CHEMISTRY STUDENTS' EXPERIENCES OF THE SHIFT TO ONLINE LEARNING DURING THE COVID-19 PANDEMIC

Dino Spagnolia, Siobhan Willsb, Shannan J. Maiseyb, Alexandra Yeungc

Presenting Author: Dino Spagnoli (dino.spagnoli@uwa.edu.au)

aSchool of Molecular Sciences, The University of Western Australia, Perth WA 6009, Australia
bSchool of Chemistry, The University of New South Wales, Sydney NSW 2052, Australia
School of Molecular and Life Sciences, Curtin University, Bentley WA 6102, Australia

KEYWORDS: student experience, online learning, COVID-19

There have been major disruptions to all parts of everyday life due to the impact of the illness COVID-19. This was especially true for students and staff at universities in the first half of 2020. The sudden shift to remote teaching and learning meant that classes never intended for the digital space (e.g. labs and tutorials) had to be reimagined and redesigned. Students were left facing diminished peer interaction and a need to adapt their study strategies on the fly.

This study follows the experiences of first year chemistry students who favour in-person attendance for classes, from three different institutions. Three online interviews were conducted with the students across the teaching period. A qualitative thematic review of student experiences revealed that first-year students use face-to-face lectures to provide a structure to their study plans during a week. This was now missing. Students were struggling to keep to a study plan when the material was presented only online – synchronously or asynchronously. Moreover, students were conscious that they did not form the social connections with their peers that they would have done in a face-to-face setting. This research emphasises the need for online courses to be scaffolded to provide students with a structured study plan, which facilitates online social interactions between students (Salmon, 2002; Seery, 2012).



Figure 1: Learning in an online environment*

*Everton Park State High School, *eLearning and COVID 19 resources*. Retrieved June 11, 2020, from https://evertonparkshs.eq.edu.au/curriculum/elearning.

REFERENCES

Salmon, G., (2002). *E-tivities: The Key to Active Online Learning*. London; Kogan Page Limited.

Seery, M. K. (2012) Moving an in-class module online: a case study for chemistry. *Chemistry Education Research and Practice*, 13(1), 39-46.

Proceedings of the Australian Conference on Science and Mathematics Education, 30 September - 2 October 2020, page 77, ISBN Number 978-0-9871834-9-1.