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Supporting Online Paramedic Education within a Covid-19 Era

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Abstract

Covid-19 has impacted many areas of New Zealand's higher education system, with most universities forced to transfer activities away from the traditional campus-based learning toward online platforms. This has resulted in a transformation from face-to-face teacher centred (objectivist) methods to online digital hybrid programs that aim to enhance the constructivist, learner-centred pedagogy.

Prior to Covid-19 a change of approach within higher education would usually take several years to develop but was now required within a limited number of days (Strielkowski, 2020). This had the potential to impact the educational experience and motivation by providing content without flexibility or an understanding of different learning styles. The absence of a thoughtful design and development process has therefore resulted in some recent online education being seen as 'crisis education' (Bozkurt & Sharma, 2020; Hodges et al., 2020; Vlachopoulos, 2020).

Whilst it was impossible to anticipate the shift to online learning, the instructional achievement of online education is often questioned due to a lack of face-to-face student community (Joshi et al., 2020). An additional challenge is that online education is not suited to all aspects of clinical learning. The reason for this is that online learning is not compatible with the kinaesthetic (hands-on) activities that are required for clinical practice (Leszczynski et al., 2018).

Effective higher education must have a comprehensive understanding of the limitations and benefits of both asynchronous and synchronous online learning (Omotayo & Haliru, 2020). To address the complexity of online learning and digital competency in this evolving environment it is important that students feel relevancy and motivation (Omotayo & Haliru, 2020). The current situation has led to investigation and implementation of content to support the online clinical student to promote engagement and offer a flexible learning experience. In addition, it was important that the system was designed to support different student learning styles and provide a community of learning.

The content was developed using Spark Adobe software to provide a range of asynchronous visual content with a flipped classroom approach. The content also had a strong lean toward the auditory learner by offering the material in a podcast listening form. In conjunction with this, each weekly topic was later 'flipped' as a synchronous case study group discussion forum.

Universities and their social role within the pandemic are recognised as important support mechanisms for the online student (Wang & Zha, 2018). The findings for our work were that students felt engaged with the content and the subsequent group forum provided a sense of inclusion and community. In addition, and similar to other authors, positive factors such as flexibility (Smedley, 2010), interactivity (Leszczynski et al., 2018), and self-pacing (Amer, 2007) were found.

Whilst it is likely that online learning will be sustained and education will become more hybrid, it is also important to develop an understanding of the complexity of online learning within paramedic clinical education. The implementation of both synchronous and asynchronous online content offers a flexible, supportive learning environment despite the challenges faced within the Covid-19 era.

References

- Amer, T. (2007). E-learning and Education. *Cairo: Dar Alshehab publication.*
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education, 15*(1), i-vi.
- Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning.
- Joshi, O., Chapagain, B., Kharel, G., Poudyal, N. C., Murray, B. D., & Mehmood, S. R. (2020). Benefits and challenges of online instruction in agriculture and natural resource education. *Interactive Learning Environments, 1-12.*
- Leszczyński, P., Charuta, A., Łaziuk, B., Gałązkowski, R., Wejnarski, A., Roszak, M., & Kołodziejczak, B. (2018). Multimedia and interactivity in distance learning of resuscitation guidelines: a randomised controlled trial. *Interactive Learning Environments, 26*(2), 151-162.
- Omotayo, F. O., & Haliru, A. (2020). Perception of task-technology fit of digital library among undergraduates in selected universities in Nigeria. *The Journal of Academic Librarianship, 46*(1), 102097.
- Smedley, J. (2010). Modelling the impact of knowledge management using technology. *OR insight, 23*(4), 233-250.
- Strielkowski, W. (2020). COVID-19 pandemic and the digital revolution in academia and higher education.
- Vlachopoulos, D. (2011). COVID-19: threat or opportunity for online education?. *Higher Learning Research Communications, 10*(1), 2.
- Wang, C., & Zha, Q. (2018). Measuring systemic diversity of Chinese universities: A clustering-method approach. *Quality & Quantity, 52*(3), 1331-1347.