

## *Caught in the Spotlight: Engaging Distance Students*

Josua Pienaar, Deputy Dean and Nadine Adams, Educational Developer, Central Queensland University, Australia \*

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### **ABSTRACT**

Equity and engagement have become the focus of many university policies. Engagement is considered to be the only solution to increasing attrition rates but is there a divide between the students' ideas of engagement and the University's? As universities develop new and innovative techniques to engage students, are they losing sight of the real needs of students? These innovations involve systems that enable staff to 'see' the engagement of their students, especially those studying by distance education. Have these new practices put students in a position where they feel stunned and trapped; no longer able to work in a manner akin to their natures? The hunt is, therefore on to find the balance between what students need and want and institutions perceptions.

This paper examines the questions surrounding engagement in the context of a distance education program at a regional Australian national university. This research utilises both a quantitative and qualitative approach. It has revealed that the constant push to "de-distance" distance education programs, although deliver some interesting engagement strategies not previously part of traditional distance education, have had some unintended consequences. Distance students do not wish to be in the spotlight and prefer to study away from the glare of the institution and only be seen if they require assistance. Many distance students choose this method of study because they want to be left to interact with the study material on their own terms and actively seek universities that do not enforce online engagement activities. It seems the rules of engagement have changed without considering there may have been no requirement.

### **INTRODUCTION**

Equity, quality, and efficiency are internationally regarded as essential measures of a higher education system (James 2012). To accommodate these attributes universities have had to broaden their learning environments and academic offerings and teaching practices have become dynamic to attract market share. There is now a focus on facilitating learning and engagement across these environments {Senior, 2015 #620}. Equity and engagement have, therefore, become the focus of many university policies.

Engagement is considered by many universities to be the only solution to increasing attrition rates. Universities are developing new and innovative techniques to engage students. Some of these engagement techniques include using dance and movement to teach statistics {Irving, 2015 #621} and the integration of technology, including video and the use of the

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\* Josua Pienaar, Deputy Dean (Learning and Teaching), School of Engineering and Technology, Nadine Adams, Educational Developer, Learning and Teaching Services

tablet PC {Adams, 2013 #340}. Other innovations involve systems that enable staff to ‘see’ the engagement of their students, especially those studying by distance education.

## **BACKGROUND**

Central Queensland University (CQU) is a regional Australian university with 15 campuses and additional study centres located in 5 of the eight states and territories across the country. The locations include Cairns, Townsville, Mackay, Emerald, Rockhampton, Gladstone, Bundaberg, Noosa and Brisbane in Queensland, Sydney in New South Wales, Melbourne in Victoria, Adelaide in South Australia and Perth in Western Australia. Vast distances separate these campuses. The shortest distance between locations is 109 kilometres (67.7mi), and the longest direct distance between locations is 3443 kilometres (2139.4mi) or 5256 kilometres (3265.9mi) via the national highway.

The University was originally founded in 1967 as the Queensland Institute of Technology (Capricornia) and by 1974 was one of the few institutions to offer distance education programs in Australia (CQUniversity 2015b). It quickly established itself as a leader in dual medium education (distance and face-to-face). In 1992, full university status was achieved. A merger with Central Queensland Institute of Technical and Further Education (CQTAFE) in July 2014 made CQU an education provider to more than 20 000 students studying qualifications from certificate to post-doctorate level (CQUniversity 2015b).

As part of the original distance education offering, students were supplied with resource material via post; allowing them to engage with the content at will. By using a central division, materials were printed and dispatched to students at least two weeks before the commencement of term. This made study easy for distance education students as they had everything they required for the term of study in one pack. Inevitably post-based distance education was not without difficulties, some students either did not receive resource material or did not receive it on time. The historic technique was in line with the true nature of distance education at the time, where the learning and the teacher were spatially removed, and high levels of self-management were only influenced by course assessment requirements (Keegan 1980). All assessments were submitted through the central division where they were tracked as they were received from students, sent to and received from markers and returned to students. A recording system enabled students to log in and see where their assessment was and their grade. Although mostly reliable, many items never reached the intended destinations and the turnaround time for assessment was many weeks.

Communication with staff occurred via telephone, face-to-face by appointment, or if offered, residential schools. In many instances, student and staff never actually spoke, communicated, or otherwise engaged except for the submission of assessment items and provisioning of feedback on student work. Those students in programs delivered in both mediums could receive the benefit of both printed resource material and face-to-face interaction with lecturing staff.

The model of delivering distance education has constantly been updated with developing technology. The introduction of audio cassettes provided students with asynchronous voice lectures of their course content. This meant that staff had to create content material well in advance of term and ensure that quality standards were maintained. With the introduction of online learning management systems in the mid-2000's to Central Queensland University, the delivery mechanism started changing, but it was not until the end of 2012 that the provisioning of hardcopy resource material was completely abandoned in favour of online delivery.

## STUDENT DEMOGRAPHICS

With the merger of the CQTAFE with CQU in 2014, the University's service delivery grew to include apprenticeships, trades and training, business, accounting and law, creative, performing and visual arts, education and humanities, engineering and built environment, health, information technology and digital media, psychology, social work and community services, science and environment, and work and study preparation (CQUniversity 2015a).

In terms of gender demographics over the period 2011 to 2015, numbers remained relatively constant with an average of 58% of the student population being female (**Error! Reference source not found.**). This is reflective of the semi-regional composition of the student population (Australian Bureau of Statistics (ABS) 2013, Department of Education and Training (DET) 2014a). **Error! Reference source not found.** provides a detailed perspective of student numbers by gender and age over a five year period.

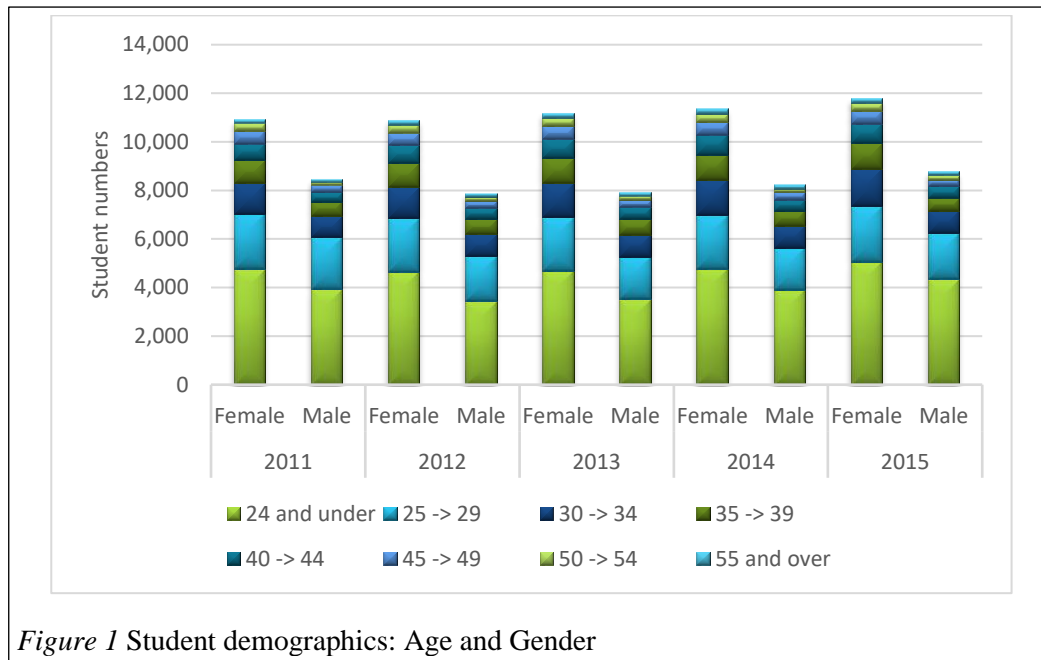


Figure 1 Student demographics: Age and Gender

There has been a constant shift in the mode of study undertaken by students at CQU since 2011 (Figure ). At the end of 2011, there was an equal split between distance education and face-to-face students. More flexible options in delivery of courses that cater to students that choose to earn and learn or reside or work in remote locations have resulted in increasing trends towards distance education. Figure provides a snapshot of the student shift regarding the mode of delivery at Central Queensland University.

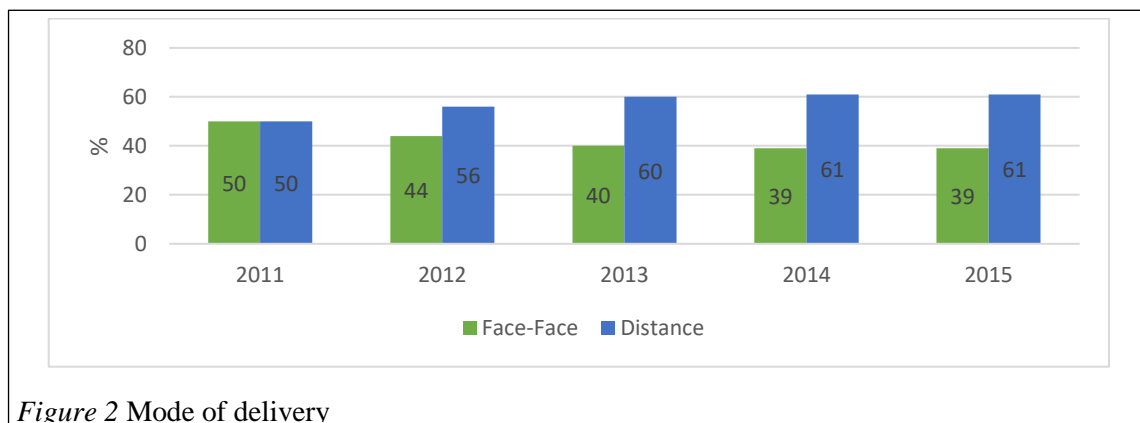


Figure 2 Mode of delivery

With the current push for student numbers in the higher education sector in Australia, competition has become stiff with 140 registered training organisations of which 43 are universities (Department of Education and Training (DET) 2014b). Not all of these players engage the distance and online market but for those that do, the playing field can at times be less than level with those with the capacity to invest financially in infrastructure to support

online delivery gaining the advantage (Lomax-Smith, Watson, and Webster 2011).

## **ENGAGEMENT**

Central Queensland University has a vision to be Australia's most engaged university by 2020. This is to be achieved through partnerships with students, industry and the community. The University is endeavouring to engage students 'through active and collaborative learning activities, based on authentic design and delivery of courses' {CQUniversity Australia, 2013 #119}.

To achieve these goals, careful consideration of the student cohort and study mode must be taken into account. Each delivery mode has characteristics disallowing a 'one size fits all' approach (Zacharis 2010, Shachar and Neumann 2010). Contrary, there are indications that no significant differences between distance education and face-to-face offerings exist (Coates et al. 2004). Coates and colleagues found that students in an economics course performed similarly independent of the mode of study and that in some cases, distance and online students performed somewhat better.

Accepted wisdom in higher education is that distance students need and desire more real-time engagement with lecturing staff and other students (Webber, Lynch, and Oluku 2013, Coetzee and Oosthuizen 2012, Zepke and Leach 2010). There are various factors that cause distance students to experience isolation; including time, geography, social, profession and cultural isolation. In an effort to overcome these factors of isolation, it is common for educational institutions to provide alternative platforms for students to engage with course material, each other and lecturing staff (Brewer et al. 2003, Leach 2014). The staff is encouraged to increase engagement with distance students and furthermore implement assessment regimes that force distance students to commit to online presentations and webinars.

Armed with the belief that distance and online students desire more frequent engagement with lecturing staff, many educational providers are moving ahead with changes to their standard distance or online offerings. In general terms, distance and online education require the student and the lecturer to be in geographically removed locations and could also be distant in terms of time (Keegan 1980, Moore and Kearsley 2011). The availability of technology to support online delivery both synchronously and asynchronously further provides motivation for education providers to tap into a market that is earmarked to grow in the foreseeable future.

## *Online learning management system*

Most educational institutions use online learning management systems for the distribution of course resource material and interactions with students. In 2011, Central Queensland University adopted the Moodle (Modular Object-Oriented Dynamic Learning Environment) system.

Moodle is a free source e-learning software platform, also known as a Learning Management System (LMS) or Virtual Learning Environment (VLE). As of June 2015 it had a user base of 65 million users. Moodle was originally developed to help educators create online courses with a focus on interaction and collaborative construction of content, and is in continual evolution. The first version of Moodle was released on 20 August 2002. Moodle has several features considered typical of an e-learning platform and is used in many types of environments such as in education, training and development, and business settings (Moodle 2015).

Some of the features that are currently in use at CQU include:

- Assignment submission;
- Discussion forums, collaborative forums, news forums;
- Resource material repository and distribution;
- Grading through the online grade book;
- Moodle instant messages, chat, and groups;
- Blackboard Collaborate interface;
- Online news and announcement (college and course level);
- Online quiz;
- Wikis.

Initially, the learning management system was freeform, allowing academics freedom in the way that they constructed their Moodle websites. With the 2012 CQU enforcement of the availability of all resource material in online format only, locating resources from various Moodle sites was found to create an excessive extraneous load on students as they had to navigate inconsistent layouts. Late in 2012, a consistency project, in the School of Engineering and Technology, delivered a consistent layout for all Moodle sites within the school. This standardised the basic layout and placement of valuable information at the same location on every Moodle site. The design still allowed academics freedom in the placement of course

content yet limited their ability to relocate key components such as staff contact detail, course profiles, and assessment items. It was found that the standardised layout did reduce the extraneous load on students; especially those studying in distance education mode (Pienaar, Adams, and Dekkers 2013, Wu et al. 2013).

In terms of the consistency approach, all Moodle websites have a similar look and feel. Of particular importance is that students encounter the same information at the same location on every site thereby reducing time wasted renegotiating individual courses. Figure 3 shows the standard layout of the school Moodle site. This same layout has now been adopted throughout the University.

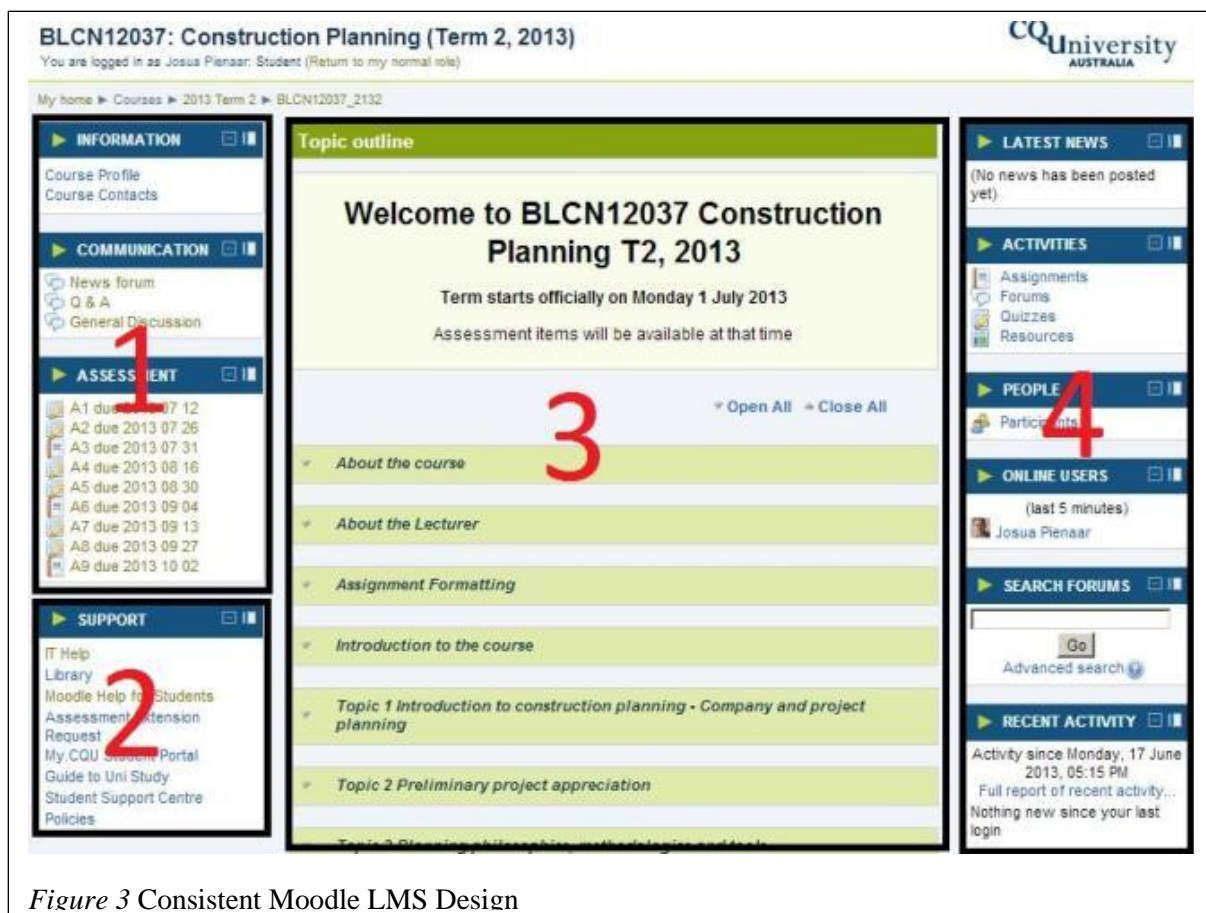


Figure 3 Consistent Moodle LMS Design

By ensuring the layout of the LMS site is the same throughout the school, students know where to find the relevant information quickly and easily. Ease of use, logic and common-sense are all factors that dictate the current layout of the LMS site. This scaffolding provides effective learning support (Puntambekar and Hubscher 2005, Vygotsky 1997, Lui 2008). Students are easily able to access all course materials, including assessments, and submit assessments and receive grades and feedback through the LMS. As well as



asynchronous teaching resources, synchronous tools are implemented to engage students further.

## ***Synchronous engagement***

Online Webinars are one way to connect with and provide support and assistance to distance education students (Pienaar, O'Brien, and Dekkers 2012, Wu et al. 2015). Online webinars have been successfully used to simulate dispersed construction project management and design with students in different geographical locations within both Africa and Australia (Pienaar, Wu, and Adams 2015).

Online webinars provide the functionality needed to support a distance education teaching and learning environments, such as two-way audio, multi-point video, interactive whiteboard, application and desktop sharing, rich media, and session recording. Staff and students can engage as if they were in a traditional classroom. Following an initial 12 month trial, Central Queensland University selected Blackboard Collaborate due to the integration options with Moodle. The chosen solution integrates fully with the Moodle LMS and provides lecturers with the capacity to establish pre-defined groups and breakout rooms. Using the online webinars, students can also use mobile devices to connect and view online lecture sessions. All Blackboard Collaborate are recorded to enable asynchronous viewing.

## **THE STUDY**

This was a three-stage study conducted within the Built Environment and Engineering Programs at Central Queensland University, Australia and the University of Pretoria, South Africa. The first stage was an archival study of 1547 Central Queensland University Built Environment student records collected as part of the government reporting requirement. The second study was a self-report structured online survey of 295 students, consisting of 154 Built Environment students and 141 Engineering students. This was an acceptable response rate of 23% (Virzi 1992, Guest, Bunce, and Johnson 2006). The students were also classified by their study mode; 162 were distance education students, including all Built Environment students (97), and the remaining students were campus-based students. The final study used one-on-one interactive conversational interviews with students, graduates, academics, employers and executives from professional organisations. In total 40 interviews were undertaken.

## ***Methodology***

This study utilised sequential mixed methods approach both quantitative and qualitative research (Creswell 2013). This design allowed the researchers to collect, analyse and mix data



within a single study (Tashakkori and Creswell 2007). This was done as neither of the individual methods could capture the circumstances and influences associated with professionally aligned distance students.

After a comprehensive review of the literature into student engagement in distance and online education, an online survey instrument was developed, and the pilot instrument was tested. The instrument was designed to focus on and extract students' perceptions of academic engagement and interaction with academic staff, other students, employers and professional stakeholders. Appropriate ethics approval was obtained for the study. In this design, the quantitative data was first collected, and the data was analysed and interpreted to inform the qualitative phase, which consisted of semi-structured conversational interview questions (Rubin and Rubin 2012). Conversational interviews allowed the researchers to adapt interview questions during the interview based on interviewee responses. Rubin and Rubin (2012) note that this technique produces responses rich in new information and allows conversations to flow unstructured and uninhibited. A total of 40 stakeholders were interviewed including students, graduates, employers, academics and professional organisation managers.

### **DISCONNECT (DISCUSSION)**

The University strongly encourages engagement and provides tools to facilitate it. These tools are available for both internal and distance students. They consist of a Learning Management System (Moodle), online webinars, Ucroo, blogs and wikis and video conferencing tools. The survey was used to determine to what extent the students utilise and valued the engagement tools and strategies implemented by the University. The in-depth stakeholder interviews then enabled the differences in opinions between stakeholders to be further examined.

An examination of the Built Environment distance education students revealed that the engagement tools and strategies supported by the University are utilised by students less often than anticipated. The online resources located on the LMS were accessed less than once a week by the majority (67%) of students. Students stated that they want to be able to download all of the course content upon the commencement of the course. This study revealed that some students prefer to download the material for the entire course (if available) during the first few weeks of the course LMS going live and only go online again to submit assessments while others will allow themselves to be guided by the weekly subject material. Some students want to print the material and never go on the site again. These findings were interesting given that some lecturers believe in only making material and assessment available according to the

study schedule. This practice is thought to simulate face-to-face lectures and to keep the student on track. However, providing the online material in a compact portable downloadable format would enable parallel replacement of the previous hardcopy offerings and satisfy the needs of a greater number of students.

Engaging with the course content through the course Moodle site is difficult for students working remotely. These students may not have access to quality internet or may be required to work extended hours. Those on a fly-in-fly-out (FIFO) or similar scheme often do not have access to the internet for long periods due to their working conditions or location. Engagement for these students is often in intensive bursts when they return from their remote placement to catch-up on subject learning activities that require an internet connection like collaborative forums or quizzes.

I work either in Karratha or Alice Springs nine weeks on three weeks off – the net connection is not all that flash while I am at work. Downloading everything lets me work on my degree while I am in the bush. Work, study, sleep. When I am home, it is family, study, sleep. (Student)

The University encourages teaching staff to engage distance students through synchronous video conferencing. Even though the online sessions conducted as part of this study were scheduled at different intervals between 07h00 and 21h00 on weekdays and some weekends, students' available time was still an issue. Given that Australia has three time zones during the winter months and five time zones during the summer months and students may be in any state aligning the time zones with their work, and family commitments is an additional struggle. This may suggest that the 93% of students that infrequently or never accessed the virtual communication tools failed to do so due to priorities rather than a learning style preference.

To accommodate students that are unable to attend the synchronous video conferenced lecturers, all sessions are recorded to enable asynchronous viewing. This provides students with more portability and allows them to integrate lectures into their temporal availability. Recorded lectures offer additional flexibility to revisit challenging and complex content through multiple viewings and manipulated playback.

Communication tools that enable asynchronous communication between students and also with teaching staff are of vital importance for distance education programs. Although some students thoroughly enjoy the engagement with other students that Moodle facilitates, other students prefer to work independently and not have any contact with the other students.

It was found that younger students were more eager to engage with staff and other students. These communication tools and virtual meeting tools also facilitate the teamwork and networking capacities of students.

Teamwork is a graduate attribute common to many universities. The students felt that it was overemphasised in distance education, and it detracted from the inherent nature of distance education. Some students commented that the teamwork element of the course was ‘irritating.’ Many of the students in this study utilised the teamwork components of course work to build professional networks in the hope of securing future employment. Younger students tend to be more successful at studying and can assist their older counterparts. The older students, usually employed full time in the industry, can provide the younger students with contacts and career advice. Therefore, by ensuring teams have a mix of younger and older students, mentor relationships can be established. (**Error! Reference source not found.**)

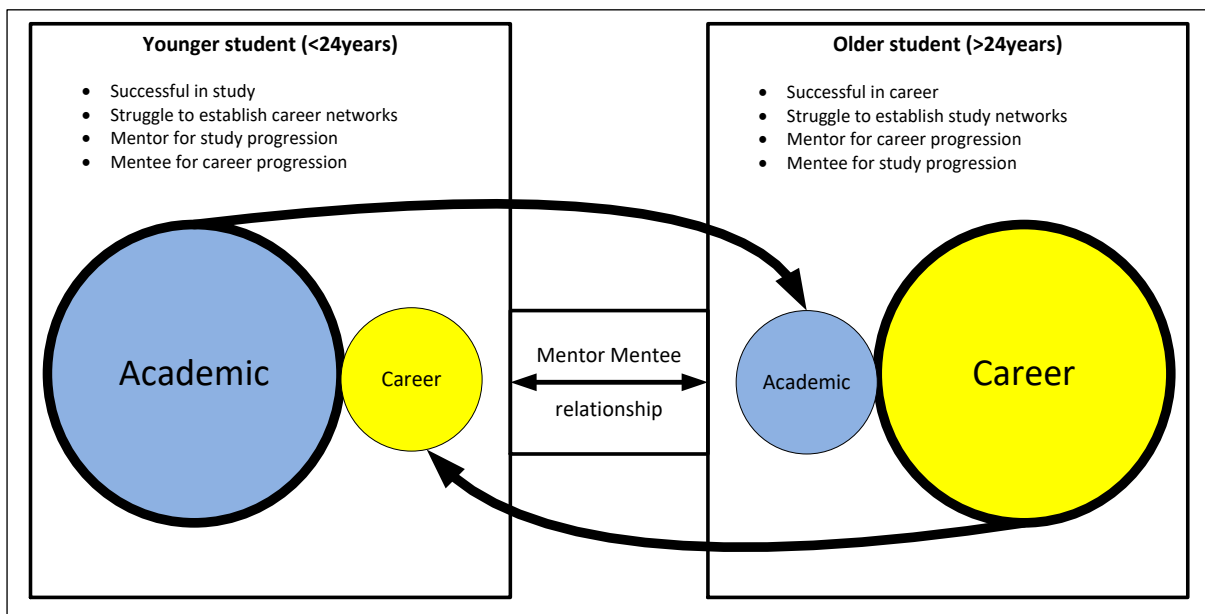


Figure 4 Mentor/Mentee relationship between different age groups

For students employed in an industry aligned profession, for instance, construction management or building design, it was more important to focus on work requirements before focussing on engagement with other students. However, in a setting where students are fully employed and deployed in teams, the over engagement agenda is having a detrimental effect; leading to irritation and in some cases, students dropping out of academic study. These students choose distance study for the flexibility they perceive it to have. They believed this study mode would allow them control over the amount of time that they invested in personal development while the opportunity cost of other activities is measured against it. It appears

that for some distance programs we are doing it wrong. Not all distance education students want the same level of support or engagement. The level of engagement can be dependent on the discipline of study. The study indicated that as the forced level of synchronous engagement increased, the level of satisfaction decreased (Figure ).

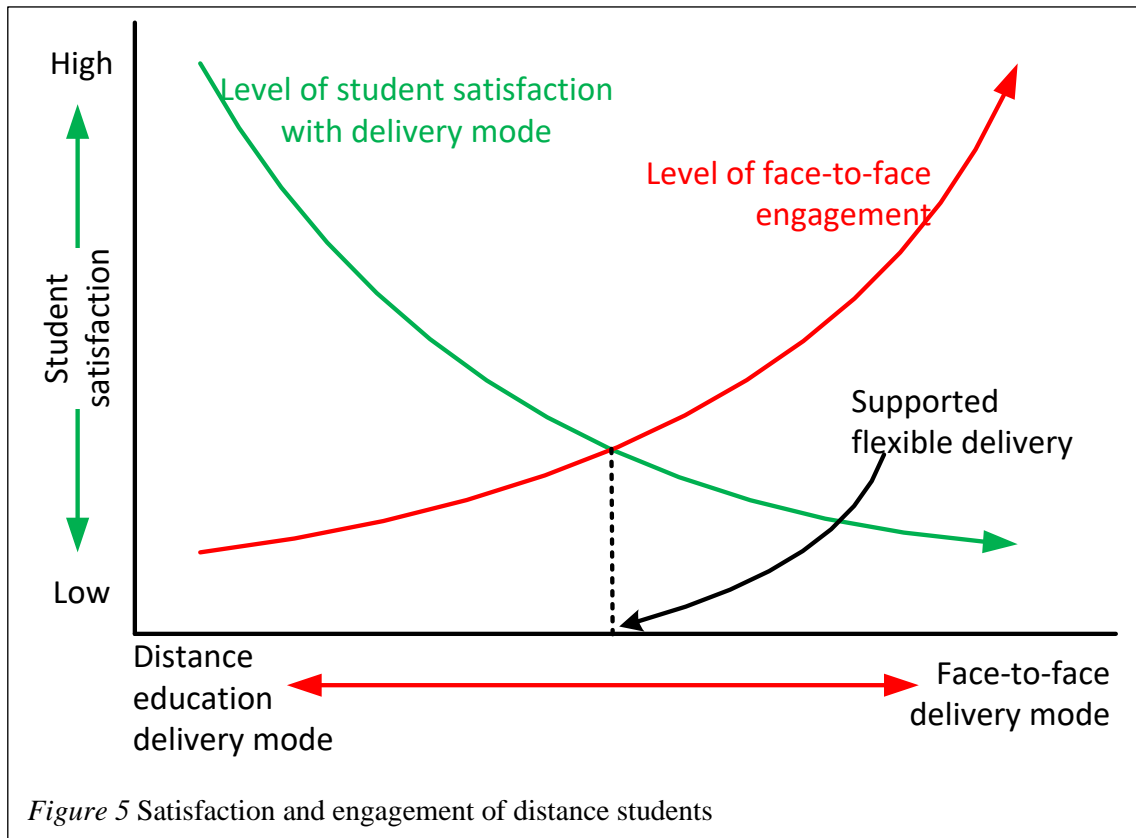


Figure 5 Satisfaction and engagement of distance students

## CONCLUSION

Given the rise in focus on student engagement and a push by universities to force students to engage, consideration of the student wants and needs must guide university decisions concerning engagement tools and strategies. This study highlighted several factors considered important to students studying in distance education mode. It is important that all online resources be made available from the commencement of term. This caters to the differing learning needs of students. Working remotely and internet connectivity can make it difficult for students to regularly access resources online. Recording online lectures gives these busy students the option to access lectures when time or connectivity is available. Online engagement through the forums should be encouraged but not enforced. Some students are just not comfortable with forum participation, or the learning style does not suit their work/life/study needs.

Establishing and maintaining online resources in ways that make them fully portable

can encourage both synchronous and asynchronous engagement with the material. Ensuring that online sessions are delivered at times convenient to the majority of students could further increase the use of online content even though these times might not suit the academic staff. The interviews have highlighted specific aspects of the use of Moodle not demonstrated by the survey results, notably the student preference for asynchronous and fully portable materials. This is in contrast to the online survey results which showed that the online resources had no significant impact on any aspect of progression. This finding provides interesting and perhaps surprising food for thought for the further development of online curriculum and pedagogy in the Built Environment.

In conclusion, we ask “Is student engagement a question of trust? If we can’t see our students engaging, either in class or online, do we think that they are not working?”

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