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From the margins to the mainstream: The online learning rethink and its implications for enhancing student equity

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From being largely at the margins of higher education for many years, online learning now finds itself in the mainstream. This paper offers a critique of the online learning literature both pre- and post-2020, looking at changes in response to this shift. Evidence tells us that online learning plays a significant role in enhancing student equity, widening higher education access and participation for many students who would have found it difficult, if not impossible, to attend university on campus. This includes students from government-identified equity backgrounds, as well as other student cohorts underrepresented at university, such as older working students, parents, and others with caring responsibilities, and those from families with no previous experience of university. The mainstreaming and normalising of online learning now presents an opportunity for universities to learn from both past and emerging evidence, to evaluate past practice and offer a more flexible learning experience that better meets the needs of an even wider range of students. Keeping online learning firmly in the mainstream, while taking an evidence-based approach to ensuring the quality of its design and delivery, has the potential to enhance student equity on a much broader scale.

Implications for practice or policy:
- Improving the quality of online learning, using evidence-based research to design and deliver it more effectively, will enable more students to stay and succeed at university.
- Continuing to offer online study options for all students, that is, keeping it in the mainstream, will further enhance student equity.
- Mainstreaming online learning options as part of standard university practice will enable more students to benefit from the greater flexibility of both fully online and hybrid models.

Keywords: online learning, Covid-19, student equity, underrepresented students, widening participation in higher education, meta-analysis.

Background

Online learning, once considered largely at the margins of higher education has moved rapidly and unexpectedly to the mainstream, and it looks set to stay. From the 1990s onwards, online learning began to rapidly replace the type of distance or correspondence learning conventionally offered mainly by universities with a significant regional student base, in which learning materials were physically posted in hard copy form to those enrolled as external students (Stone, 2019). During the first 2 decades of the twenty-first century, online study catered for a minority of higher education students. In 2019, 15.9% of Australian domestic higher education students were enrolled as external students – that is, in a course of study offered primarily online, with either very limited or no requirements to attend any classes in person (Department of Education, 2020a).

Prior to 2020, online learning was not routinely offered by every Australian university even though external undergraduate enrolments were growing faster than on-campus undergraduate enrolments. By 2017, only 14 of the 37 public universities in Australia at the time were offering online degrees across a broad range of disciplines, at both undergraduate and postgraduate levels (Department of Education, 2018a). Most of these were regional universities and/or universities with high regional student enrolments, while a number of metropolitan-based universities were offering online courses in collaboration with Open Universities Australia, a company that partners with Australian universities, providing pathways into online courses and

degrees (Stone, 2017a). Notably, these 14 universities all offered both on-campus and online programs, with on-campus students largely in the majority, apart from three regional universities where online students were in the majority (Department of Education, 2018a).

The use of technology in distance education has been discussed in scholarly papers as early as the 1980s (see for example, Rixon, 1985), focusing on ways technology could be used to make distance education more engaging, such as through the use of multi-media including video and teleconferencing (Cochran et al., 1985). As digital technology advanced and access to the internet became more widespread, discussion moved towards the need to rethink ways of teaching with, for example, Laurillard (2002, p. 29) advocating for "a radical shift from the standard transmission model" of education delivery. Laurillard (2002, p. 28) defines the transmission model as simply "the passing on of knowledge and information" which she contends "has prevailed throughout fundamental innovations" in education, including the use of the internet. Using examples from her teaching practice at the Open University United Kingdom, Laurillard (2002, p. 29) talked of the "conversational framework for learning" in which "an iterative dialogue between teacher and student" can be incorporated within distance education delivery. It is interesting that here we are now, post-2020, talking very much about the same thing – the importance of "two-way communication, interaction, [and] discussion" (Marković et al., 2021, p. 10) in online delivery, the need for it to be student-centred, engaging (Baker et al., 2022), and also offering a strong sense of teaching presence (Payne et al., 2022).

Taking a student equity perspective, in this paper I examine the literature about online learning pre- and post-2020, looking at similarities and changes in both the knowledge generated and the emphasis placed on this knowledge, as online learning moved so rapidly from the margins to the mainstream. I propose that this mainstreaming and normalising of online learning, as a direct result of the Covid-19 pandemic, presents an opportunity not only to appropriately recognise and value the now essential place that online learning holds in HE, but also to learn from the evidence gathered over the previous 20 years about how to deliver online learning more effectively. It is imperative that institutions learn from both past and emerging evidence to continue to improve the online experience for increasingly diverse student cohorts. For several decades, distance and online learning have contributed significantly to student equity, by making it possible for a wider range of people to participate and succeed in HE. No longer an add-on serving a minority of students, it now has a central and essential role in delivering education for all. Its benefits and advantages are being experienced and recognised by a much larger group of students and educators. It is clearly here to stay and needs to be fit for purpose.

The impact of online learning on student equity pre-2020

There is a considerable body of literature about online education up to and including 2019, even though, as shown by HE enrolment statistics (Department of Education, 2020a), it remained at that time a mode of study pursued by only a minority of Australian HE students. While this literature was important to those involved in online learning design, delivery, and teaching, as well as those involved with online students in various other ways, through library, academic, and personal support services, it seems likely that it would have been of less relevance to those not involved with online learning. Additionally, the relatively lower retention and completion rates for online students compared with on-campus students (Department of Education, 2017; 2020b; Greenland & Moore, 2014) appeared to indicate that studying online was not as effective or as satisfying as studying on-campus in a face-to-face mode. However, a different interpretation can be made of these figures when looking at them through a student equity lens, beginning with the demographic differences between online and on-campus student cohorts.

Pre-2020, the research literature clearly showed that in Australia and other countries, those choosing to study online tended to be older students, more likely to be female, to have family and caring responsibilities, to be in regular employment, and to be studying part-time (Hewson, 2018; Ilgaz & Gülbahar, 2015; Kahu et al., 2013; Michael, 2012; O'Shea et al., 2015; Ragusa & Crampton, 2018). Many were first in their families to enter university and/or from backgrounds and circumstances historically underrepresented in higher education, such as those from the Australian government-identified equity groups (Department of

Education, 2020c). The evidence also indicated that the poorer retention and completion rates of online students were likely to be related to the difficulties faced by this cohort in prioritising study in the midst of such busy and challenging lives, rather than simply due to the mode of education delivery (Bisonnette, 2017; Hewson, 2018; Kahu et al, 2014; Signor & Moore, 2014; Stone & O'Shea, 2019b). Yet, institutional expectations of online students very often failed to take their different circumstances into account, with insufficient flexibility offered to assist these students to combine their studies successfully with other, non-negotiable responsibilities (Boling, 2012; Moore & Greenland, 2017; Stone et al., 2019).

Research around the world has evidenced ways in which distance education, offered almost exclusively online since the early 2000s, has helped to widen HE participation. As early as 2007, research with students at the Open University in the United Kingdom demonstrated how online learning could transcend "geographical, physical, visual and temporal barriers to accessing education", hence reducing "socio-physical discrimination" (Knightley, 2007, p. 281). These findings were replicated in United States research (Müller, 2008; Park & Choi, 2009). In Müller's study (2008, p. 1) the "access, flexibility, and convenience" of online learning were key to enabling women "with multiple commitments in their lives" to undertake further education. Park and Choi (2009, p. 207) concluded that online learning benefited "adult learners who have employment, family and/or other responsibilities … by saving travel costs and allowing a flexible schedule". Later research in Malawi (Chawinga & Zozie, 2016, p. 16) concluded that online courses contribute "towards achieving universal access to higher education in Malawi due to the flexibility … whereby students are allowed to study while working". Within Australia and New Zealand considerable research has evidenced the widening participation benefits of online learning for historically underrepresented cohorts in higher education, including older students with work and family responsibilities, and those first in family to go to university (Kahu, 2014; Kahu et al., 2103; Ragusa & Crampton, 2018; Signor & Moore, 2014; Stone, 2017a; Stone & O'Shea, 2019a, 2019b; Tyler-Smith, 2006). Higher rates of online enrolments have also been noted from Australian government-identified equity groups of Indigenous (First Nations) students (Smith et al., 2015), students with disability (Kent, 2015), and those from regional and remote areas (Crawford, 2021; Pollard, 2018; Stone et al., 2019).

However, such research has also highlighted that online learning and online students have frequently not been paid sufficient attention by institutions themselves. A national Australian report in 2017 (Stone, 2017a, p. 26) which interviewed over 150 staff across 15 Australian higher education institutions revealed that online learning was considered by the staff involved to be generally under-resourced and under-appreciated. This was evidenced by comments such as, "online students have always been treated as kind of like the poor cousin … it's hard to get them to be taken seriously", "I just feel like they're getting a lesser experience than what my on-campus students are getting", and "institutions tend to focus – I guess inadvertently focus on those students who we can see in the classroom". This is consistent with findings from research with online students themselves, who felt as if they were, "a lower priority than on campus students," and that universities "make it very clear you are an online student and do not show the same interest in your learning" (O'Shea et al., 2015, p. 51). A sense of invisibility was expressed in comments such as, "they don't know me and that's part of the stuff with online I suppose. I'm not a person, I'm just a number" (Stone et al., 2019, p. 87). Many students were signing up for online learning because of the flexibility they felt they were being promised, seen as essential by these older, online students with multiple commitments and responsibilities for family, work, and other caring duties (Boling et al., 2012; Hewson, 2018). However, the promise of flexibility was found in many cases to be "inconsistent with actual offerings" (Todhunter, 2013, p. 247), with online students reporting being dismayed to find that even though "we're being sold a product that is described as fully flexible" the university "treats us the same as the on-campus students" (Stone et al., 2019, p. 82).

Other research findings have exposed the need to improve the overall quality of the online learning experience in various ways. These include the need to design for online (Devlin & McKay, 2016), to know the students (Crawford, 2021; Devlin & McKay, 2018; Stone, 2017b), and to ensure a strong teacher presence (Lambrinidis, 2014; Stone & Springer, 2019) in the online learning and teaching space. In Australia and the United Kingdom, standards and guidelines for good practice in online learning and teaching emerged (Parsell, 2014; Salmon, 2014; Stone, 2017b). Many of these have been used to inform

online learning developments at institutional levels as well as being adopted in practices by individual educators (see for example, Cannell et al., 2019; Deakin University, 2022; Dyment et al., 2019; James Cook University, 2017).

By the beginning of 2020, key recommendations that had come out of this wealth of research and literature could be summarised as follows:

- For universities that offer both on-campus and online degrees and courses there needs to be recognition at a whole-of-institution level of online learning as core business, equal in importance to on-campus learning, rather than as a side-line or add-on at the margins.
- Institutions and educators within them need to know who the online students are; to understand the demographics and diversity of this cohort so that their strengths and challenges can be appropriately and equally considered and understood.
- Student policies and procedures must be sufficiently flexible to meet the needs of online students, rather than keeping to those that have been designed primarily with on-campus students in mind.
- Online learning needs to be appropriately designed and delivered quite differently from the design and delivery of face-to-face teaching, making appropriate use of available and accessible technology and taking into account the particular needs and challenges of online learning and online students.
- A strong and engaging online educator presence is required, ensuring regular communication, imparting a sense of interest in and caring for students and their learning, and building peer to peer relationships.
- Systems need to be developed to effectively monitor online student engagement and progress, in order to provide early intervention for students who may be struggling academically or otherwise at risk of discontinuing.

This is what we knew by the beginning of 2020, much of which had begun to significantly influence the development, design, and delivery of online learning for what was still a minority of higher education students, mostly within institutions that were also focused strongly on face-to-face teaching and learning. Then, suddenly, the world changed. The Covid-19 pandemic swept the globe, with unforeseen consequences in almost every aspect of our lives, including that of education – how it is delivered, received, facilitated, and assessed.

The need to rethink online learning

Beginning in early 2020, restrictions on the movement of people outside their homes, and closures of schools, colleges, and universities, meant that educational institutions around the world had no choice but to turn to technology, delivering education online to all students, whether they had chosen it or not. For many Australian universities and the staff within them, this was the first time that online education had been offered. Even at the large regional universities, well-known for offering distance, online education, there were many staff who found themselves delivering online courses for the first time ever. From March 2020, what had until then been relatively marginal suddenly became mainstream, with all students now expected to study online into the foreseeable future (Martin, 2020; O'Shea et al., 2021).

This massive shift has undoubtedly created many challenges, for students, institutions and the staff within them. Indeed, "the immediate and prospective threat of COVID-19 has, and will continue to, test the online delivery infrastructure of universities" (O'Shea et al., 2021). However, it has also created opportunities, which we need to understand and embrace into the future. As the previous discussion has shown, there is little room for doubt that the opportunity to study remotely has implications for student equity, by making it possible for many more people to gain an education than if everyone had to physically attend classes on campus. Despite the initial and inevitable scrambling that universities and staff had to do in order to rapidly pivot to online delivery en masse, much of the research and literature that has emerged since 2020 shows a very real promise of a more equitable higher education experience, in terms of improving access,

participation, and success for a wider range of students of all ages and circumstances, including those from diverse and underrepresented backgrounds.

Online learning literature – 2020 and beyond

One of the first pieces of Australian research to emerge during the pandemic was a report commissioned by the Tertiary Education Quality Standards Agency (Martin, 2020) on the findings from a survey of students' experiences of the initial shift to online learning due to Covid-19. The findings showed that what students disliked most about the switch to online learning was having insufficient interaction and engagement with both teachers and other students, poor online resources, and in many cases, the lack of expertise in online teaching demonstrated by their tutors/lecturers. What they most appreciated was having flexible access to their learning materials (including not having to get to lecturers/tutorials at fixed times), having access to help and support online (where this was available), and where technology was used well, they appreciated the aspects of technology that helped their learning.

Similarly, Savage's research (2021, p. 8) with student mothers and their educators found that amongst student mothers who had previously been studying on-campus there was "overall agreement that online learning presented flexibility and adaptability … which was helpful in managing study and family life". In the words of one of the student mothers, "I really appreciate the flexibility … if I had a sick kid … I was like, well, it's not that big of a drama, I can just log on at night". This research also showed that students who were already studying an online course and therefore previously in a minority, appeared to experience a greater sense of inclusion, now they were part of the mainstream. For example, "I knew I wasn't missing out because there only was online, whereas previously it was like, 'What's even happening internally?'". Suddenly being part of the mainstream brought other benefits. Savage's study (2021) revealed that the greater flexibility offered by the university to help students adjust to studying online, such as "granting all students a five-day extension on all assignments without requiring the usual documentation" (p. 9) was a boon for both previously on-campus and online students alike. There was also an increase in personal contact from the institution, creating a stronger sense of belonging for all.

Students in on-campus enabling, or university pathways programs, also had to make the transition to online study once Covid-19 arrived. Research into their experiences (James et al., 2021) found that they too mostly "adapted and enjoyed the flexibility and convenience of studying at home" (p. 10). This was indicated by comments such as: "It was so much easier not having to drive to campus for classes and to be able to do many things around class time" and "being able to attend lectures anywhere" (p. 8). Online learning was also more comfortable for some students psychologically: "I am a very anxious person and was a lot more comfortable being in my own environment and by myself", with other students choosing to transfer to a fully online mode of study for the future for reasons such as: "I loved the independence that came from studying at home", and "It suited my family commitments well" (p. 8). A key important factor in the students' successful adjustment to online learning (p. 9) was the presence of "a collegial relationship between lecturer and students", exemplified by "lecturers' availability, support, and their regular attempts to engage students who were inactive or struggling". For some, what was at first a negative experience as they struggled to adjust to online learning, became a positive experience due to the supportive interventions of their lecturers, with students valuing their humour, helpfulness, and kindness. In the words of one student: "The supportive, really, really, kind staff were a God-send - just all being 'in it together' to get across the line during a challenging time probably gave my confidence a little boost by the end"(James et al., 2021, p. 9).

Another recent study highlighting the importance of flexibility in online delivery is that by Mercer-Mapstone et al. (2022). This was conducted with students across a combination of Australian, United States, and United Kingdom universities, who self-identified as being from *minoritised* backgrounds. This major piece of research surveyed over 2,500 students from 12 universities across three countries, finding that online learning was "described as both one of the best and one of the worst aspects of students' experiences during the pandemic" (p. 10). Nevertheless, broadly speaking:

> [T]he shift to online/blended learning for previously face-to-face students opened up a level of flexibility which made learning more accessible, particularly for students from minoritised backgrounds. In those cases, this accessibility and flexibility prompted ripple benefits which enhanced wellbeing and improved student's financial situations. (p. 10)

The impact of Covid-19 on student wellbeing is similarly explored in research by McKay et al. (2021) with students entering their first year of university. Over 50 students participated in surveys and/or focus group interviews during their first trimester at an Australian university. All had been expecting to start university as on-campus students until Covid-19 disrupted these plans. Experiences were varied, with some students struggling more than others to adjust to the change to online. McKay et al. concluded that connection with others, emotional support and academic support were all crucially important to students' successful navigation of the online learning experience. Recommendation for institutions from their study included, facilitating social networks, student-student groupwork, drop-in sessions with support staff, and "opportunities for extra-curricular activities that provide purpose and connection to programs of study" (p. 11). They also suggested that learning management systems need to be closely monitored to identify students "who need in-time support" (p. 11).

Students in the second to third years of their on-campus degrees were found to have also faced significant challenges in the sudden and unchosen move to online (Attree, 2021). A qualitative in-depth study of six undergraduate students in this situation revealed the "shock to the system" (p. 2) they experienced, despite their familiarity with university study in itself. What they missed most was the "interaction with other students" (p. 3) that comes from being physically in the presence of others. Attree (2021) points out the importance of teacher presence for these students, who were asking for, "a more personal and inclusive environment" that included an "interactive and interpersonal delivery mode" (p. 5). One student advised teachers to "run the class like you are in the room and make it interactive. Talk to the students, not at them", while another, whose lecturer had phoned her to personally help her through some difficulties she was experiencing with the course, described her lecturers as "amazing, understanding, empathetic and interpersonal" (p. 4).

International research shows consistent findings. For example, a Serbian study (Marković et al. 2021) conducted surveys and interviews with university students who had all previously been studying on-campus but had been forced by the pandemic into "emergency online learning" (p. 1). This study found that many students spoke very positively of their online learning, particularly appreciating:

> [T]he ability to attend lectures from different places; the possibility of simultaneously performing other activities while attending the teaching process; the ability to establish better cooperation with some students; the ability to take the tests online…; more time for studying and other activities, …[time] not wasted on going to and coming back from the faculty; practical approach to explaining teaching content by means of online teaching; digital training of students; the use of different digital tools and technologies; a more flexible atmosphere. (Marković et al., 2021, p. 9)

Key disadvantages named by students included: reduced participation and communication with teachers and other students, including insufficient feedback from teachers; technical difficulties and issues, including spending too much time on digital devices, unequal access to technology and lack of comfort with digital communication; and a greater sense of disconnect from their learning – a lack of "feeling of being a student" and "motivation and focus". The researchers conclude that a number of important factors need to be attended to by universities to "secure the quality of education" while delivering it online, such as: "tak[ing] into account individual differences and students' psychological needs (for belonging, socialising, cooperation)"; ensuring appropriate "preparation of students and teachers at an institutional level"; along with suitable levels of "institutional support" and "interaction among students" (Marković et al., 2021, p. 13).

All the studies discussed reinforce what the evidence has been telling us for many years about ways to improve the online student experiences, including the importance of personal contact and more flexible practices for online students. The common themes that emerge from these examples of post-2020 research into the student experience of online learning are discussed in the following section, along with implications for the place of online learning into the future and its potential role in continuing to enhance student equity.

Implications for the future

None of these recent findings are surprising and indeed are entirely consistent with what we knew about the online learning experience prior to 2020. Like those who had chosen online learning in the past, students forced to learn online from 2020 have been shown to be appreciating the greater flexibility, in terms of access to materials and ability to manage their time. Where interaction and engagement with teachers and other students are well facilitated, where help and support are readily available, and where technology is used to aid learning effectively, students are more satisfied with the overall experience. Where there is also sufficient flexibility to combine study successfully with other non-negotiable life commitments, it becomes even more manageable, expanding the possibility of higher education to a wider and more diverse student cohort.

Some of the research focusses directly on the experience of student cohorts previously underrepresented in higher education: cohorts such as older learners; students with home, family, and other caring responsibilities; those embarking upon enabling programs; and students from other marginalised or minoritised backgrounds. Such student cohorts can also be referred to as *under-served*, in that they have historically not been well-served by the conventional higher education sector, generally "demonstrating the lowest positive ratings of satisfaction and engagement within their undergraduate courses" (Payne et al., 2021, p. 2). These very same student cohorts have been the ones embracing online learning over the past 2 decades. This mode of study has offered a way, often the only way, for many students to participate in higher education. I would argue that it can be even more effective in widening higher education access and participation into the future now that it occupies a mainstream position.

The normalising of online learning due to Covid-19 presents an opportunity for all universities to attract more students from diverse backgrounds to study, whether fully online or in a hybrid model. Growing evidence indicates that online delivery also has an important place in university widening participation outreach programs. Being able to deliver outreach programs at a distance, reaching more students in high schools in regional and low socio-economic areas, "can engage diverse, new cohorts, increase the scale of engagement, and provide participants with exposure to a greater range of outreach programs and learning experiences than traditionally encountered" (Dodd et al., 2021, p. 12).

The research indicates that universities are taking online learning more seriously; they are learning from the evidence to improve flexibility, communication, and support, now that the retention and academic success of all students is at stake. Recognition by universities of the time and effort necessary for effective online design and delivery, reflected in workload models, training, and mentoring, will also be crucial. A study by Dodo-Balu (2017) reported that online tutors, largely on sessional contracts, were "donating significant amounts of their own time to achieve a quality experience for their students". Universities need to ensure that they do not continue to rely upon the personal goodwill of tutors and lecturers "rather than institutional strategy … to ensure the quality of teaching" (p. 11). The effective mainstreaming of high-quality online learning options will have important flow-on effects for students both now and in the future. This includes students who have traditionally chosen to study online, with the potential to attract and retain more students who may not previously have considered university as a possibility for them.

Conclusion

It is important that "universities and staff resist the urge to revert 'back to normal' for teaching when this becomes an option post-pandemic" and instead "focus on enhancing opportunities and reducing challenges"

(Mercer-Mapstone et al., 2022, p. 76) for students from all circumstances and backgrounds. Following the unexpected and rapid move of online education from the margins to the mainstream, universities now have the opportunity to build on this, by maintaining and improving online learning options that best meet students' needs, based on the solid evidence amassed over the past 20 years and more. An examination of the online learning literature, both pre- and post-2020, shows that the opportunities made available to what was once a minority of students, via the affordances offered by online learning, can equally be embraced by a much wider student cohort. These opportunities are being welcomed by the broader student cohort, while at the same time institutions are increasingly recognising the need to support both online and on-campus students through, at times different, yet equitable processes and strategies. There are inevitable implications for higher education universities to address, such as how to devote sufficient staff time, training, and resources to building an engaging and supportive learning environment for on-campus and online students alike. However, through recognising and responding to such challenges using the evidence-based findings generated from the past 20 years of research, the higher education sector can look to a future that makes it possible for a greater diversity of students to participate and succeed. The effective and ongoing provision of online, blended, or hybrid models, offered as equal alternatives, side by side with the more traditional on-campus education delivery, can only enhance "the potential for higher education to be more accessible to a broader student population" (Baker et al., 2022, p. 59).

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