
Feature—Consolidated Project Report

Online learning in Australian higher education: Opportunities, challenges and transformations

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Abstract

Higher education is being rapidly transformed by the growth in online learning, with an increasing number of universities worldwide offering degree programs in online, distance modes of study. Australian education has a long history of 'distance education', primarily offered by regional universities. With the digital communication advances of the 21st century, traditional 'correspondence' study has transformed into online learning, with many more universities, both metropolitan and regional, offering undergraduate degree programs that can be completed entirely online. While this can provide a significant opportunity for further widening of participation in higher education, Australian and international research indicates that much needs to be done to improve the higher attrition rates currently associated with online learning. This paper draws on the findings of three separate yet related Australian research projects, to compare student and staff perspectives on ways to improve outcomes in online learning.

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Introduction

As in many other countries, the mode by which distance education is delivered to students studying off-campus in Australia, has changed quite dramatically over the past couple of decades. What used to be delivered to students by post, through recorded lectures and hard copy notes and readings, is now delivered almost exclusively in an online format via the Internet. Distance or external students now study 'online' rather than 'by correspondence'. The impact of being able to deliver education via the Internet has resulted in changes that are far greater than simply the mode of delivery. The relative ease with which learning content can be put online, coupled with the perception of the reduced cost of online delivery, when compared with face-to-face teaching and with printing and posting materials to students, has resulted in an increase in online offerings across the higher education sector. More institutions than ever before are offering online courses at undergraduate as well as higher degree levels, and an increasing number of students are taking up the opportunity to study in what is seen and marketed as a more flexible and manageable way to gain qualifications. Indeed, statistics from the Australian Government Department of Education and Training (DET; 2018) show that the number of students in Australia studying in a distance/online mode is now rising faster than those studying on-campus. Not only is this transforming the way in which institutions plan, develop and deliver education, it is also expanding the possibility of higher education to an increasingly wider student cohort.

Online students are less likely than on-campus students to be school-leavers, and more likely to be older, mature-age learners, engaged in regular ongoing employment, either full or part-time, with substantial family responsibilities and to be juggling multiple responsibilities in their lives (Moore & Greenland, 2017; Signor & Moore, 2014; Stone & O'Shea, 2019). There is evidence that online learning, particularly at undergraduate level, is contributing significantly

to the Australian Government's student equity agenda, with this cohort containing higher proportions of students who are first in their families to study at university level as well as those from the government-identified higher education equity categories (DET, 2017a), of low socio-economic background, regional and remote students, Aboriginal and Torres Strait Islander students, and students with a disability (Cardak et al., 2017; Kent, 2015; Pollard, 2018; Stone, O'Shea, May, Delahunty, & Partington, 2016;).

However, it is debatable how much of a real opportunity to achieve a qualification this provides, when Australian Government data demonstrates the considerably lower rate of completion of qualifications by online students when compared with those studying face-to-face (DET, 2017b, 2017c). One government study showed that only 46.6% of external/online students completed their qualifications over an eight-year period, compared with 76.6% for internal, face-to-face students (DET, 2017b), while another found that online students were 2.5 times more likely than face-to-face students to withdraw from their studies without a qualification (DET, 2017c). Clearly, online study brings with it both opportunities and challenges for students as well as higher education institutions. This paper draws on the published findings of two pieces of Australian research into the online student experience (O'Shea, Stone & Delahunty, 2015; Stone et al., 2016) and compares these with the findings of an Australia-wide research project conducted in 2016-2017 into the perspectives and experiences of academic and professional staff involved in online education. The Final Report of this research project was published in 2017 by the National Centre for Student Equity in Higher Education (NCSEHE; Stone, 2017).

Hearing from the students

Previous Australian research has given voice to this diverse higher education cohort, allowing us to hear directly from the students about their motivations for and experiences of online study;

also, their perspectives on what are the key factors that help them to persist with their studies. Two such studies (O'Shea et al., 2015; Stone et al., 2016) surveyed and interviewed a combined total of 144 online students from a range of universities across Australia. In both studies, consistent with the overall population of online undergraduate students, the majority were mature-age students, with the largest group aged between 25 and 50. Key findings common to both studies are summarised below.

Why study now, and why online?

Reasons for studying were overwhelmingly related to improving incomes, advancing careers and generally improving their lives in instrumental ways. A typical quote is that of Gemma, aged 42:

I've gone as high as I can go at work without a qualification, so it's for career advancement and opportunity I think, because I'd like to change jobs, but it's a bit difficult unless you've got that piece of paper (Stone et al., 2016, p. 153).

Students were very clear about their reasons for choosing to study online, rather than face-to-face study, stressing the importance of flexibility in terms of being able to choose where and when to study, due to the need to fit their studies around their other pressing responsibilities. For Glenda, aged 36, "It's just perfect because I can study at my own pace and my job gives me the freedom to study when I want", while Evan, aged 29, finds he can "structure the study – to suit my sort of lifestyle instead of having to make any dramatic changes to study on campus" (Stone et al., 2016, p. 155). The word "opportunity" crops up frequently in the stories of online students: "there's never been the *opportunity*"; "a great *opportunity*"; "*opportunity* plays a big part" (Stone et al., 2016, p.156).

What helps?

While making it clear that the availability of online education provided this opportunity for them to start university, the students also talked

about what they wanted and needed from their institutions once they had started, to help them to continue successfully. The two studies revealed a number of key issues for students, as follows:

1) *Inclusion*: students wanted to feel included as equals; to be valued as much as on-campus students. Many felt that:

online learners were "a lower priority than on-campus students" ... "second fiddle" and ... "not really having a voice" (O'Shea et al., 2015, p. 51).

2) *Preparation*: they wanted to be prepared for online study, particularly in understanding the technology used to deliver their learning:

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

3) *Communication and connection*: a lack of communication from tutors and the absence of feedback was particularly frustrating for many. There was mention of "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). Inca, aged 55, reported that:

Sometimes you'd have unusual things happen where they just seem to disappear after, like by week 11, week 12 they just don't come back (O'Shea et al., 2015, p. 49).

Many spoke about feeling isolated and craving more of a connection with fellow students and tutors, with comments such as that by 38-year-old Tania, "if there's no connection there with students, you kind of feel a bit isolated" (O'Shea et al., 2015, p. 48). The tutor could have a considerable impact on reducing isolation, as reflected by 25-year-old Neill's observation that "if the tutor's very active and engaging with students, generally the students are more willing to engage with each other" (O'Shea et al., 2015, p. 49).

4) *Proactive institutional support*: isolation could be alleviated through “being offered and receiving institutional help and support” (Stone et al., 2016, p. 160), as the experience of Cory, a female 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) *Engaging learning design*: students were often disappointed by the poorly designed courses and materials they were faced with, finding them difficult to navigate and disengaging. In the words of Ana, aged 50:

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

Hearing from those who educate and support online students

The above findings have since been complemented and extended by a third research project, funded by the Australian Government DET, conducted via an Equity Fellowship from the NCSEHE at Curtin University, Australia and supported by the Centre of Excellence for Equity in Higher Education (CEEHE) at the University of Newcastle, Australia. This research sought the wisdom and insights of academic and professional practitioners on ways to improve the experiences of and outcomes for online students. What follows is an overview of this research, with discussion of the consistencies between its key findings and the student perspectives previously discussed.

This research was conducted during 2016 and 2017 with staff participants from 15 different Australian universities, plus the Open University (OU) in the United Kingdom (UK). The OU was included because of its history of specialising in offering distance education, now primarily online, across the whole of the UK and

internationally. Due to the nature of the ethics clearance, which assured anonymity for participants, it was not possible within this research to explicitly compare and contrast practices at the OU with practices at other Australian universities, as related by participants. However, where there was published material to draw on, examples of effective practices at participating universities, including the OU, are mentioned within this paper, with the Final Report containing further information (Stone, 2017).

Qualitative interviews of around 45 to 60 minutes, mostly face-to-face and occasionally by telephone, were conducted with 151 members of academic, professional, administrative and managerial staff, involved in online education across the 16 institutions. Participants came from a very broad range of areas and disciplines. The proportion of academic to professional staff was fairly evenly divided: 70 participants were academics, representing all or almost all disciplines, schools and faculties at each of the institutions; 75 were professional staff members from many different areas such as library, student services (including student engagement, retention, success and support), academic skills, equity, learning design, educational technology, planning, policy, data; and six were in senior executive roles.

A semi-structured questionnaire with open-ended questions sought information about each participant’s role, the extent and type of involvement they had in online education, their familiarity with and understanding of the online student cohort, the types of practices and interventions they were using and whether any of these had or were being evaluated. For example, they were asked about “any interventions or strategies that you use, or any that you are aware of others using, which are having a positive effect on student engagement, retention and/or student academic success” and, in their experience, “what other types of interventions and practices are important in helping online students stay and succeed”.

The Final Report from the research (Stone, 2017) outlines seven key findings. In comparing these findings with those of the two studies previously discussed, strong consistencies can be seen between the view of staff and the view of students about what is most helpful for students in the online environment. It seems that experienced staff have come to understand well what students need, even if institutions are not always meeting these needs. These seven findings and their close relationship with student perspectives are discussed below. Quotes are drawn directly from the research data unless otherwise attributed.

1. Strategic whole-of-institution approach

Similar to students' perceptions of being 'a lower priority', or 'second fiddle' to on-campus students, many staff talked about their frustration that online students were being "treated as kind of like the poor cousin" (Unit Coordinator) or "getting a lesser experience" (Lecturer) and that online education was regarded by the institution as "secondary education". For casual teaching staff in particular, there was a sense that they were regarded as "a second-class academic" (Casual Lecturer), being paid insufficient hours and receiving no access to paid staff development and training. Many emphasised the need for the university as a whole to recognise and treat online education as core business, rather than an add-on. This included establishing quality standards for online education, subject to ongoing continuous improvement, as well as understanding the nature and diversity of the online student cohort, in terms of both its strengths and its needs. On the one hand online students tend to be older and in paid employment, therefore more experienced and mature in many important ways: "they're really conscientious students" (Senior Academic); but, on the other hand, they can be in need of extra support due to various challenges in their busy lives; "it's the extra ball that gets thrown up in the air and the first one they'll drop if things get tough" (Course Coordinator). There was also awareness of the higher proportions of students

from equity categories, such as those with disability: "students that are incapacitated in some way" (Lecturer); and those from remote areas who have "difficulty often with internet access" (Student Advisor).

2. Intervene early, to connect and prepare

Similar to students' views about the importance of being adequately prepared for their online studies, staff were clear that connecting with students early, offering orientation and preparation, was vital to their future success. Staff talked of the need to help students develop "a realistic understanding of what it's going to be like" (Project Coordinator) and the perils of adopting a "one-size-fits-all sales approach" (Student Counsellor). One senior manager in student services talked of the need for "a greater emphasis at the front end"; while a Senior Lecturer talked of providing new online students with "a highly scaffolded entry into the online environment". Connecting early with students in more personal ways such as phone calls was seen to help develop "a sense of belonging because they'd spoken to someone that they felt knew them" (Library Manager). There were examples of outreach orientation programs for online students in one regional university having "a team that travels to select locations around Australia ... we literally jump in our cars and go and visit students" (Student Engagement Director), as well as strategies such as "the welcome campaign, from 0-week through to Week Three, dialling out, having a conversation" (Student Support Manager). Preparing students academically was raised as a key issue, with some universities offering free preparatory units and modules online to try to "get them to a place where they're comfortable being in an academic environment" (Course Coordinator).

3. The vital role of 'teacher-presence'

Consistent with students' desire for communication and connection, the importance of lecturer or tutor communication came across

very strongly from staff, with “someone at the other end of the system listening to them ... communication and feedback ... you can’t communicate enough with online students” (Senior Lecturer). Staff participants were confident that regular and constructive teacher-student communication improves student retention. “When there’s no responses to emails and no responses to discussion forums ... the attrition rate’s higher and the students are really unhappy” (Unit Coordinator). There was also a recognition of the different demands on tutors and lecturers when teaching online. “The engagement demands are completely different, the reliance of students on the instructor is much more intensive – basically you’re it” (Course Coordinator). Experienced online teachers were very clear about the need for prompt and regular responses with many being “online every day” and putting “a little about myself often into the emails” (Lecturer); also using different media to communicate, including discussion forums, emails and at times telephone. “Phone is really important ... if you need to resolve things in some way ... phone is helpful for breaking the IT barrier down a little bit” (Lecturer).

The importance of communication and feedback from online teachers has been highlighted in other research studies (Delahunty, Verenikina, & Jones, 2014; Kuiper, 2015; Lambrinidis, 2014) with Ragusa and Crampton (2018), 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” (p.15). One of the difficulties for experienced, dedicated online teachers was a lack of recognition from within their institutions of the time it takes to engage and support online students effectively:

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).

4. Design for online

There was a strong understanding amongst the staff participants 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”. In the words of one lecturer, online learning is “a different animal to the face-to-face course ... it needs to be designed completely differently for that mode of delivery”. This supports findings from other research (Devlin, 2013; Mayes, Ku, Akarasriworn, Luebeck, & Korkmaz, 2011; Parsell, 2014) about the importance of designing specifically for online.

This finding is consistent with students’ views on the need, not only for learning design to engage, but also for a stronger connection with others. Many staff commented on the importance of designing online content in ways that will more easily connect students with each other and with the teacher, encouraging greater interaction, collaboration and communication. Comments such as: “you can replicate peer support in an online environment” (Teaching and Learning Senior Manager); “discussion is the centrepiece of the classroom experience” (Course Coordinator); “allowing opportunities for students to engage with the content online ... teacher-presence ... responding to questions and comments” (Curriculum Manager); show the possibilities that are available when courses are appropriately designed for online. Again, this is consistent with other evidence (Canty, Goldberg, Ziebell, & Ceperkovic, 2015; Parsell, 2014) indicating that content can be designed in ways that provide “opportunities for students to interact in multiple ways with their peers in an online environment” (Shackelford & Maxwell, 2012, p. 7).

Issues of accessibility and inclusivity were raised: “If the unit is designed with universal access in mind ... a huge bulk of your challenges are addressed” (Disability Advisor); also the importance of having “Indigenous content in our courses”, with examples of Aboriginal and Torres Strait Islander students asking for “spaces in the

curriculum where we can be heard and where we can hear other voices" (Team Leader). Other researchers have also been calling for greater inclusivity in learning design to "promote the success, retention and completion of Indigenous people in higher education courses" (Reedy, 2011, p. 2). The strengths that these mature-age, experienced students bring with them to the virtual classroom can be highlighted and enhanced through, for example, learning design that "links university to the workplace more effectively" (Downing, 2015, p. vi).

5. Contact and connect along the student journey

This finding ties in closely with students' comments about inclusion, communication, connection with others and proactive institutional support. Staff commented on the need for regular and targeted institutional communication, to enhance students' sense of belonging and engagement, as well as targeting appropriate support as needed. Some institutions had established systems of interventions by which they could "reach out to students when we think they may be sort of falling by the wayside, having some difficulties" (Student Services Manager). Many had implemented other types of communication, such as "a welcome call which is done by students, so it's a student-to-student communication" (Student Engagement Manager); there were other examples of various contact strategies from teaching areas, student support and library services. The need for a proactive approach was recognised. "Don't wait for them to approach you ... just say 'How's it going? Is there a problem?'" (Lecturer).

The possibility of multiple communication points between the institution and student highlights the need for a united approach. One institution had "a communication strategy that's at four touch points along the first semester ... also to link off to other support systems" (Senior Manager). Expectations on staff need to be realistic, as expressed by one senior manager who explained that "it's very difficult for academic staff to deal

with the sheer volume". Others were in the process of developing institutional frameworks for student interventions, such as that operating at OU (Slade & Prinsloo, 2015), in which communication between institution and student is planned and implemented strategically rather than in an ad-hoc way. Participants involved in this framework talked about "building in person-to-person support, right at the beginning" and enabling them to "selectively message students or make other interventions, like telephone".

Anecdotal evidence from participants for the positive impact on student outcomes from such interventions - "I've been able to get my non-completer rate down to four per cent ... and my fail rate down to one per cent" (Course Coordinator) - is supported by evidence-based research within both Australia and the UK (Nelson & Creagh, 2012; Slade & Prinsloo, 2015; Stone & O'Shea, 2013; Woodthorpe, 2015).

6. The role of learning analytics

Making strategic use of data on student activity and behaviour within the learning management system (LMS) can inform ways and times to reach out to students with targeted support (Johnson et al., 2016; Sclater, Peasgood, & Mullan, 2016). As a recent report from the Australian Government DET (2018) has found, "there is widespread acceptance that learning analytics, if implemented effectively, is a valuable tool for addressing student retention" (p.24). Some institutions had developed intervention strategies informed by learning analytics, however most were still very rudimentary, often relying on individual staff members to extract data manually from the LMS and contact students on a piecemeal basis. "At the moment we have a very manual process and what we are hoping for is something much more automated" (Senior Academic). Similar to other research findings (West et al., 2016), many staff members were interested in knowing more about how to use student data to inform effective interventions and outcomes but were not sure how to go about it or from whom to seek assistance. As an Evaluation

Officer at one institution reported, “there’s so much data there, we’re not collecting it in an accessible form for lecturers to take appropriate actions”.

However, there appeared to be a growing interest across institutions in using student data, not only to target students whose behaviour indicates a need for immediate support, but also to make predictions about who may need support in the future, through the development of predictive models. “We hope that predictive indicators get us into, ‘actually, we think this student isn’t going to submit their next assignment’, based on their behavioural patterns” (Head of Analytics). Such strategies can help to address the need expressed by students for greater inclusiveness and proactive support.

7. Collaboration to deliver support at point of need

None of the above can be effectively delivered without a high level of collaboration across the various divisions, departments, faculties and schools within institutions. The interviews with staff revealed the importance of “joined-up academic and non-academic support for students in a holistic way” (Senior Executive). Such an approach can make it possible, for example, to embed timely support within the curriculum: “if their referencing is not great ... okay, we’ll get one of my team in ... we’ll create some sort of online resource to embed” (Library Manager). Collaboration across teaching and professional areas enables academic literacies to be “integrated within the classroom task ... making what’s implicit explicit” (Learning Support Manager). As within the Open University UK, where curriculum-based support teams have been established (Slade & Prinsloo, 2015), with support staff working within “dedicated curriculum areas so they have much closer links with teaching staff” (Lecturer), some Australian institutions within this study were, to varying degrees, aiming to build a more collaborative approach to supporting students. Examples included having “at least one student advisor in

every School” (Student Advisor Coordinator); and “we’ve just distributed learning support across the Faculty” (Senior Executive member). Those who had experienced such collaborative approaches were very positive about their impact, with comments such as: “colleagues within departments and faculties are quite happy that the support is more accessible, they feel like it’s closer (Senior Executive member)”; and “the team approach was far better” (Program Coordinator).

However, for online students, there was generally quite poor access to the types of personal support services that are readily available to on-campus students, such as personal counselling, mental health services and career services, which were still largely operating in normal business hours. “There’s not a lot of support out of hours for online students ... most things are nine to five still” (Enabling Programs Manager). As one learning designer commented, “it’s been focused on the face-to-face students and there hasn’t really been anything put in place for the online students”, while an Equity Officer remarked, “we need to be making sure that we have a kind of online version of what we have on campus”.

Discussion and conclusions

In comparing findings from research into students’ experiences of online learning with the perspectives of staff involved in online education, many commonalities and similarities have emerged. It is a reassuring discovery that university staff, working directly or indirectly with online students, share many of the same perspectives as their students about what is most important for online student success. 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. These findings demonstrate that, with online learning continuing to grow rapidly, 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, universities and the staff within them need to embrace the digital communication advances of the 21st century, to deliver online education differently, in more creative ways.

Today's students, across all age-groups, are familiar with the engaging digital platforms of social media and the commercial world. They are quick to recognise poor digital design and equally quick to become disengaged by a poor online experience. Online students tend to be, on the one hand, more experienced than the face-to-face cohort, by virtue of being older, employed and competently managing other responsibilities; yet, on the other hand, they tend to be academically less experienced and hence less confident about university than their face-to-face, younger counterparts. With many of them coming back to study after lengthy gaps, a good proportion from under-represented equity groups and perhaps also from backgrounds where neither family nor friends have been to university, the challenges can be immense. They want to feel that they belong and that they are valued. They express a desire for strong connections with teachers, with other students and the institutions in which they are studying.

The findings outlined in this paper – taken from the perspectives and experiences of both online students and the staff who work with them – can point the way towards transforming online learning from what is, in many cases, simply a digital delivery of face-to-face content with high attrition rates, to one that encourages greater retention and success through embracing the potential of both technology and people. External students, whose primary, or in many cases, only mode of learning is online, are largely 'unseen'. To improve these students' opportunities for ongoing participation and success, institutions need to ensure they are kept 'visible' through a range of measures across the whole institution. They need to be considered every bit as important as those who literally can be 'seen'. While individual staff members undoubtedly make a positive difference to the success of many,

through the measures they implement within their own areas of work, a whole-of-institution approach is required to make a difference on a larger scale - to raise online education from the status of an 'add-on', to one that is truly 'core-business'.

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Feature article—author biography

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