

# COVID-19 induced change in higher education: Reflections on rapidly transitioning a first-year undergraduate academic literacies unit from face-to-face to online

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The COVID-19 pandemic forced many Australian universities to move all face-to-face teaching online partway through Semester 1, 2020. This rapid shift in teaching mode presented not only pedagogical challenges, but challenges in how best to support staff and students across this transition. In this paper, three academic foundations lecturers teaching an undergraduate academic literacies unit at a regional Australian university reflect on their experiences in moving the unit online four weeks into the semester. The student cohort consisted of high numbers of non-traditional students and students who did not necessarily have access to the technology and equipment they needed to learn online. While the transition presented challenges, working to resolve and adapt to the challenges also presented opportunities to experiment with online learning technology and develop skills and strategies to implement for future cohorts of online students. As the higher education sector continues to experience rapid change, it is imperative to continue to develop strategies to support students in their learning during these uncertain times.

**Key Words:** COVID-19, higher education, online learning, academic literacies, rapid change.

## 1. Introduction

COVID-19 hit slowly and then all at once. It hit before Australia as a collective nation had the chance to take a breath after the devastation of the summer's bushfires and collided with already unsettling times politically and environmentally, both within wider society and within Australia's higher education sector. In the Northern Territory (NT), we watched and waited as virus cases escalated elsewhere in the nation, triggering lockdowns and the temporary closure of university campuses. Each day, news broke of more universities transitioning their face-to-face teaching online and we wondered when our inevitable turn would come.

Universities are complex bureaucratic machines and quick action is not always an easy undertaking. The systems within higher education institutions place value on process, and research is predicated on rigorous, critical and considered thinking and analysis. These ruminations take time. While scope for flexible learning is built in to normal course design, in the context of COVID-19, universities were required to go beyond their normal definitions of flexible teaching and learning to respond to the rapidly changing situation while still complying with accreditation policies and procedures. Worldwide, the pandemic demanded a rapid response from higher education institutions to the unfolding crisis (Bao 2020; McMurtrie, 2020; Skulmowski & Rey, 2020).

Simultaneously, the complexities of the pandemic also demanded rigorous, critical and measured thinking and analysis in how best to respond to the challenges within short timeframes.

The NT's isolation and small population appears to have contributed to a smaller number of cases of COVID-19 than in other states and territories, and consequently, a later lockdown. Because of this, our institution was not one of the early adopters of the switch to online teaching. However, as the situation worsened in other parts of Australia, it became clear that we would not avoid a mid-semester change in teaching mode. Our team of three academic foundations lecturers was given one week to transition and adapt the face-to-face classes for our first-year undergraduate academic literacies unit into the online teaching space. This rapid change in delivery mode presented challenges in how to replicate a face-to-face experience in the online environment to ensure students continued to feel supported in their learning. While we also offer the unit in online mode, it became clear that we needed to treat our on-campus students as an online cohort distinct from our existing 'normal' online cohort of students. Despite the challenges, the rapid shift in teaching mode also presented opportunities to enhance our knowledge and teaching practice in the online space (Peters et al., 2020). In this paper, we reflect on our experiences navigating this change and on the decisions we made in how to transition our on-campus students and casual teaching staff to online learning and teaching. We also consider how these experiences will inform our future practice as academic foundations lecturers in the increasingly tumultuous higher education sector.

## **2. Context**

The complexities of our teaching context informed the way we transitioned to online teaching in Week 4 of Semester 1, 2020. As a regional university, Charles Darwin University's student demographic consists of high numbers of non-traditional university students, including: students from non-English speaking backgrounds, mature age, first in family, Indigenous, students from low socioeconomic areas and students studying in part-time mode. To support these students in their first semester of study, most first-year undergraduate students are required to take an academic literacies unit. Consequently, the unit attracts high numbers of students. The unit has student enrolments of between 800 and 1200 students each semester and is offered across four different campuses and online mode. In Semester 1 2020, 1150 students were enrolled in the unit, with 300 of those students studying on-campus.

The unit adopts a best practice approach by developing students' academic literacy skills through embedding literacies into a discipline area (Halliday & Hasan 1985; Thies 2016; Wingate 2006). As students from many different discipline areas are required to take the unit, we teach academic literacies through the topic of sustainability, enabling students to apply their developing literacy skills to real-world content. Due to the large student numbers and interdisciplinary content, the on-campus classes are co-taught with a sustainability lecturer and an academic literacies lecturer in each class. These on-campus students attend one three-hour workshop each week. In contrast, our online cohort of students watch a recorded lecture and attend a one-hour online tutorial each week. They are allocated a tutor who provides support through a weekly email outlining the week's tasks and activities. The online students are also expected to work through the online content and materials with the support of their tutors. Even though we do also offer the unit in online mode, we had to consider the differences between the online and face-to-face cohorts when choosing how to transition the face-to-face students to online delivery. These variables all impacted our decision-making in the process.

## **3. Making the transition: 'online face-to-face' mode**

The decision-making process of how to move to online teaching was informed by directives from the university and was a collaborative process between the authors of this paper: the two unit coordinators (UC1 and UC2) and the unit's senior lecturer (SL).

One of the first decisions we needed to make quickly as a teaching team was how we would transition our on-campus students to online teaching. Research shows that retention rates for online cohorts are lower than for on-campus students (Department of Education and Training, 2017; Greenland & Moore, 2014; Stone & Springer 2019). A study by Greenland and Moore (2014) found that students who complete their course online have a 20% lower completion rate than their on-campus counterparts. This research is supported by more recent data from the Australian Government, which shows that completion rates are approximately 15% lower for students studying online than face-to-face (Department of Education and Training, 2017). These figures are reflected in our normal retention rates for online and face-to-face students, where the online cohort generally has a 10–12% lower completion rate than our face-to-face students. This is not necessarily surprising, as research also demonstrates that online cohorts of students are more likely to fall into the category of non-traditional students, and non-traditional students are also less likely to complete, whether or not they are studying on-campus or online (Palmer, 2012; Taniguchi & Kaufman, 2005). As the majority of our on-campus cohort were non-traditional university students comprising of a high percentage of international students (40%), none of whom had chosen to be online students, we needed to carefully consider how best to continue supporting our on-campus cohort in the online space and maintain our normal levels of retention for this cohort.

All students enrolled in the unit, whether they are studying online or on-campus, have access to the same unit materials through our Learning Management System (LMS), Blackboard. With this, the primary point of difference between the unit's online and on-campus students is in the way these materials are delivered. Therefore, one option we considered was to direct all on-campus students to attend the online weekly lecture and tutorial that our online cohort attend each week, and to work through the online learning materials at their own pace. However, our students did not choose to be online students. As a result, they were unfamiliar with this mode of study, its expectations, and the technology involved, which placed them at a high risk for developing "online learning anxiety" (Abdous, 2019). They were not online students as our usual online cohort of students, but 'online face-to-face' students, where circumstances outside of the students' control dictated the mode of study. They also faced the change in study mode partway through the semester. This meant that they had had three weeks to establish relationships with each other and their lecturers, to know each other viscerally and to hear each other's stories through ice-breaker activities, group discussions and over coffee breaks. Thus, this group could be characterised as students who had had significantly richer and more extended opportunities to form relationships than the 'online-by-choice' students. Consequently, instead of treating our on-campus students the same as our online-by-choice students, we attempted to use the online classroom in a way that replicated as closely as possible the face-to-face experience the on-campus students had encountered in the first three weeks of the semester. A key component of this was to find ways to continue the relationship building and rich conversations we had established in the face-to-face classroom.

In the wake of the 2010 and 2011 earthquakes in New Zealand, some cohorts of students faced a similar shift when higher education institutions had to rapidly shift to e-learning (Ayebi-Arthur, 2017). Due to the closure of university campuses, students and lecturers had to shift to the online classroom in order to continue their classes. Yet in the case of Canterbury University, at the time they did not already have a large focus on online teaching, so there was no distinction to be drawn between an existing online cohort and a new online cohort. Their on-campus cohort became the online cohort (Ayebi-Arthur, 2017). For an institution such as ours with a large existing online student cohort, it was important to acknowledge and cater to the differences between the two groups.

Moore and Greenland (2017) explain that misalignment of the curriculum often occurs for online cohorts of students, as they are expected to conform to learning outcomes and policies developed with on-campus cohorts in mind. For example, despite the fact they choose to study online, they

are often not offered additional flexibility in assessment to support that external status (Gillett-Swan 2017; Moore & Greenland 2017). Materials for online students are often adapted from content and sequencing designed for on-campus students and are not designed specifically with online cohorts in mind. In addition, there is not always as much choice in class times. Lecture and tutorial recordings are considered the alternative for students who cannot make the set times. In this situation, we faced the opposite dilemma. Despite the necessity of moving to the online space, the students were not technically (nor by choice) online students, and so we had to adapt our face-to-face classes to avoid compromising their collaborative learning experience and expectations of learning by not merely moving these students into our existing online delivery of the unit. We therefore decided to run the online workshops in our usual workshop times and to continue co-teaching in the online space. We also made a strong commitment to finding ways to continue the rich conversations our face-to-face classes had begun to engage in with each other as part of their learning. This ensured we could continue to build a community of practice learning environment, building knowledge together through shared experiences (Wenger, 1998; Wenger & Synder, 2000). SL saw this decision as integral in maintaining the learning communities already established during the three weeks of face-to-face classes:

*The decision of the coordination team to maintain the timetable and delivery as discrete for the internal group, I think was absolutely the best option as it helped us to maintain connections and identity and community.*

In addition, UC2 noted that structuring our classes in this way “removed one transitional challenge for the students, as it attempted to build on the safe space that students had been exposed to from the outset of teaching”. Choosing to keep as many aspects as possible consistent with the face-to-face experience ensured some stability for students in a time of extreme change and uncertainty.

However, choosing to transition our on-campus students to online learning in this way was not without its challenges. The first impact of this decision was that both lecturers and students needed training in how to teach and learn in the online space. Some of our less experienced casual lecturers had not taught online before and were apprehensive about moving into online teaching. Martin, Budhrani, and Wang (2019) investigated lecturers’ perceptions of their readiness to teach online. They examined four areas of online teaching competencies by surveying 205 lecturers and found that less experienced lecturers were more likely to believe they were not as adequately prepared to teach online as lecturers with more experience. A factor contributing to this assertion is that the dynamic of the online environment is one in which less experienced online lecturers may encounter some technical difficulty (Gay, 2016). In spite of these challenges, a study by McGee, Windes, and Torres (2017) identified preferred lecturer support mechanisms for online teaching. They found that lecturers believed sufficient training, technical support and experience in the online classroom enabled them to effectively teach online.

We replicated these support structures as best we could within our short timeframe. Each casual lecturer was already paired with a more experienced lecturer, and the experienced lecturers were designated as the lead lecturers for the first several weeks of the transition to give the casual lecturers time to adjust to teaching in the online space. In effect, this attempted to provide a form of pedagogical ‘on-the-job’ training for the casual lecturers, to scaffold successful engagement with and delivery in the online space. To support this, the unit coordinators ran a professional development session with teaching staff to prime their readiness for teaching online. The rationale behind this lay with the understanding that online teaching faculty benefit from explicit development in furthering their online pedagogies (Berry, 2018).

To further ease the change in delivery mode for both staff and students, we designated the first week of online teaching as a transition week to allow staff and students to become familiar with the online classroom. As Abdous (2019) writes, an online learning orientation, familiarising students with their position and the attached expectations can reduce learner anxiety and contribute

to increasing prolonged engagement with the new learning space. Instead of teaching a complete workshop online, we used this transition week as an opportunity for staff and students to try out the technology in an attempt to scaffold the change. However, on reflection, UC1 questioned whether this was the right decision:

*I was worried about the students not being familiar with the technology and the online classroom and therefore wanted to create a space for the students to test everything out and ask any questions they may have about their new study mode... in hindsight, this led to a dull first online class...I underestimated the fact that the students were moving to online mode in all of their units. For most students, it was not completely unfamiliar or unexpected.*

The coordinator worried that a “dull” first online experience might put students off joining the online classroom again the following week and contribute to lower attendance for the on-campus students. However, these concerns proved to be unfounded, and reflected the coordinator’s own apprehensions about successfully moving so many students to the online space.

#### **4. Fostering student engagement**

The transition week also provided extra time for the two unit coordinators to adapt the content from a 3-hour workshop to a 1.5 hour online class so as to “not confront the students with three hours of screen time” (UC2). Our original plan was to have a 1–1.5 hour lecture, and then let the students work through the self-guided online activities, while the lecturers remained online to answer any questions that arose as the students worked through the materials. This demanded more autonomy from the students than what is normally expected of them in their face-to-face classes. UC2 observed that “the students who were actively engaged in the online space seemed to develop greater control over the content and skills explored”. In contrast, UC1 found that by the third week of online classes “many students did not necessarily work through the self-guided activities”. This led to us slightly lengthening the online classes to two hours, to ensure the essential academic literacy skills and sustainability content were scaffolded more completely.

Yet student engagement is not always observable. In the area of students learning beyond the lecturer gaze, Dymont et al. (2020) investigated measures of student “visible and invisible” engagement. They interviewed third-year online students about their experiences of online learning and found that many students engage in their studies outside of the LMS and these activities cannot be measured. Additionally, Wilton (2018) investigated “quiet participation” in online learning. She used a mixed methods approach to examine participation activities of 137 graduate students through tracking their online activities. Fourteen of those students completed a survey about their perception of their online learning experience, and four students discussed their experiences in semi-structured interviews. The findings indicate that students who did not engage as actively or frequently in tasks that required them to post online still engaged with the unit through more frequent reading and rereading. Therefore, even if our perception as lecturers was that students were not engaging with the online material, it did not mean that students were not working through the material in their own way to support their learning.

Whether or not students used the extra time at the end of class to work through the materials, we found many students used the additional time to ask further questions and clarify the content. UC2 noted that many students from non-English speaking backgrounds in particular took advantage of this opportunity and suggests this “may have been because the text option [chat box] allowed for clearer clarification of the concepts they were exploring”. Rather than only having the opportunity to clarify concepts through spoken communication, the written communication afforded by class discussions in the chat added an additional layer of multimodality and scaffolding.

Incorporating multimodality into academic literacies units has increasingly been recognised as a critical component to developing students’ academic literacy as digital literacy has become an integral aspect of academic literacy skills (Archer, 2010; Huang & Archer, 2017). The structure

of our unit incorporates a multimodal design, where students can access information and develop their knowledge through different mediums: written text, video clips, in-class discussions and written and spoken communication with lecturers and other students.

Moving the face-to-face students to the online class shifted the modalities, where informal written language (such as the chat box in the online classroom and writing ideas onto shared documents) became a key part of students developing their academic literacy skills. This change in modalities had some benefits. Firstly, it provided students an opportunity to contribute without having to speak in front of other students, as they could type into the chat instead. It also provided opportunities for students to anonymously contribute to discussions. For example, when sharing ideas by typing directly onto blank slides or into shared documents, the students' ideas were not traceable back to the person who shared them. For some students, the anonymity removed a barrier to actively contributing to discussions. Tolhurst and Bolton (2017, p. 186) advocate for creating inclusive online learning spaces that consider different learning styles and "allow[s] students to support and interact with each other and teachers to work individually with students". The additional modalities incorporated into the online space provided further opportunities for students to check their understanding of the ideas discussed in different ways. Therefore, despite the challenges we found in engaging students in the online space, there were also some positive outcomes in the different ways our students could engage online that we do not currently use in the face-to-face environment. We plan to consider how we might incorporate a similar chat function in the face-to-face environment, to provide face-to-face students with another way of asking questions and contributing in class.

Even so, we all noticed a significant drop in class interaction once we transitioned into the online classroom, with the exception of one of UC1's classes. As the unit is built around scaffolding and peer-to-peer interaction, replicating this in the online space proved challenging. UC2 observed that:

*Where we would typically setup a task in a face-to-face setting and peer interaction would be initiated almost instantaneously, the student interaction in the virtual space appeared to be on a delay or required additional prompting for students to come out of their shell.*

SL found that "interacting was limited to a few predictable students despite encouraging students to use their mics or write in the chat". UC1 believed that the online interaction worked well in one class, partly due to higher student numbers, but not the other: "The students wanted to engage, but they faced many challenges: for example, access to technology and typing speed. It was also more difficult to build rapport with students". This reluctance to engage in the online classroom was not something we had previously witnessed with our online-by-choice cohorts of students and took us by surprise. It also made us question our own effectiveness as online lecturers:

*As we moved the students online so quickly, I didn't feel as though I had enough time to really consider the best way to engage students online or to explore different options for how to do so effectively. Because of this, as a lecturer, I felt as though the students were not getting the best possible experience (UC1).*

The rapid shift in teaching mode meant we were under time pressure to adapt quickly and had limited time to carefully consider the changes and how to implement them from the very beginning. We had to focus on the most immediate decision, of what online teaching for our on-campus students would look like. Other decisions, such as how we would specifically use technology and engage with students in the online space, were aspects that developed over the course of the semester through experimentation and trial and error. For example, we experimented with breakout rooms to foster small group discussions, yet some aspects of the functionality of breakout rooms in Collaborate hindered rather than supported our online teaching: the size of some of the classes

made managing breakout rooms difficult and the way the chat function worked in breakout rooms disrupted meaningful discussions.

As the semester progressed, we found opportunities to foster engagement and build rapport, often in unexpected ways:

*My co-teacher forgot to mute the mic when I was lecturing and decided to open a video which began playing over the class. I knew it was my co-teacher, but I tried to be subtle about the situation and asked if whoever it was who had their mic unmuted could please mute. Immediately, a student in the chat called out my co-teacher. The students thought this was hilarious, and so did me and my co-teacher. This was a nice bonding moment with my students, and a nice acknowledgement of the absurdity of the situation we had found ourselves in and that we were all still learning to navigate this space together (UC1).*

Finding shared experiences in technological failures contributed to creating a shared and supportive online learning space, as it acknowledged that we, as lecturers, were in a similar situation as our students, technologically speaking. Glazier (2016, p. 442) argues that one way to build rapport with students is by “humanizing the instructor”. In her own teaching practice, she does this through being approachable and friendly, regularly posting media related to each week’s content, and by using humour and satire. In the online space, these kinds of technological mishaps played the role of “humanizing” us to our students. We were adapting to the new learning environment in the same way as our students and were not immune to making errors, much like our students.

Despite the challenges we faced in fostering student interaction online, SL acknowledges that “the fact students kept coming back to the online sessions suggested they were getting something out of it”. We were able to use the additional modalities the online space offered to engage students and build rapport, while also guiding students towards more autonomy and independence in their learning.

## 5. Technological literacy and student support

Transitioning so quickly to the online space did not allow a lot of time to develop additional skills or strategies for teaching online. SL found the experience “very unique and stimulating” and that it provided an opportunity to “jump into the deep end with using Collaborate ... I enjoyed conquering my fear and mastering this.” In contrast, while UC1 had some experience teaching in the online space, there was some reluctance to experiment too much with technology:

*I did not want a cohort of students who are unfamiliar with and did not choose to study in this mode to become disengaged or frustrated by technological difficulties or failures. However, my co-coordinator experimented a lot in this space, and through discussions with the coordinator I also experimented with different ways of facilitating online tasks in the online classroom.*

Through ongoing discussions and sharing ideas between the three of us throughout the semester, we were able to support each other in continued and ongoing development in teaching online. For example, we used shared documents hosted through SharePoint and Microsoft Teams to foster better online engagement and discussion. We also experimented with breakout rooms and online document mark-up tools. Harasim (2012) argues that in online learning, the role of the lecturer is to initiate students into the language and practices of the discipline area and to do so by supporting students in developing, organising and analysing ideas and knowledge. She proposes Online Collaborative Learning (OCL) as a pedagogical approach to underpin decision making in online learning, where students learn by moving through different stages: Idea Generating (where students work together in groups to develop ideas in response to questions or problems), Idea Organizing (where students take their initial understanding and start to read literature to inform and expand their initial thinking) and Intellectual Convergence (where, supported by the lecturers,

students decide on a position informed by their reading and analysis) (Harasim, 2012, p. 94). This approach informed the decisions we made in shifting our face-to-face students online and enabled us to experiment with different technologies to determine how we could best replicate the face-to-face experience online. In doing so, we uncovered novel ways of fostering student collaboration online. With the success of these strategies for our online face-to-face students, we are starting to consider how we can implement these tools for our future online-by-choice cohorts of students to enhance their opportunities for peer-to-peer collaboration.

The biggest technological challenge we faced was that not all of our students had access to the technology required to be a successful online student. Online learning has been celebrated for making higher education accessible to students who may otherwise not be able to access university study, yet Lee (2017) questions the assumption that offering online learning automatically makes higher education more accessible to students. Without also providing students with the additional support and scaffolding they need to succeed in online learning, instead of making higher education more accessible, it can further alienate students from university study. Borsheim, Merritt and Reed (2008, p. 90) state that “we cannot assume...that all students have equal access or experience with technology”. This was true for a subset of our students who did not have access to adequate internet or the devices required to engage effectively. Even for those students who did have access to the technology, many were not comfortable in using it. As lecturers, we often had to play the role of technical support person, which disrupted the flow of classes at times. This poses the question of where the responsibility lies in providing an inclusive environment. These students were not online students by choice but were forced to study in this way. Institutional support for providing additional equipment and resources to students who did not have access to the required technology would have ensured more equity for our students.

Furthermore, Borsheim, Merritt, and Reed (2008) also argue that technology must be considered and used appropriately in line with pedagogy. It is not enough to use technology because it exists, but it is important to consider how it can be incorporated to enhance the learning experience. Harasim’s (2012) OCL theory supports lecturers to design online learning environments with a pedagogical grounding. Yet it is also important to consider how to support and scaffold students who may not have access to all of the necessary technology required to study online. These considerations were front and centre in the decisions we made in how to use technology in the classroom. To minimise the challenge of our students not having access to adequate technology, we chose predominantly to use the online chat in the online classroom for class discussions, so that students did not feel they required a headset in order to attend and contribute to the online discussions. This ensured that all students had the opportunity to participate, whether or not they had access to all equipment and technology.

We saw support, beyond the online class, through regular communication as an essential aspect assisting student learning in this new online space. Our online-by-choice cohort are all allocated a tutor, who sends them a weekly letter outlining the week’s tasks each Monday and provides email support. While this strategy works for our online-by-choice cohort, Abdous (2019) explains that students who are not prepared to study in the online space, especially those with low levels of computer literacy, experience high levels of online learning anxiety. As our online face-to-face cohort had no choice but to move to online learning, we chose to modify this strategy and adopt it for our online face-to-face cohort to reduce any online learning anxiety in our students. We sent our on-campus students a weekly email each Monday outlining the week’s tasks and activities and we also sent summary emails outlining key aspects that were covered or identifying essential preparatory work that needed to be undertaken. This strategy ensured that students who could not attend the class for technological reasons also received the essential information and email support. They were not as disadvantaged as they otherwise may have been by not being able to access the classes. We also offered one-on-one support via Zoom, telephone and email. Adapting the current support structures we have in place for our online-by-choice students to suit our online



face-to-face students ensured that even students who did not have the technology necessary to attend the online class received additional support in their learning.

## 6. Conclusion

As we finalise grades for Semester 1, the ongoing effects of COVID-19 on the Australian higher education sector and the long-term impacts on teaching remain unclear. However, we have been heartened by evidence so far of our face-to-face students' capacity to come along for the ride: the retention of this cohort has remained within the same range recorded over the last five years and the quality of assignments and grades is on par with previous semesters.

At the time of writing, as we prepare for Semester 2, our university has decided to return to face-to-face teaching for on-campus students, so long as physical distancing protocols can be maintained in the teaching spaces. This new change will bring with it new sets of challenges for how we deliver the unit face-to-face. Transitioning a large undergraduate academic literacies unit online within such a short timeframe demanded that we experimented with and adapted our approach as the semester continued. We kept the student experience at the forefront of our decision-making throughout the semester and acknowledged that under the circumstances, we needed to treat them as a distinct online face-to-face cohort, different from our online-by-choice cohort of students. In the next stage of our investigation into the impacts of COVID-19 induced changes to our teaching, we are intent on unpacking the student experience for our online face-to-face cohort.

Transitioning the unit online allowed us to explore different ways of using technology in the online classroom. Through our experiences, we have found ways we might enhance the online classroom for our online-by-choice cohort of students in future semesters, through using platforms such as Microsoft Teams to improve peer-to-peer and student-teacher collaboration. Furthermore, we have identified opportunities for meaningfully incorporating more technology into our face-to-face classroom, such as having a classroom chat set up for our face-to-face students, where they can anonymously type out their questions during the class, as an alternative to asking them in person. We also consolidated and improved our own teaching skills not only in the online classroom, but also in our face-to-face classes, in thinking about how we can incorporate aspects of each teaching mode into the other, to improve student support and learning across all learning modes through increased multimodality. For the foreseeable future, rapid change in higher education seems to be inevitable. As the COVID-19 pandemic continuously evolves, so too must our teaching continue to adapt to the challenges and changes a COVID and post-COVID higher education sector demand.

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