BLENDED DELIVERY OF UNDERGRADUATE CHEMISTRY LABORATORIES DUE TO COVID-19

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COVID-19 has had a profound impact on tertiary education, most notably the rapid transition from face-to-face classes to online methods of teaching. This has posed significant challenges for laboratory classes, where students normally acquire technical, data analysis and communication skills through direct hands-on experience. Achieving these learning outcomes amid a global pandemic requires fundamental re-design of laboratory activities and their assessment. This presentation will provide a case study of how a second-year analytical chemistry unit was adapted to provide a blended learning experience. Half of the laboratories were transitioned into take-home activities using video recordings, sample data and additional online resources in place of face-to-face sessions. A revised report format was introduced, enabling students to demonstrate their knowledge of the underpinning chemistry and laboratory safety without physical attendance. The remaining laboratories were held face-to-face and assessed through a competency criterion system, maximising the value of students' on-campus experience. An analysis will be provided of lessons learned from the adaptation process and how this will be used for continuous unit improvement.

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