.









- Zoom also serves as a back channel for student chat comments - questions and a backup monitor for the stream.
- A secondary monitor is used to check and verify the stream in up and operational and can also be used for monitoring the chat back channel, and break out rooms to work with students and groups.







- Streaming and lecture capture along with other tools and techniques provide for an agile flexible learning environment and is the wave of the future as we have blended learning environments
- Back channels like chat encourage student interaction and engagement. Tools like Zoom provide everyone a "front row seat" and allow to interact directly with students regardless of distance.
- Multiple applications working together provide a much richer and more understandable learning environment.







#### Thank You Dennis Dahlquist dahlquid@csus.edu



#### **Examples of course applications:** <u>https://www.merlot.org/merlot/viewSite.htm?id=2132647</u>

https://vimeo.com/337908662

