

MATCHING PEDAGOGY TO PRACTICE : ADAPTING TO COVID 19 AND BEYOND; MOVING A PHYSIOLOGY MOOC TO ON DEMAND STATUS

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Abstract

Introduction:

Interactive digital technologies have become an increasingly important tool within HE (Bayeck, 2016), and over recent years, Massive Open Online Courses (MOOCs) emerged as a conduit to widen access to higher education, allowing students from different backgrounds, to access educational materials and learning opportunities (Wintrup et al, 2015). Consequently, there has been a growing trend of creating MOOCs targeted at those who have not yet entered University, and whom often feel underprepared for the experience (Lambert, 2019). An introductory Physiology MOOC aimed at 16-19-year-old students was developed at the University of Liverpool in collaboration with The Physiological Society UK. The initial project aim was to create an innovative and interactive e-learning environment; enhancing the student experience through better preparation for those who intend to study Physiology or a related subject at degree level. It consisted of three weeks of content focussed on the respiratory, cardiovascular, and neurological systems. The MOOC materials comprised of educational videos, exercises, quizzes, articles and discussion amongst peers and course facilitators. At the end of each week there was a review of materials, to allow those taking the course to reflect upon their understanding. An evaluation of each delivery was conducted focussing on demographics, achievement, engagement, and feedback.

Impact of the pandemic:

From March 2020 onwards, COVID induced circumstances had a marked impact on education delivery and learning across multiple interfaces. Schools and universities were forced to close, or transition to remote learning, disrupting the traditional education system. This sudden shift created significant challenges for students, teachers, and parents. The closure of schools resulted in increased probabilities of widespread learning loss, as students struggled with the limitations of online education. Many lacked access to necessary technology, and in some cases to internet connectivity; exacerbating existing inequalities. The shift to remote learning also posed social and emotional challenges, as students missed out on in-person interactions, extracurricular activities, and support systems. Furthermore, the pandemic highlighted the importance of teachers and their essential role in education. Educators faced immense pressure to adapt their teaching methods and create engaging online content. They had to quickly learn new digital tools and find innovative ways to deliver lessons effectively.

At the request of secondary school partners and in partnership with FutureLearn we repurposed our introductory Physiology MOOC to serve as an on- demand learning resource, which educators could use to support their requirements. We talk about the steps taken to provide a MOOC which was self-supporting, whilst maintaining a community learning environment. The presentation also provides a comparison of pre-pandemic and post March 2020 MOOC usage and evaluation. Finally, we reflect on learner landscape remodelling and what this may mean for education in the future.

Keywords: MOOC, Pandemic effect, Repurposing digital materials.