

Effectiveness of online teaching and learning of wood science and technology courses during the COVID-19 pandemic: early evidences from a survey of Malaysian Universities

ABSTRACT

Wood Science and Technology (WST) courses have been traditionally taught face-to-face in most of the universities worldwide, but the global COVID-19 pandemic has disrupted classroom lessons, replacing them with online teaching and learning methods. To assess the effectiveness of these online methods, a survey of students and academics were carried out in several Malaysian universities offering the WST programs. The survey revealed that students were mostly challenged by the problems related to access to internet, computer hardware, and lack of communication. Further, the student-centered learning method was preferred, while non-technical courses were the most suited for online teaching and learning. In contrast, academics appear to prefer pre-recorded lectures and recorded videos as the most common method for teaching online, while continuous assessment of the student's progress found limited application. The results found that to enhance the effectiveness of teaching and learning online of WST courses, factors such as connectivity, student's preparedness, content design, pedagogical approach, peer communication, and the teacher's presence, must be taken into consideration and improved.

Keyword: Online learning; Wood science and technology; Assessment; Student-centered learning; Connectivity; COVID-19; Distance learning