

CHRISTOPHER CORBIN, SCOTT MONTGOMERY & NATALIA OMELCHENKO-COMER, STEM and Business Division, WVNCC, Wheeling, WV, 26003. WVNCC innovative technology use benefits physiology instructions during Covid-19 pandemic.

Inquiry based collaborative learning is a vital asset of modern physiology curriculum. Application of this approach is severely impacted by Covid-19 pandemic when face-to-face physiology laboratories must be modified to comply with needs of social distancing. Introduction of a new technology may mitigate some impact, but it is associated with adding to the complexity of educational activities and may interfere with the proper social dynamic of the classroom. WVNCC team designed a new learning environment, employed, and assessed use of a new technology in our biology laboratory in Weirton Campus. Originally, during a typical physiology lab, each student operated IWorx physiology stations using a personal computer. The progress of the work was not easily shared with the other students or instructor in the classroom, especially when social distancing was maintained. A new educational environment allowed for an on-demand connection to a large screen monitor for all classroom computers and was achieved using a wireless Polycom Pano content sharing and wireless presentation system (Polycom, San Jose, CA). In a survey, students indicated that the provided equipment is seamlessly incorporated into the lesson and encourages active engagement. Eighty percent agreed that the new technology makes it easier to ensure that social distancing is maintained during collaborative learning. The innovative learning layout presented here allows for prompt guidance, effective collaboration between students, appropriate assessment of student performance. Our design idea and technical solution can be modified for various laboratories and be used during and after Covid-19 pandemic.