

FLEXIBLE LABORATORY LEARNING OPPORTUNITIES TO MAKE CHEMISTRY MORE ACCESSIBLE FOR STUDENTS

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ABSTRACT

A typical chemistry unit develops a student's practical laboratory skills and theoretical knowledge. Often, it is the experimental aspects of chemistry that students find the most engaging. Since 2019, we have developed and implemented chemistry units for UniReady and the Centre of Aboriginal Studies at Curtin University. The diversity of students enrolled in these enabling pathways meant some students could not attend regular university laboratory sessions for reasons including health, living in remote areas, and personal commitments that precluded attendance at prescribed times, such as being a carer or parent.

The unit development aimed to provide students access to meaningful and equitable laboratory-learning experiences flexible enough for specific needs of students who could attend regular laboratory classes as well as those who could not. In 2020, COVID-19 offered an unprecedented opportunity, with the alternative activities becoming the 'main activities' for all students. As we returned to face-to-face classes in 2021, we built on our experiences to develop a pilot study for a laboratory learning activity that could be experienced by all students, regardless of their circumstances.

In this presentation, we will share some of the innovative learning experiences we developed and implemented, along with the pilot study's findings.

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