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## Challenges, Successes and Lessons Learned in Implementing Hyflex Course Module during the COVID-19 Pandemic Era

The recent COVID-19 pandemic has brought challenges in many areas of our everyday lives including in exploring novel ways for teaching and learning to occur in higher education. As the pandemic has been affecting the way of our lives, educators, universities, and students have been facing new challenges to keep up a sound teaching and learning environment. The challenges we faced during this difficult time made us explore teaching modules to keep an *active learning environment* thriving in the classroom.

In this pandemic era, educators and universities are constantly testing the efficacy of various teaching modules and formats including Synchronous/Asynchronous online, Hybrid, and *Hyflex* tools. A *hybrid flexible*, or *HyFlex* course design offers a plethora of options including attending classes and learning/practicing course materials on campus or, via online, or a combination of both, based on your preference including a blend of synchronous (real-time) and asynchronous (on your own time) online elements. Various teaching modules including the *Hyflex* module and its components were successfully implemented to keep engaging students in the classroom. During the last two years' annual meetings, we shared our experiences on "Active Learning," "Demonstration-based Learning," "Embedding Career Guidance," and "Developing Career Ready Skills" followed by "Active Learning during the Pandemic Era." This session's presentation will include discussion of what worked, what didn't work, and its future concerning the Hyflex module.

### Keywords

Hyflex Teaching, Synchronous Teaching, Asynchronous Teaching, Hybrid Teaching, Engineering Education; Active Learning; Teamwork; Covid-19 pandemic teaching