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# Improving Student Engagement, Retention and Success in Online Learning

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## Introduction

Australia has a long history of distance education, which traditionally was delivered to students in regional and remote parts of the country. However, the way in which this is delivered, as well as the student cohort, has changed considerably over the past 20 years or so. What used to be known as 'correspondence' education, through posted material such as recorded lectures, hard copy notes and readings, has been replaced by online, digital delivery of course content via the internet. While a higher proportion of regional students study online (31.29%) than do metropolitan students (16.75%) (Pollard, 2018), the total number of online

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metropolitan students is greater than that of online regional students, given that regional students comprise less than 19% of all Australian university students (Australian Government Department of Education, Skills and Employment [DESE], 2019).

Within this chapter, the term online learner refers to those students enrolled in higher education in a distance or external mode, with learning content delivered online. As such, many may not be required to attend any face-to-face learning experiences throughout their entire degree program, while some may be required to attend occasional sessions on campus, or professional placements in a workplace. Many may also be required to be physically present to sit examinations. However, for the most part, these students are studying away from campus, at their computer or other digital device, not physically attending classes. Massive open online courses, or MOOCs, refer to open-access courses that are delivered free or at low cost potentially to anyone, anywhere, provided they have access to the internet. They can be stand-alone non-accredited courses or included as a component of an accredited university course. Online learners may at times be undertaking a MOOC in association with their university studies.

The continued advances in technology that have simplified the digitalisation of learning content, along with the growing competitiveness of universities, has led to more institutions than ever before offering online courses at undergraduate and higher degree levels. Universities generally market online study as a more flexible and manageable option for students who may find it difficult to attend classes due to factors such as distance or lack of time, leading to an ongoing rise in online enrolments. Australian enrolments in distance/online study grew from 17% of the commencing domestic cohort in 2010, to 25% in 2018 (DESE, 2019), a faster growth than on-campus enrolments over the same period (DESE, 2018, p. 14). Inevitably, the ways in which universities traditionally have planned, developed and delivered education are being transformed, with higher education being delivered differently to an increasingly more diverse student cohort.

This chapter explores the findings from recent Australian and international research into the online student experience, conducted prior to the 2020 COVID-19 pandemic and subsequent shift from face-to-face to

online education delivery. It focuses particularly on the Australian experience of those who choose to enrol in an online mode, examining the potential student equity opportunities that online learning can offer, to what extent these are being realised and how they could be improved. Within this context, recommendations are offered for the types of institutional strategies and practices that are most likely to improve retention and success for online learners. These recommendations are even more important in the light of the 2020 rapid expansion in online learning, which is likely to continue while face-to-face contact across educational settings and the broader community remains highly restricted due to COVID-19.

## The Role of Online Learning in Improving Student Equity

Multiple studies have highlighted that, internationally, the majority of students who choose online study are mature-aged (aged 25 and over) and managing other essential and time-consuming commitments such as paid employment and/or caring for children/family, which also impact upon their energy and finances (Bissonette, 2017; Chawinga & Andrew, 2016; Hewson, 2018; Ilgaz & Gülbahar, 2015; Moore & Greenland, 2017; Park & Choi, 2009; Signor & Moore, 2014; Stone & O'Shea, 2019a).

Within Australia, higher proportions of students from the Government-identified higher education equity categories (DESE, 2017a) have been represented in online learning. These include students from low socio-economic backgrounds, regional and remote students, Aboriginal and Torres Strait Islander students, and students with disability (Cardak et al., 2017; Halsey, 2018; Kent, 2015; Pollard, 2018; Stone, 2017). Higher proportions of students who are first in their families to enter university have also been choosing to study online than face-to-face (Stone et al., 2016). As such, online learning has been playing an important role within the Australian Government's student equity agenda through 'meet[ing] students where they are currently placed, allowing participation in ways

that suit the student considering their individual circumstances and the personal barriers they may have' (Dodo-Balu, 2018, p. 35).

Additionally, women have been more strongly represented within the online cohort not only in Australia (DESE, 2018) but also at universities with substantial numbers of fully online students within New Zealand (New Zealand Ministry of Education, 2017), the United Kingdom (Open University, n.d.) and North America (Athabasca University, 2019). It needs to be acknowledged that women continue to be disadvantaged in higher education by their traditional role of carer (Chesters & Watson, 2014; Mallman & Lee, 2016; Pocock et al., 2009; Stone & O'Shea, 2012, 2013). Indeed, the need to combine study with that of caring for others is a key reason that so many women have been willing to embrace online learning. It can therefore be argued that gender equity is being enhanced, as women with caring responsibilities increasingly choose 'the flexibility that online study promises…to manage study around other family commitments' (Stone & O'Shea, 2019b, p. 98).

However, these potential equity gains have been diminished by the lower student retention and completion rates compared with the performance of on-campus students (Stone, 2017). Various studies have shown that for distance, online students, retention is poorer by at least 20 percent (Greenland & Moore, 2014), with 40 percent fewer completing their degrees over a nine-year period (DESE, 2017b) and withdrawal without a qualification being 2.5 times more likely (DESE, 2017c). Many reasons for this have been expounded, such as technology challenges (Yoo & Huang, 2013), family, work and other caring commitments making it difficult to dedicate enough time for study (Greenland & Moore, 2014; Ilgaz & Gülbahar, 2015) and poorly designed course materials and delivery (Devlin & McKay, 2016). Other researchers point to the importance of sufficient communication and contact with tutors and other students (Lambrinidis, 2014), including the 'presence', 'accessibility' and 'responsiveness' of the online teacher (Vincenzes & Drew, 2017, p. 13), to avoid online students experiencing a sense of isolation and 'aloneness' (Resop Reilly et al., 2012, p. 104).

More recently, it has been argued that lower retention and completion rates are connected as much with the nature of the student cohort, or in fact a lack of understanding of this cohort, as with the different mode of

delivery per se. A number of studies have stressed the importance of recognising the diversity of the online student cohort, contending that only through 'recognising, understanding and valuing this cohort' (Stone & O'Shea, 2019a, p. 66) can an equitable experience be achieved. If institutions expect this cohort to be largely the same as that on campus, there are likely to be 'gaps between expectations and delivery' (Hewson, 2018, p. 10) on both sides. For example, Hewson (2018) proposes that 'a *dominant* [sic] student identity… is not realistic for online students' (p. 11) who 'cannot prioritise their student identity over their work identity' (p. 10) while Devlin and McKay (2018) highlight the 'subculture expectations and rules' within universities that may not always be 'clear to online students' (p. 161). Understanding the 'important fundamental differences between on-campus and online learners' (Moore & Greenland, 2017, p. 57) is therefore a prerequisite for designing teaching, learning and support strategies that will effectively engage and support these students.

In looking at the role of MOOCs, there is some evidence that, where they are designed and offered as no-cost, open courses that help to prepare students for more formal studies through such means as improving language and literacy, raising confidence in study skills and providing tailored learner support in specific subject areas, they may also contribute towards student equity. A review of research into the student equity and student inclusion benefits of MOOCs over the five-year period of 2014–2018 concluded that 'MOOCs and contemporary open education programs that aim to enable improved student equity and social inclusion are an active global and multi-lingual phenomenon' (Lambert, 2020, p. 13). Those most effective at enabling student equity and/or social inclusion were ones which had been developed by 'organisations and educators with a remit or passion to widen participation… [designing] programs with particular disadvantaged communities and cohorts in mind, adopting the MOOC platforms and similar technologies in more developmental, supportive and equitable ways' (p. 14). The design principles that tend to be used in the development of MOOCs have also been found to be appropriate for 'facilitating and encouraging cultural inclusion in their specific learning spaces' (Marrone et al., 2013). The other side of the picture however is that MOOCs have in many cases become

more commercial, with a 'shift from free to fee-paying offerings' (Lambert, 2020, p. 2) and even those which remain free are, by themselves, 'unlikely to provide dependable accreditation' (Productivity Commission, 2017, p. 98) unless they are incorporated, possibly as a micro-credential, as part of an accredited learning package (Zacharias & Brett, 2019, p. 12).

## Why Study: And Why Online?

Findings from research with mature-aged online students over the past decade have revealed that the motivation for studying at this stage of life is generally linked to the student's desire to improve their earning capacity, to progress their career and achieve a better quality of life for themselves and their families (O'Shea et al., 2015; Stone et al., 2016). For the many women who choose to return to study as mature-age students, key reasons include 'to gain or improve employment to increase their income, to support themselves and their children… with major family events such as having a child, or children leaving school, being significant catalysts' (Stone & O'Shea, 2019b, p. 102).

The need for flexibility in their studies has been shown to be a key motivator for women choosing to enrol as an online student rather than attend campus, in order to balance their other 'work and life commitments' (Muir et al., 2019, p. 270). Quotes such as, 'I choose to study online because I work, all shift work [and] I have a six- and eight-year old child' (female online student, aged 36, in Stone et al., 2019, p. 32) and '[I can] structure the study – to suit my sort of lifestyle instead of having to make any dramatic changes to study on campus' (male online student, aged 29 in Stone et al., 2016, p. 155) are typical amongst many. Other studies have found that not only 'work/balance issues' but also 'money concerns' are 'factors in the forefront of the participating students' minds' (Hewson, 2018, p. 10) when they choose to study online, with fewer costs to be expended in travel and lost work hours (Michael, 2012).

Given the particular demands that so many online students are dealing with, such as lack of time, other life responsibilities and often tight finances, it is perhaps not at all surprising that student attrition is higher for this cohort. In the face of the competing priorities of work, family and

study, it is study which will inevitably be sacrificed as the least essential of these three, should the balance become unmanageable. It is therefore of the utmost importance that institutions pay sufficient attention to engaging and supporting these students, not only at the time of first enrolment, but throughout the entire length of their studies.

## Building Student Engagement, Retention and Success

Research with students who have chosen online study, seeking to understand their views on what is important to help them to stay and succeed, has been vital in building an understanding of ways to improve their engagement, retention and success. First and foremost, as alluded to above, is the need to understand and appreciate the diverse nature of this cohort, and to pay close attention to what the students themselves regard as the key ingredients for engagement and persistence. These can be summarised as follows:

1. *Being known and valued for who they are*

> They have no understanding of online students or how to interact with them… it's like we are an extension… I get weather updates and carpark info! (student quote, O'Shea et al., 2015, p. 41)

Online students want to feel included as equals, not to be treated as 'a lower priority than on-campus students', 'second fiddle' or 'not really having a voice' (O'Shea et al., 2015, p. 51). The overwhelming majority of online students traditionally have been aged 25 and over, yet Mallman and Lee (2016, p. 2) have argued that older students generally remain 'insufficiently understood'. Hewson's (2018, p. 36) research has highlighted the multiple identities which older, online students must maintain, and how they, by necessity, prioritise 'family first, work second and study third'. It is therefore vitally important for institutional cultures to 'genuinely and actively [value] the contribution that mature-age students

make to the institution' (Laming et al., 2016, p. 41). Examples of how this might be done include, 'acknowledging the prior experience of this cohort and the strengths they bring to their studies' (Stone & O'Shea, 2019a), adopting an institutional 'perspective that recognises… their multiple identities' (Hewson, 2018, p. 11) and, for the many women studying online, 'a simple recognition of the gendered expectations' (Stone & O'Shea, 2019b, p. 106) that will inevitably impact upon their lives as students.

2. *Meaningful and relevant connection and communication with the institution – particularly teachers and other students*

> Why should I be bothered if the lecturer can't? (student quote, Muir et al., 2019, p. 7)

A lack of communication from tutors and the absence of feedback have been revealed to be particularly frustrating and disengaging for online students. Students have talked about 'self-service units'; the 'disappearing lecturer'; 'little or no feedback, no discussion and "don't bother me" tutors' (O'Shea et al., 2015, p. 49). Conversely, students report positive engagement occurring within the context of 'a strong teacher presence…[with] regular and prompt communication between teacher and students' (Stone & Springer, 2019, p. 64). This includes the tutor 'being available for contact' and engendering a sense of a 'reciprocal relationship' between students and tutors (Muir et al., 2019, p. 9).

Other studies have highlighted 'the tutor-student relationship' as being 'critical' to the concerns of online learners, particularly the 'interactions and relationships with their tutors – how often and how they would be able to communicate' (Hewson, 2018, p. 10); the importance of 'instructor immediacy in motivating participation' (Kuyini, 2011, p. 11); and 'relationship-building strategies' (Resop Reilly et al., 2012, p.104). Communication and feedback from online teachers have been repeatedly highlighted as being vital for online student engagement (Delahunty et al., 2014; Kuiper, 2015; Lambrinidis, 2014) with Ragusa and Crampton (2018, p. 15) for example finding that 'the quality and

timeliness of lecturer feedback was the most valued form of learning connection identified by students irrespective of course'.

The 'presence and authenticity' (Thomas & Thorpe, 2018, p. 6) of an online teacher can play a crucial role in building engagement and communication on a student-to-student level, by helping to 'establish a learning climate that normalises vulnerability and enhances the students' comfort, confidence and willingness to participate' (Thomas & Thorpe, 2018, p. 6). Within such a climate, students are more willing to communicate meaningfully with each other, hence furthering their sense of engagement with the online class as a whole. Building social connection between students has also been shown to enhance their engagement and sense of belonging, through such means as 'social exchanges' with other students, including 'assigments that required them to interact with others' (Boling et al., 2012, p. 123) within a meaningful context related to their learning outcomes.

3. *Engaging learning design*

> What works in person is not the same as online… I thought it would be more tailor-made for it than what it is. (student quote from O'Shea et al., 2015, p. 52)

Many students report being disappointed by the poorly designed courses and materials they are faced with, finding them difficult to navigate and disengaging. Well-established from research into online student retention is the need for 'engaging and interactive course design' (Stone & Springer, 2019, p. 150), with online courses designed in ways to 'stimulate [students'] active participation and interaction and meet their expectations' (Park & Choi, 2009, p. 215). There are many examples cited in the literature of ways this can be done, including, 'the importance of using multimedia and of choosing formats and content that represent the students' experience' (Devlin & McKay, 2016, p. 98) and providing 'opportunities for students to interact in multiple ways with their peers in an online environment' (Shackelford & Maxwell, 2012, p. 7).

Evidence (for example, Akarasriworn et al., 2011; Devlin, 2013) confirms that practices such as recording face-to-face lectures and uploading them for online students, rather than providing specifically designed online content, provides a disengaging experience. Students report feeling most engaged and connected with their teacher, other students and the learning content when their online course provides activities directly related to learning outcomes; encourages communication and collaboration between students; takes students through assessment tasks directly related to the content; provides prompt feedback; provides both synchronous and asynchronous activities; and allows students to work ahead if they wish to do so (Boling et al., 2012; Hewson, 2018; Muir et al., 2019; O'Shea et al., 2015; Stone & Springer, 2019).

4. *Proactive institutional preparation and support*

> Even some who regularly used computers in other settings found learning the technology a struggle, which impacted upon their motivation, confidence and perseverance. (O'Shea et al., 2015, pp. 51–52)

Various studies (for example, Reedy, 2011) have revealed that online students want and expect some level of technology preparation for what is ahead, stressing the importance of 'robust and comprehensive instructional support systems' (Yoo & Huang, 2013, p. 160) to improve their technical competence and hence their confidence with online study.

Students are also seeking preparation in academic expectations and skills. For the many older learners who have not studied formally for some years, a lack of preparation in academic skills can be daunting. In the words of one online student: 'They came back to us and said you have all got a problem with referencing, you all need to redo your referencing for the next assessment which was another essay. They gave us no tutorial or anything' (Stone, 2017, p. 50).

There is also evidence that the isolation of online study can be alleviated through 'being offered and receiving institutional help and support' (Stone et al., 2016, p. 160), as the experience of this female online student, aged 30, illustrates:

> I got an email… telling me that they were here to help… uni is hard so give us a call if you ever want a chat… and then a couple of days later I thought I'm going to call these guys. It was really helpful. I had a chat to a woman over the phone who was really great. (Stone et al., 2016, p. 160)

5. *A flexible approach*

> People who are interstate, people on night shifts, people who can't attend school in standard hours that school is offered. It has to be flexible. (student quote in Stone et al., 2019, p. 32)

The dependence on flexibility has been raised in the findings of a number of studies with online students (Bissonette, 2017; Boling et al., 2012; Hewson, 2018; Moore & Greenland, 2017; Ragusa & Crampton, 2018; Stone et al., 2019). These older, time-poor students have chosen to study online so that they can 'study when and where they could fit it in around busy lives and other pressing responsibilities and commitments' (Stone et al., 2019, p. 29). Many express a need for 'all their learning materials to be available in advance' (Hewson, 2018, p. 5), so that they can maximise their time most effectively, to 'move ahead or catch up from behind' (Stone et al., 2019, p. 32) when they have the time to do so, rather than being forced to wait for the materials to be posted week by week.

> So, if you know you've got a lot of things on, say, in week five, you can maybe put in a few extra hours in week four to listen to those lectures. Or, get some postings up early and come back and read them later the following week. (student quote in Stone et al., 2019, p. 32)

Problems have been experienced when 'instructors required students to participate in synchronous online classrooms' (Boling et al., 2012, p. 121) without considering 'if you had kids, if you were working' (Stone et al., 2019, p. 30). Another source of frustration can be 'the difficulties involved in seeking even a short extension of time, on rare occasions, due to quite rigid rules being applied' (Stone et al., 2019, p. 33), indicating a need for streamlined processes to help them manage their studies around

other unexpected demands, such as sick children or sudden work deadlines. Many students have experienced a 'lack of consideration given to employment' (Moore & Greenland, 2017, p. 58) with employment issues or demands 'not perceived as valid for seeking extensions… "when I started my degree they told us that things like work would never be acceptable [as reasons for extension requests]"' (Stone et al., 2019, p. 34).

It appears there is a lack of clarity within universities about the meaning and practical application of these terms, with flexibility 'rarely… extend[ing] beyond the means by which students interact with staff, learning resources and fellow students' (Todhunter, 2013, p. 240). When words such as 'flexible' and 'work at your own pace' are used to market online courses, understandably students find it a disengaging experience if they feel they are not being given the flexibility they were promised. 'We're being sold a product that is described as fully flexible…yet… [the university is] sort of treating it like an office-hours gig' (Stone et al., 2019, p. 30).

## Implications and Recommendations for Higher Education Institutions

Research with online students over the past decade clearly indicates that, in a climate of continued rapid growth of online learning, institutions need to move beyond the conventional methods of external education that have been relied upon in the past. Instead of essentially trying to replicate the face-to-face learning experience at a distance, higher education institutions need to embrace the digital communication advances of the twenty-first century, to deliver online education differently and in more creative ways.

Those who choose to study online tend to possess a great deal of life experience. They tend to be older and hence have had more experience in the workplace and/or being responsible for others, such as through parenting. They are more likely to have the necessary maturity to manage complex responsibilities and tackle unfamiliar situations. The other side of the coin is that they may lack confidence and academic experience,

perhaps coming back to study after a lengthy gap, or from family backgrounds where no one they know has been to university. It can be a considerable challenge for institutions to create a learning environment that encourages and supports these students to persist and succeed.

As discussed earlier, multiple research studies with online students indicate that they want to feel valued by their institution; they express a desire for strong connections with teachers, with other students and the institutions in which they are studying; and they want to be treated as adult learners through a more flexible approach to both the delivery of learning content and the application of student policies and processes. They also expect an engaging and interactive digital experience, similar to the sophistication of social media platforms and commercial online sites that they are used to. If instead they encounter a poorly designed online learning experience, they are less likely to engage with it or to want to interact.

Staff involved in the design and delivery of online education at a grassroots level are also generally very aware of what constitutes an engaging online student experience. Findings from a national study with Australian universities that interviewed a range of staff involved in the design and delivery of online education (Stone, 2017; Stone, 2019) demonstrate many commonalities and similarities between the student and staff perspectives:

> Specifically, there are very similar views on what needs to be done to engage online students, to help build their sense of belonging within their studies, and to help them succeed academically. (Stone, 2019, p. 8)

This is a reassuring discovery and one that indicates the value for institutions in also consulting with their expert staff – those who teach and support students directly and those who understand how to design specifically for online education.

From this and other research (Canty et al., 2015; Delahunty et al., 2014; Downing et al., 2019; Parsell, 2014; Reedy, 2012) some key recommendations are offered here for ways in which institutions can better address the needs of online students.

1. Build students' sense of belonging and of being valued by their institution, through an institution-wide approach to online learning, in which the university as a whole recognises and treats online education as core business, not simply an add-on. This includes establishing quality standards for online education as well as understanding the nature and diversity of the online student cohort, in terms of both its strengths and its needs.
2. Improve communication between students and the institution through intervention programs that make early contact with students and maintain meaningful connection throughout their learning journey. Examples include outreach phone calls, comprehensive orientation delivered remotely and/or face-to-face in regional centres, contact with student advisors and student mentoring programs.
3. Value and support a strong teacher-presence, recognising the time and energy required to teach effectively and sustainably online, in ways that encourage students to persist and succeed. This has implications for university workload models, with the need for a realistic assessment of teaching hours required for online teachers to effectively engage and interact with students, to build interaction throughout the length of the course and, equally importantly, to prevent teaching staff from becoming overloaded and disaffected.

> It's very time-consuming and tutors aren't paid for it, for that amount of time. We're not supposed to spend a lot of time on it. You're always chasing your tail because there's just not enough time. (lecturer quote from Stone, 2017, p. 37)

This latter concern has been shown to be particularly acute for sessional or casual staff, with 'a lack of opportunities for casual staff to develop their professional skills…[and] personal goodwill rather than institutional strategy…used to ensure the quality of teaching' (Dodo-Balu, 2017, p. 11).

4. Design for online, to ensure that course design engages students with their learning, connects students with each other and with the teacher, encouraging interaction, collaboration and communication. Accessibility and inclusivity are necessary features of effective learning

design, to recognise and value the diversity of backgrounds, skills and strengths that these students bring with them to the virtual classroom.

5. Prepare students effectively for academic expectations and support them with their ongoing learning. This requires collaboration across the various divisions, departments, faculties and schools, to embed preparation and academic skills' support as much as possible within the curriculum. There has been previous recognition of the importance of embedding support within face-to-face curricula, through academic and professional staff working together to achieve this (Kift et al., 2010). For those studying online, without access to on-campus support services, this is even more crucial. MOOCs can play a role here, with a number of universities developing academic preparation MOOCs. These are aimed particularly at 'learners with low skills, low confidence, and/or low levels of previous education' (Lambert, 2020, p. 7) and offered by some Australian higher education institutions (see for example, University of Newcastle, 2020).
6. Ensure other support is delivered as needed, such as interventions that reach out to students at appropriate times. Data on student activity and behaviour within the learning management system (LMS) can inform ways and times to contact particular students or student groups (Johnson et al., 2016; Sclater et al., 2016). An Australian Government report (DESE, 2018, p. 24) has found, 'there is widespread acceptance that learning analytics, if implemented effectively, is a valuable tool for addressing student retention'. Again, collaboration is required to ensure holistic support through, for example, embedding online resources and joining up academic and support staff to work together (Slade & Prinsloo, 2015). Remote access to support services such as personal counselling, mental health services, disability and career services, is also required. Instead of largely operating face-to-face in normal business hours, remote and out-of-hours availability for online students needs to be assured.
7. Provide sufficient flexibility in university policies to ensure that online students are not disadvantaged. Student processes and protocols need to be appropriate for online learners rather than being 'designed for traditional on-campus students without adequate adaptation for the online learner' (Moore & Greenland, 2017, p. 5). Flexible access to

learning materials assists students to make the best use of their time, to fit their studies in and around busy lives. It is important to recognise the 'after-hours' nature of online study for many, including how difficult it can be to attend synchronous activities, or to meet inflexible cut-off dates/times for class contributions and other tasks. Allowing greater flexibility for staff in their responses to student requests and circumstances allows for a more individual, caring approach, in which students are more likely to remain engaged and connected with their studies.

## Conclusion

To encourage greater retention and success, online education delivery requires something more than simply digital delivery of face-to-face content. It requires a whole-of-institution approach to develop the potential of both people and technology. Distance students, studying online, may not be physically present but should certainly be kept 'visible', not only by those who are teaching or supporting them, but also by the institution as a whole, at all levels. This visibility includes a recognition of the skills and strengths that online students bring with them to university and the challenges they may face in combining study with their other multiple responsibilities. It also allows for a more differentiated approach that engages and encourages this diverse cohort of students to persist and succeed: an approach that provides the flexibility that online students are seeking; ensures that learning materials are interactive, engaging and relevant; delivers targeted support that is practical, timely, relevant; and offers meaningful communication that builds a sense of belonging and a desire to persist. Through such an approach, universities can ensure that online students, their varied circumstances, strengths and needs, are recognised, appreciated and ultimately supported to maximise their persistence and success.

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