COVID-19 Digital and Education Working Group Briefing paper series

Topic – Future of Digital/STEMM Education: a higher education perspective

An RMIT Enabling Capability Platform Post COVID-19 ReStart Research Initiatives – A Digital Start and A Healthier Start, March 2021

The COVID-19 crisis has changed many practices dramatically, with activities that were unthinkable a year ago now becoming routine. In universities, this has vastly accelerated changes in academic practice that were already in train, and which will lead to a predominance of quite different approaches to teaching practices in the post-COVID era. Clearly the era of "chalk and talk" and its variants is officially over however, the issue of what the replacement could or should be, is very much open. Here, we have solicited the input of two Royal Melbourne Institute of Technology (RMIT) University academics to address what they see as key issues in this area.

This paper outlines some initiatives aimed at addressing the following questions:

- What is the right balance between online and on-campus activities?
- How do we best support students in such an environment?
- What is a typical day for a 21st century student?

Range of Issues

A natural starting point for this discussion is classroom practice, which had to be rethought and reworked at short notice. Dr Jessica Danaher, an Early Career Development Fellow and Lecturer in Nutrition in the School of Science at RMIT University, describes her classroom practices and how she adapted them for successful deployment in a full online environment. A related issue is student engagement and well-being, particularly with such an unexpected and radical shift in their learning environment. Associate Professor Sophia Xenos from the Discipline of Psychology in the School of Health and Biomedical Sciences at RMIT University, in conjunction with her colleagues Professor Andrea Chester, Dr Melissa Monfries & Ms Kathy Littlewood, discuss how they collaborated with students to produce three webinars on mental health issues.

The Initiatives

When the transition to online commenced, it was integral to ensure that any scheduled live online classes would be used strategically; always providing a value-add to the learning experience. Simply expecting students to attend a live class in which they would be spoken at in a largely one-sided forum (as happens in many standard lectures) was not an acceptable alternative, particularly at a stage of increased external stressors and time pressures for many.

Dr Danaher decided that providing pre-recorded lecture material in small 'chunks' allowed for flexibility with students able to engage at times convenient to them and to start and stop listening at any time. This benefitted students who juggled work and family commitments such as home-schooling. The pre-recorded lecture approach allowed for equitable learning and eased accessibility challenges observed by students needing to share devices or bandwidth limits with others in their home.

Utilising podcast approaches and editing software can greatly assist in developing high quality pre-recorded lecture material. The purpose of pre-recording lecture content in a way one may engage in a podcast, ensures that any use of visual aids only reinforces a message delivered verbally. Thus, the delivery of this nature would not rely on a person needing to sit and watch a screen to receive the content, further increasing flexibility in how students can choose to engage and potentially multitask. To ensure lecture content is up to date whilst taking a savvy time efficiency approach, previously recorded material can be reused where it remains relevant. Editing software programs can also be utilised to embed new and remove outdated content into these lectures, where applicable.

With lectures pre-recorded, a value-add learning environment can be created at times when live classes are scheduled. During restrictions, these live classes were intended to bring students together for a purpose - not just sitting and listening, but to engage in interactive learning and meaningful experiences whilst providing a human connection at times lost in an online context.

The standard lecture timetables slots can be repurposed to incorporate gamification, case studies, critical reviews, group discussions, practical hands-on tasks, virtual lab simulations – any tasks which reinforce learning content via "doing". During lockdown, the repurposed timetable was also utilised to touch base with students in smaller groups, providing them with a sense of belonging. This humanised the online learning experience each week, reinforcing that a helpful, relatable person existed on the other side of the screen.

The 'Mental health webinar initiative' was developed by staff and students across RMIT University's Discipline of Psychology and the School of Education and is an example of student-led assessment within the digital domain. This initiative was based on the students-as-partners model whereby students and staff collaborate to co-design and deliver projects to enhance the student experience. Such partnerships help students develop skills to facilitate their own learning and lead to increased trust between students and staff. Importantly, according to Dunne and Zandstra (2011), there is a subtle, but extremely important difference between an institution that 'listens' to students and responds accordingly, and an institution that gives students the opportunity to explore areas they believe to be significant, to recommend solutions and to bring about the required changes. In short, there is evidence in the literature that we should actively engage students in their own learning and assessment because of the considerable benefits in building expertise not just in academic content but in the development of important 21st century work-ready skills.

Associate Professor Xenos describes how alongside the students-as-partners model, the aim of the current webinar initiative was also to develop resources to support student mental health, particularly given university students have been identified as being at increased mental health risk following the challenges of COVID-19. Students from the Master of Clinical Psychology program and the Master of Education program collaborated with staff from across Psychology and Education to create and design three interactive webinars focused on various aspects of mental health. This initiative provided students with the opportunity to develop important digital literacy

RMIT
UNIVERSITY

skills (how best to deliver, in an interactive way, expert information in the online domain) alongside important groupwork skills (interpersonal communication, collaboration, problem-solving, and reflection). Furthermore, students were informed that the final webinars would be uploaded into the RMIT Together Facebook page – an online platform with over 3,000 RMIT students designed to connect students and provide support during the COVID-19 pandemic. In collaboration with staff from the RMIT Wellbeing Team, students and staff developed three interactive 20-minute webinars focusing on various aspects of mental health, namely (1) Enhancing Positive Wellbeing; (2) Managing Isolation & Loneliness; and (3) Social Media and You.

In summary, the mental health webinar initiative supported students from across disciplines to identify key themes that were meaningful to them, form teams, work independently on those projects, reflect on group processes and develop an assessment template alongside a strategy for measuring impact of the new resources. The webinars formed the basis of course assessment across both the Psychology and Education courses. Further, they provided an opportunity for students to create an authentic assessment and develop important 21st century work-ready skills alongside supporting fellow students through the challenges of COVID-19. Feedback for the initiative was very positive with students reporting a high level of motivation to undertake the task, the opportunity for creativity and showcasing of skill sets beyond content knowledge (IT skills, teamwork, problem solving, cross-disciplinary awareness, health promotion measuring impact) alongside its real-world application.

Conclusions

The sudden shift to online learning has required substantial changes to classroom practice. In addition, it has changed the way other benefits of traditional face-to-face learning must be provided, such as support for student well-being. The emergency response required in 2020 has now given way to a planned post-pandemic world, in which the balance between on-campus and on-line environments and cultures needs to be developed.

Technological progress is often quickened by exigencies, such as the COVID-19 pandemic and the sudden shift to online learning has accelerated changes that were already underway. Classroom activities, student engagement strategies and support practices need to adapt to a hybrid and changing environment. Above all, it seems vital to adopt an agile and experimental attitude, both in the classroom and elsewhere, in order to identify and support excellent student experiences.

Reference

Dunne, E., Zandstra, R., Brown, T., & Nurser, T. (2011). Students as change agents: New ways of engaging with learning and teaching in higher education.

Authors:

Professor James Harland, Professor Margaret Jollands, Associate Professor Sophia Xenos & Dr Jessica Danaher

RMIT Contact:

Professor James Harland: james.harland@rmit.edu.au

RMIT
UNIVERSITY