Adopting an Innovative On-site Classroom Strategy for Teaching STEM During the COVID-19 Pandemic

Category: COVID from online-related modifications to application topics or programs

The COVID-19 pandemic has dramatically changed education over the past six months and resulted in an explosive rise of e-learning and blended learning courses. However, most colleges across the U.S. just opened their on-campus classrooms to students with personal protection equipment, protective barriers, filtrations, social distancing, and other means to combat COVID-19. This situation has created challenges to the teaching and learning effectiveness in the classroom at RIT's National Technical Institute for the Deaf (NTID). At NTID, teachers and students have unique communication needs which were negatively impacted with the COVID-19 recommended modifications in the classroom.

Despite these communication challenges, NTID faculty were innovative and resilient and delivered effective classroom instruction. In one of the classrooms, an innovative approach was adopted to significantly change the classroom layout, computers, and other equipment. This modification resulted in retaining and even enhancing the effectiveness of teaching and learning from the pre-COVID era.

In this presentation, the authors will discuss the challenges and how faculty adopted innovative strategies to address the unique challenges created by the COVID-19 pandemic in the NTID STEM classroom. The specific implementation of these modifications and strategies will be shared.

Author(s)

Brian Trager is the chairperson of the NTID Information & Computing Studies department at the Rochester Institute of Technology. His passion involves accessibility, education experiences and instructional technology. He is also the lead faculty in the Mobile Application Development program, and the PI for the NSF ATE RoadMAPPS to Careers grant.

Tiandré Turner is a visiting lecturer in RIT/NTID's Information and Computing Studies department. He brings experience in mobile app development to elevate his teaching in .NET programming in C#. He shares a strong passion for accessibility and cutting-edge technology in the education realm.