TOWARDS ACCESSIBILITY IN CHEMISTRY EDUCATION USING TECHNOLOGY

Ryan E. Lopez[a] and Dino Spagnoli[a]

Presenting Author: Ryan E. Lopez (ryan.lopez@research.uwa.edu.au)
[a]School of Molecular Sciences, The University of Western Australia, Crawley WA 6009, Australia

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Access is an important aspect of tertiary education as students with disabilities are significantly underrepresented at the university level and in the workforce (Soong, Agmata, Doyle, Jenne, Adamo, & Simpson, 2018). By making a course accessible it allows students with disabilities to have an equitable education experience. Additionally, students who have not disclosed a disability will also be included in the course. Overall, using inclusive and accessible practices will be beneficial to all students in a course and can enhance their education experience. In this presentation we will describe technologies we have implemented to improve access across our laboratory course in chemistry. Technology has enabled students to experience high quality course content which they had previously not had access to. In our course we used pre laboratory videos, augmented reality applications, laboratory tours and online pre-recorded lectures among other technologies, to address accessibility issues identified within a large first-year chemistry course. This presentation is told from the point of view of a student support worker who has worked closely with students with disabilities over the past four years. This point of view has given important insight into what works and what does not work for students with disabilities in science.

REFERENCE

Soong, R., Agmata, K., Doyle, T., Jenne, A., Adamo, T., & Simpson, A. (2018). Combining the maker movement with accessibility needs in an undergraduate laboratory: a cost-effective text-to-speech multipurpose, Universal Chemistry Sensor Hub (MUCSH) for Students with Disabilities. *Journal of Chemical Education, 95*, 2268−2272.

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