# Factors influencing tertiary students' choice of study mode

#### **Matthew Bailey**

Department of Modern History, Politics and International Relations Macquarie University

#### **Dirk Ifenthaler**

www.ifenthaler.info

## **Maree Gosper**

Learning and Teaching Centre Macquarie University

## **Mandy Kretzschmar**

Department of Modern History, Politics and International Relations Macquarie University

Managing and understanding student's motivations and experiences of learning will be increasingly important as demand for higher education continues to grow and online delivery continues to evolve and expand into open access, on-campus and distance modes of study. It is in the interests of institutions offering two or more modes of study to understand the reasons why students make different choices. This research investigates the importance of six factors (personal, logistics, teaching and learning, learning support, environment, and advice and marketing) influencing 744 students choice of three different modes of study. Findings indicate that there are significant differences in the importance of factors amongst students enrolled in different study modes, although when averaged across all cohorts 'teaching and learning' and 'logistics' factors were the most influential. It is suggested that providing a high level of transparency in the information provided to students is vital for higher education institutions.

Keywords: study mode, online learning, open access, on-campus mode, distance mode

## Introduction

Reductions to government funding of tertiary institutions have fostered a more competitive environment in Australian higher education over the past decade (de Zilwa, 2010; Bradley, 2008; Currie, 2002). Universities have been pressured and encouraged to explore new avenues for additional income and to view students as more consumer-like in their choice of a course and university. A heightened competition for prospective students has required tertiary institutions to adopt more flexible modes of delivering education to meet student demands. Open access (Greenland & Moore, 2014) and distance learning have become a critical long-term strategy of many universities to encourage higher education participation (Allen & Seaman, 2011; Ziguras & McBurnie, 2011). Online learning also increases the accessibility of tertiary education due to its capacity to overcome the spatial and temporal limitations of traditional teaching settings (Bates, 2005). Pedagogically, blended models of learning combining face-to face and online experiences (e.g., lectures and tutorials supported by podcasts, online discussion, materials, and activities) can lead to teaching methods and resources that support both oncampus and distance delivery (Lefoe & Albury, 2004; Lefoe & Hedberg, 2006; Woo, Gosper, McNeill, Preston, Green, & Phillips, 2008).

Managing the integration of online and face-to-face delivery and understanding student's motivations and experiences of learning online will be increasingly important as online delivery continues to evolve and expand into open access, on-campus and distance modes of study. It is in the interests of institutions offering different educational pathways through two or more modes of study to understand the reasons why students choose particular study modes at the outset and at different points throughout their degree. This research explores these choices through an online survey of students studying through Macquarie University located approximately 16 kilometres to the north-west of Sydney's CBD in Australia. Macquarie has been offering units of study through Open Universities Australia since 2004, and also delivers many of its on-campus units through distance education, which accounts for around 10% of student enrolments.

#### Theoretical background

The decision-making processes of students at the entry point to higher education have been the focus of several research projects. Studies conducted since the early 1990s have examined intrinsic motivations such as interest in an area of knowledge and related career opportunities (Sugahara, Boland, & Cilloni, 2008), as well as the more general reasons for attending a particular university: for example, reputation, campus environment, academic programs and services (James, 2001; Elsworth et al., 1998). An Australian study by Hagel & Shaw (2008) confirmed that study mode remains the most important attribute informing school-leavers' initial choice of enrolment (with a slight preference for face-to-face teaching), followed by tuition fees and to a slightly lesser degree university reputation. Bornholt, Gientzotis and Cooney (2004) have further shown how interlinking personal and social factors influence student preferences, confirming the results of an earlier study by James and colleagues (1999) that rural and remote locations as well as low socio-economic background impact on students' choice when considering a higher education pathway in Australia. These pathways have expanded and become increasingly flexible, with the availability of web-based systems in the tertiary sector allowing for the delivery of education material that supports multiple modes of enrolment (Bates & Poole, 2003; Garnham & Kaleta, 2002; Singh, 2003), meeting the needs of an increasingly diverse student population (Rumble & Latchem, 2004). They provide students with the flexibility to choose between studying on-campus and/or at distance to suit their family and lifestyle priorities and learning preferences. Blended learning environments, a combination of face-to-face and online experiences, have blurred the distinction between delivery modes as both on and off campus students can access the same unit information and have similar learning experiences (Gedik, Kiraz, & Ozden, 2013; Garrison & Vaughan, 2008).

There are a range of characteristics that have traditionally been associated with students studying in different modes. Moore and Kearsley (2005) stated that the majority of students enrolled in distance education programs in Australia are adult learners between the age of 25 to 50 years, but Crock, Baker and Turner-Walker (2013) have recently revised these findings arguing that the majority of those studying through OUA are now between 18 and 29 years old, enrolled in arts and social science courses, and many are in full-time employment. Typically gender enrolment trends reflect a significantly higher proportion of women than men choosing online courses as an educational pathway to obtain a degree (Tucker, Halloran & Price, 2013; Price, 2006). In addition, Zimitat (2003) has assessed the impact of full-time employment and family commitments on full-time students' success during their first year at university. Nonetheless, studies into how these variables affect students' preferences for a specific educational pathway are scarce (Tinto, 2005). Recent research has therefore emphasised the need to develop a validated measure for differences in the motivation to enrol in a specific enrolment mode (Johnson et al., 2013; Stewart, Bachman & Johnson, 2010; Herbert, 2006). Further to this, where universities provide the flexibility for students to move between enrolment modes as they progress through their degree this raises the question of whether students maintain the same mode throughout their degree and if there is movement between modes, what are the factors influencing their decision. Robinson and Bornholt (2007) have developed the foundations for a new theoretical framework concerned with student's progress through their degree examining the influence of components such as choice, context, personal situation and time constraints affecting pathway choices.

#### Research questions and hypotheses

The present study was set to investigate and compare why students choose different modes of study, i.e., on-campus (with a blend of face-to-face and online learning experiences), distance (off-campus and online study including on-campus components), or online (fully online study). There are many reasons why students choose different modes of study for example: to fit with family and lifestyle priorities; balance work and study; inability to get to campus due to distance or inconvenience; administrative and organisational constraints; timetabling of classes; special access and learning needs; or differing pedagogical approaches, resources and services (Hrastinski & Jaldemark, 2012). In particular, the following research questions and hypotheses were addressed:

- 1. Are there differences in the importance of personal, logistics, teaching and learning, support, environment, and advice and marketing factors among students currently enrolled in different study modes? We assume that there are differences in the importance of such factors among students enrolled in different study modes (on-campus, distance, open and online) (Hypothesis 1).
- 2. Are there differences in experience with technology among students enrolled in different study modes? We assume that there are no differences in experience with technology among students enrolled in different study modes (on-campus, distance, open and online) (Hypothesis 2).

#### Method

## **Setting and context**

Macquarie University has a long history of providing flexible offerings and pathways to study. It has a well-established distance program to complement many of its on-campus offerings and several pathways for entry to academic programs including the Jubilee Scheme, non-award pathways and Open Universities Australia (OUA; www.open.edu.au). OUA offerings are fully online with open access, not requiring students to meet formal University entrance requirements at the undergraduate level. At Macquarie, OUA is increasing in popularity with a total of 138 individual units on offer at undergraduate, postgraduate and non-award level. At the undergraduate level, there are 92 individual units on offer as well as a Bachelor of Arts. Whilst not all degree programs and units at Macquarie offer the full range of flexible offerings and pathways, there are those (particularly in the Faculty of Arts) where students are able to choose between one of three modes of enrolment:

- On-campus mode: On-campus offerings, with the expectation of an on-campus presence and typified by a blend of face-to-face and online learning experiences (variable: on-campus study mode).
- Distance mode: Equated to distance learning where students study off-campus however there may be an on-campus component. Delivery can vary from fully online to a blend of online and print as well as multimedia (variable: distance study mode).
- Open and online mode: Open-access study and fully online delivery (variable: open and online study mode).

The research was centred on units in the Bachelor of Arts Program that were offered in all three modes. The principle means of data collection was an online survey which was conducted between October 2013 and March 2014 in three waves of data collection over three teaching sessions - Session 2, 2013, Session 3 over the summer break and Session 1, 2014.

#### **Participants**

In total, 744 students (70% female, 29% male, 1% indeterminate/intersex/unspecified) from the Faculty of Arts participated in the study. Their average age was 27.16 years (SD=10.42) and 7% reported to have a physical or learning disability that impacts their experience at university. 77% were full-time students and 23% were part-time students. 2% of the participants reported to be Aboriginal or Torres Strait Islander. 10% were in full-time employment, 19% worked less than 10 hours per week, 22% worked between 11 and 20 hours per week, 12% worked 20 or more hours per week, and 37% were not in paid employment. Over half of the participants reported to have completed the final year of secondary education (59%), 7% completed a Diploma or Associate Degree, 13% started and 3% completed a Bachelors degree, 1% completed a Masters degree, and 2% completed a Postgraduate degree. The remaining participants reported to have VET/TAFE (Vocational Education and Training/Technical and Further Education) or other post school qualifications (13%), and 2% reported to have no prior educational attainment. In each of the three survey waves, as an incentive participating students were offered the chance to win one of twenty \$30 iTunes vouchers.

## Instrument

The survey consisted of the following sections:

- 1. Enrolment profile
- 2. Motivation to study
- 3. Factors influencing initial choice of study
- 4. Factors influencing the current choice of study
- 5. Technology skills
- 6. Demographics

The subscale for motivation to study was based on an existing OUA Survey and the subscale on choice of study mode drew on research by Hrastinski and Jaldemark (2012). The items were answered on a five-point Likert scale (5 = extremely important; 4 = very important; 3 = neither important nor unimportant; 2 = very unimportant; 1 = not at all important). Table 1 shows example items of the different subscales. Subscales have been successfully tested for reliability with Cronbach's alpha  $.681 \le r \le .869$ . The survey was implemented on the Qualtrics platform (www.qualtrics.com). It took approximately 15 minutes to complete the survey.

Table 1: Example items of the online survey

Subscale	Item				
Enrolment profile	Program, major, units completed, enrolment mode (internal external, online)				
Motivation to study	How important are the following factors for undertaking university level studies? Factors comprised: To gain employment, To progress my business, To start a business, Career change, Career progression, Job requirement, Knowledge and skill development, Prerequisite to another course, and For personal interest.				
Initial choice of study mode	<ol> <li>How important were the following factors in making your initial choice of study mode? There were six factors comprised of several items.</li> <li>Personal factors comprised five items: Personal, Cultural and/or religious orientation, Special/ specific learning needs, Confidence in your academic ability or capacity to succeed at university-level study and Prior experience of studying at MQ or OUA.</li> <li>Logistics comprised eight items: Cost of study per unit, Distance from campus, Ease of access to campus (e.g. transport, parking), Flexibility in studying at your own pace, Flexibility in studying at your time of choosing, Flexibility in managing work-life-study balance, Flexibility in studying at other universities and Range of units available to choose from.</li> <li>Teaching and learning comprised six items: Extent to which teaching and learning is conducted online, Being able to work collaboratively with other students, Access to study materials and resources, Expected workload, Engagement with academic staff, and Reputation of high quality teaching.</li> <li>Support for learning comprised four items: Access to services to support learning (e.g., writing, numeracy and literacy support), Access to IT services and support, Access to course and careers advice and Ease of administration.</li> <li>Environment and campus/community wellbeing comprised three items: Access to personal support services (e.g. medical, disability services counselling), Access to campus facilities (e.g. gym, swimming pool, clubs) and Meeting and socialising with other students.</li> <li>Advice and marketing comprised three items: Experience of other students, Advertising/ Website/ Social Media and Advice from Student Advisors or other university services.</li> </ol>				
Current choice of study mode	As for initial choice of study mode above				
Technology skills	Please rate your experience with using technologies for learning. Experience included: using the computer; surfing the Internet, with using blogs, wikis, podcasts, YouTube and discussion forums; doing Internet searches, setting bookmarks; uploading and downloading files, doing Internet searches; installing software and changing configuration settings on my computer; and getting help if I have computer problems.				
Demographics					

## Data collection and analysis

Based on enrolment lists from the relevant teaching units, participants were invited to complete the survey using the Qualtrics platform bulk email function. All data stored on the Qualtrics platform were anonymised, exported, and analysed using SPSS V.21. Six factors (personal, logistics, teaching and learning, learning support, environment, advice and marketing) were computed by the average of items focusing on the area of the factor. Initial data checks showed that the distributions of ratings and scores satisfied the assumptions underlying the analysis procedures. All effects were assessed at the .05 level.

## Results

## Differences in importance of factors (Hypothesis 1)

The results reported in this paper are those relating to student's current mode of study. Table 2 provides means, standard deviations, F-tests results, and effect sizes of the importance of factors influencing decisions students make for the three enrolment modes (on-campus, distance, open and online).

Table 2: Means (standard deviations in parentheses), F-test results, and effect sizes for importance of factors for the three enrolment modes (on-campus, distance, online), N = 744

	Enrolment mode				
Factor	On-campus	Distance	Open /Online	F(2,743)	Eta2
Personal	3.08 (.617)	3.10 (.758)	2.99 (.763)	1.058	.003
Logistics	3.29 (.741)	3.56 (.704)	3.50 (.727)	7.351**	.019
Teaching and learning	3.23 (.975)	3.73 (.850)	3.70 (.836)	18.244***	.045
Learning support	3.25 (.816)	3.08 (1.090)	3.02 (1.035)	3.936*	.011
Environment	3.29 (.756)	2.44 (1.209)	1.97 (.967)	134.447***	.266
Advice and marketing	3.29 (.719)	2.67 (1.209)	2.67 (1.138)	36.610***	.090
<i>Note.</i> * $p < .05$ ; ** $p < .05$	<.01; *** <i>p</i> < .001				

For logistics factor, Tukey-HSD post-hoc comparisons between the enrolment modes indicated that distance students (M = 3.56, 95% CI [3.39, 3.72]) rated significantly higher than on-campus students (M = 3.29, 95% CI [3.23, 3.35]), p < .01. Additionally, open and online students (M = 3.50, 95% CI [3.37, 3.64]) rated significantly higher than on-campus students (M = 3.29, 95% CI [3.23, 3.35]), p < .05. The comparison between distance students and open and online students was not statistically significant.

For teaching and learning factor, Tukey-HSD post-hoc comparisons between the enrolment modes indicated that distance students (M = 3.73, 95% CI [3.56, 3.93]) rated significantly higher than on-campus students (M = 3.23, 95% CI [3.15, 3.32]), p < .001. Additionally, open and online students (M = 3.70, 95% CI [3.55, 3.86]) rated significantly higher than on-campus students (M = 3.23, 95% CI [3.15, 3.32]), p < .001. The comparison between distance students and open and online students was not statistically significant.

For learning support factor, Tukey-HSD post-hoc comparisons between the enrolment modes indicated that oncampus students (M = 3.25, 95% CI [3.18, 3.32]) rated significantly higher than open and online students (M = 3.02, 95% CI [2.83, 3.21]), p < .05. All other pair-wise comparisons between cohorts were not statistically significant.

For environment factor, Tukey-HSD post-hoc comparisons between the enrolment modes indicated that on-campus students (M = 3.29, 95% CI [3.23, 3.35]) rated significantly higher than distance students (M = 2.44, 95% CI [2.16, 2.72]), p < .001. Additionally, on-campus students (M = 3.29, 95% CI [3.23, 3.35]) rated significantly higher than open and online students (M = 1.97, 95% CI [1.79, 2.15]), p < .001. Last, distance students (M = 2.44, 95% CI [2.16, 2.72]) rated significantly higher than open and online students (M = 1.97, 95% CI [1.79, 2.15]), p < .01.

For advice and marketing factor, Tukey-HSD post-hoc comparisons between the enrolment modes indicated that on-campus students (M = 3.29, 95% CI [3.23, 3.35]) rated significantly higher than distance students (M = 2.67, 95% CI [2.39, 2.95]), p < .001. Additionally, on-campus students (M = 3.29, 95% CI [3.23, 3.35]) rated significantly higher than open and online students (M = 2.67, 95% CI [2.46, 2.88]), p < .001. The comparison between distance students and open and online students was not statistically significant.

To sum up, of the six factors, five were significant: logistics, teaching and learning, learning support, environment, and advice and marketing. The biggest difference in mean response rates (and strongest effect size) was found for the environment factor, where on-campus students indicated a higher importance of campus, community and wellbeing items than distance students as well as open and online students. In contrast, distance students as well as open and online students indicated a higher importance for the teaching and learning factor than on-campus students. Accordingly, the results support Hypothesis 1, indicating that there are differences in the importance of factors influencing study mode choice amongst students enrolled in different study modes.

## Differences in experience with technology (Hypothesis 2)

ANOVA was used to test for difference in experience with technology among the three study modes (on-campus, distance, open and online). No significant difference was found between on-campus (M = 4.36, SD = .520), distance (M = 4.33, SD = .539) and open and online study mode (M = 4.40, SD = .628), F(2, 743) = .381, p > .05.

Accordingly, the results support the hypothesis that there are no differences of experience with technology among students enrolled in different study modes (on-campus, distance, open and online) (Hypothesis 2).

## **Discussion and conclusion**

The research reported aimed to investigate the question of why students choose to study in different modes: oncampus, distance, or open and online. Six sets of factors (personal, logistics, teaching and learning, support for learning, environment as well as advice and marketing) were explored to ascertain whether their importance to students when making choices differed across the three different modes. Because online technologies are integral to all three modes, we were also interested in understanding whether there were differences in students' experiences with technology in the different study modes.

Figure 1 indicates that the mean response for importance was relatively consistent across factors for on-campus students when compared with the other cohorts, although for all three cohorts there are significant differences across factors. While the teaching and learning and logistics factors were high for all cohorts, mean importance dropped for the other four factors for both the distance as well as open and online cohorts. In this regard, the distance cohort was more closely aligned with the open and online, rather than the on-campus cohort. The congruence in mean responses for the distance and open and online cohorts can be explained by the similarities in delivery: distance 'external' education at Macquarie University occurs predominantly online, although it is not fully online as is the case with the OUA cohort. The essential difference is that distance students in the BA Program may spend time on campus for concentrated face-to-face sessions, and they also have access to campus facilities, the full range of Library services and personal support services. All administration for these students is conducted through Macquarie. Open and online students do not have access to campus facilities or the full range of library services as they are enrolled through the OUA umbrella organisation, which also handles their enrolment and aspects of their support services. This helps explain the significantly higher mean importance of the environment factor for the distance cohort as compared to the open and (purely) online cohort.

The high mean scores of importance for the logistics and teaching and learning factors for all cohorts emphasises the importance of maintaining and ensuring quality delivery and providing a high level of transparency in the information provided to students about the nature and requirements of different modes of study, teaching methods, the learning experience, workload, assessment processes, cost, and flexibility in program choices and study options.

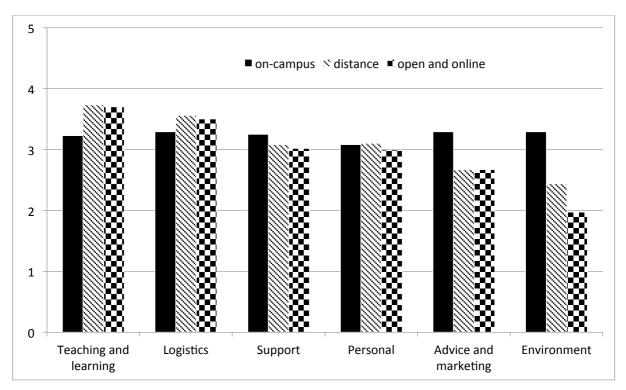


Figure 1. Order of importance of factors for the three enrolment modes (on-campus, distance, open and online)

#### **Personal**

The personal factor was the lowest factor in terms of mean importance for the on-campus cohort, and whilst the mean importance for distance as well as open and online students was similar to that of on-campus students, it ranked higher in importance for these cohorts than other factors such as advice and marketing and environment. The higher standard deviation for distance as well as open and online students for personal factors (as well as for learning support, environment and advice and marketing) when compared with on-campus students, indicate a greater variation in responses within these cohorts. It is thus possible that issues such as study experience, confidence with meeting the standards of tertiary study, and specific learning needs inform enrolment decision making for students in these cohorts in different ways. Many open and online education students, for example, are returning to study after a considerable break or may not have the necessary qualifications and experience to gain entry to university through traditional avenues and hence may not feel confident with tackling tertiary study. In addition, many students choose open/online study to accommodate personal and lifestyle constraints (Bates, 2005).

#### Logistics

The logistics factor registered the second highest mean importance across all cohorts. The mean importance of this factor for distance as well as open and online students was significantly higher than for on campus students. The high importance of this factor across all cohorts is reflective of the challenges students face in balancing work, life and study (Baron & Corbin, 2012). James, Krause, & Jennings (2010), for example, claim that approximately five years ago 61% of full-time students in Australia were in paid employment for around 13 hours per week and two thirds were working to support their basic needs. The higher mean importance registered for this factor by distance as well as open and online cohorts can be viewed as an influence on their choice of study mode, with both these study options providing more flexibility and convenience. University administrators and program directors should note the importance of this factor, which largely concerns distribution and accessibility. Its importance to all student cohorts emphasises the strategic value of offering a flexible and accessible product.

## Teaching and learning

The teaching and learning factor registered the highest mean importance across all cohorts. This emphasises the importance for all students of quality teaching and the ways in which it is delivered. The items comprising this factor did not test pedagogical content, because there is generally close alignment at Macquarie University in this regard across study modes, but focused on the ways in which it is delivered and the opportunities students believed they have to engage with it both personally and in conjunction with their peers. The significant importance of this factor for distance as well as open and online students, when compared with the on-campus cohort, indicates the value they place on content delivery and quality teaching. This is instructive in that it demonstrates a desire amongst these cohorts for engagement with both academic staff and fellow students, as well as an expectation that resources and study materials will be available and of a high standard. This provides a tangible guide for investment in online delivery and a reminder that students studying off-campus have high expectations for their learning experience.

#### Learning support

There was a significant difference in the importance of the learning support factor between the on-campus cohort and the open and online cohort, with the latter rating it lower than the former. This suggests a higher degree of self-reliance amongst open and online students, and emphasises the importance of services such as learning, writing and IT support for on-campus students. Standard deviation was again higher for distance as well as open and online students indicating that a broader range of learning support concerns come into play for these cohorts. This suggests a tension between the mass-education delivery that can be characteristic of online learning and the need for this learning to be both responsive and flexible to individual student needs.

#### **Environment**

Information and communication technologies have been a disruptive influence in many service sector industries, bringing both challenges and opportunities for traditional operations. One of its impacts has been to refocus the attention of businesses on core strengths. In the retail sector, for example, the recent focus has been on reintroducing or invigorating 'experiential' retailing by enhancing the in-store experience (AMP, 2011; Bagdare & Jain, 2013). The significant difference in importance of the environmental factor between the on-campus

cohort and the other cohorts, and even between the distance cohort – which has some connection to the physical campus – and the open and online cohort, indicates that even while universities pursue the opportunities and distant student markets available through online delivery, providing a rich and engaging study environment for on-campus students remains important.

## Advice and marketing

The advice and marketing factor was the second lowest factor in terms of mean importance for the distance as well as the open and online cohorts, with a significant difference between these and the on-campus cohort. Because this study concerns current rather than initial enrolment, we need to consider this engagement with marketing as the influence on ongoing decisions during the course of students' study, rather than advice and other influences prior to commencement of their studies. The relatively high mean importance for on-campus students suggests that they continue to be influenced by marketing and advice on enrolment choice during their degrees, whereas students in other cohorts are less susceptible to marketing once enrolled. This is perhaps because on-campus students have the benefit of more personal and spontaneous interactions with staff and students in their own course and study level, as well as with students in later years of study. This opens them to more avenues for seeking and coming across advice about their course options. In contrast the medium for communication for distance and open/online is more restricted and there are not the same opportunities for inadvertent conversations and advice.

## **Technology**

The survey asked students a range of questions regarding their levels of comfort with different usages of technology. That mean ratings of technological competency were high and there was no significant difference across all study modes reflects the broad spread of information technology literacy amongst students. It also reinforces the findings of Ali and Elfessi (2004) who found little difference in levels of confidence with information technology across cohorts of online and on-campus students. This suggests that online delivery of content in one mode, such as in blended on-campus models, should be readily transferrable to other modes without raising major technical obstacles to student learning. It also supports research that indicates that students are comfortable with their level of technical skills and hold an expectation that they will be using technology in their tertiary studies (Gosper, Malfroy& McKenzie, 2013). These findings support pedagogical innovations such as flipped classrooms that seek to integrate online delivery across study modes (Strayer, 2012). With universities increasingly offering multi-channel delivery, unit and program developments that share resources and content across modes offer important efficiencies as well as alignment, improving the cohesion of curriculum mapping and targeting of learning outcomes.

## Limitations and future questions

This study has some limitations. The students recruited were all studying humanities subjects. While we can make some broad generalisations about the implications of this data for cohorts in other disciplines – the broad technological proficiency demonstrated here, for example, is probably similar elsewhere – it is likely that the discipline of study will impact on the importance of particular factors. The learning and support factor, for example, may be much more important for students studying science online, where complex technical knowledge plays a higher role in pedagogical instruction. There was also variation in the size of the samples for each of the three cohorts examined here, requiring some caution in the strength of the claims made. Further examination of this data at the item rather than factor level will also produce more fine-grained analysis to shed insights into questions such as: How do these different cohorts vary at this more detailed level? What aspects of learning support, for example, are relevant and important to each cohort and how do we then integrate these into a cohesive offer across different modes of delivery? The higher standard deviations amongst the distance as well as open and online cohorts for some factors also suggests diversity within these student bodies. Mapping this may produce insights useful for shaping online delivery and balancing the investment of resources across different modes. Additionally, a qualitative follow-up study would provide further insights. For example it would be useful to explore the issues surrounding return to study for open and online students, and the implications these raise for the provision of learning support items.

That advice and marketing received relatively low mean importance ratings from both the distance and the open and online cohorts is significant and requires further investigation. Does this reflect the quality of marketing efforts by universities and OUA in this space, does the exceptionalism of the tertiary education product render it intrinsically difficult to market, or do perceptions of marketing differ from the actual effect of marketing efforts by tertiary institutions? Alternatively is it related, as we suggested above, to the opportunities available for

students to mix, communicate, and be exposed to a larger collective through which they might absorb advice and impressions of study options.

This study has identified factors that influence students' current choice of study mode. However, the importance of these factors may change as they progress through their degree. Further analysis of data is currently underway to ascertain whether this is the case. Another question that arises is whether factors influencing modes translate to other decision choices faced by students. For example, OUA students have access to a broad range of providers within their degree structure. Do perceptions of teaching and learning, for example, influence which institutions they choose?

At this stage, though, it is clear that choice of study mode is influenced by a number of factors. There are significant differences between cohorts on logistics, teaching and learning, learning support, environment, and advice and marketing factors, while overall, teaching and learning and logistics are rated the most important factors across the entire student body.

## Acknowledgements

Research conducted for this article was generously funded by Macquarie University under its Learning and Teaching Competitive Grant Scheme, 2013.

#### References

- Ali, A., & Elfessi, A. (2004). Examining students performance and attitudes towards the use of information technology in a virtual and conventional setting. *Journal of Interactive Online Learning*, 2(3), 2-9.
- Allen, I. E., & Seaman, J. (2011). Going the distance: Online education in the United States. Research Report No. 9.
- AMP Capital Shopping Centres (2011). Consumer connections: recommended retail practice report from AMP Capital Shopping Centres. Retrieved from http://www.ampcscresearchhub.com.au/Reports/Consumer-Connections.
- Bagdare, S., & Jain, R. (2013). Measuring retail customer experience. *International Journal of Retail & Distribution Management*. 41(10), 790-804.
- Baron, P., & Corbin, L. (2012). Student engagement: rhetoric and reality. *Higher Education Research & Development*, 31(6), 759-772. doi: 10.1080/07294360.2012.655711
  - Bates, A. W. (2005). Technology, e-Learning and Distance education. London: Routledge.
- Bates, A. W., & Poole, G. (2003). Effective teaching with technology in Higher Education: Foundations for success. San Francisco, CA: Jossey-Bass.
- Bornholt, L., Gientzotis, J. & Cooney, G. (2004). Understanding choice behaviours: Pathways from school to university with changing aspirations and opportunities. *Social Psychology of Education*, 7(2), 211-228. doi: 10.1023/B:SPOE.0000018560.99580.2a.
- Bradley, D. (2008). *Review of Australian higher education: Final report*. Retrieved from http://www.innovation.gov.au/HigherEducation/Documents/Review/PDF/Higher%20Education%20Review one%20document 02.pdf
- Crock, M., Baker, J., & Turner-Walker, S. (2013). Open Universities Australia: The evolution of open access and online education opportunities. In J. Witterns, B. Tynan, & R. James (Eds), *Global challenges and perspectives in blended and distance learning* (pp. 83-98). Idea Group.
- Currie, J. (2002). Australian Universities as Enterprise Universities: Transformed players on a global stage. *IAU* 2002 International Conference, 18-21 April 2002, University Laval, Quebec City, Canada. Retrieved from http://researchrepository.murdoch.edu.au/6607/1/Australian universities as enterprise.pdf
- de Zilwa, D. (2010). *Academic units in a complex, changing world. Adaptation and resistance*. Heidelberg: Springer.
- Dobozy, E., & Ifenthaler, D. (2014). Initial teacher education by open and distance modes: A snapshot of ecompetency experiences in Australia. *eLearning Papers*, 38, 43-54.
- Elsworth, G. R., Harvey-Beavis, A., Ainley, J. & Fabris, S. (1998). Generic interests and school subject choice. *Educational Research and Evaluation*, 5(3), 290-318. doi: 10.1076/edre.5.3.290.3882.
- Garnham, C., & Kaleta, R. (2002). Introduction to hybrid courses. *Teaching with Technology Today*, 8(6). Retrieved from http://www.uwsa.edu/ttt/articles/garnham.htm.
- Garrison, R., & Vaughan, H. (2008). Blended learning in higher education: Framework, principles and guidelines. San Francisco, CA: Jossey-Bass.

- Gedik, N., Kiraz, E. & Ozden, Y. (2013). Design of a blended learning environment: Considerations and implementation issues. *Australasian Journal of Educational Technology*, 29(1), 1-19. Retrieved from http://ascilite.org.au/ajet/submission/index.php/AJET/article/view/6.
- Gosper, M., Malfroy, J., & McKenzie, J. (2013). Students' experiences and expectations of technologies: An Australian study designed to inform planning and development decisions. *Australasian Journal of Educational Technology*, 29(2), 268-282.
- Greenland, S. J., & Moore, C. (2014). Patterns of student enrolment and attrition in Australian open access online education: A preliminary case study. *Open Praxis*, 6(1), 45-54.
- Hagel, P., & Shaw, R. (2008). The influence of delivery mode on consumer choice of university. *European Advances in Consumer Research*, 8, 531-536.
- Herbert, M. (2006). Staying the course: A study of online student satisfaction and retention. *Online Journal of Distance Learning Administration*, 9(4), 1-12. Retrieved from http://www.westga.edu/~distance/ojdla/winter94/herbert94.htm.
- Hrastinski, S., & Jaldemark, J. (2012). How and why do students of higher education participate in online seminars? *Education and Information Technologies*, 17(3), 253-271. doi: 10.1007/s10639-011-9155-y.
- James, R. (2001). How school-leavers choose a preferred university course and possible effects on the quality of the school-university transition. *Journal of Institutional Research*, 9(1), 78-88.
- James, R., Krause, K.-L., & Jennings, C. (2010). The first-year experience in Australian universities. In R. James, K.-L. Krause, & C. Jennings (2010). *The first-year experience in Australian universities: Findings from 1994 to 2009*. Melbourne, VIC: Centre for the Study of Higher Education.
- James, R., Wyn, J., Baldwin, G., Hepworth, G., McInnes, C., & Stephanou, A. (1999). Rural and isolated students and their higher education choices: A re-examination of student location, socio-economic background, and educational advantage and disadvantage. Canberra: Australian Government Publishing Service.
- Johnson, R., Stewart, C. & Bachman, C. (2013). What drives students to complete online courses? What drives faculty to teach online? Validating a measure of motivation orientation in university students and faculty. *Interactive Learning Environments*, 1-16. doi: 10.1080/10494820.2013.788037.
- Lefoe, G., & Albury, R. (2004). Editorial. Educational Media International, 41, 181-182.
- Lefoe, G., & Hedberg, J. (2006). Blending on and off campus: A tale of two cities. In C. Bonk, & C. R. Graham (Eds.), *Handbook of blended learning environments: Global perspectives, local designs* (pp. 325–337). San Francisco, CA: Pfeiffer.
- Moore, M. G., & Kearsley, G. (2005). *Distance education: A systems view*. Belmont: Wadsworth Publishing Co. Price, L. (2006). Gender differences and similarities in online courses: challenging stereotypical views of women. *Journal of Computer Assisted Learning*, 22, 349-359.
- Robinson, R., & Bornholt, L. (2007). Pathways theory of progression through higher education. *Australian Journal of Educational & Developmental Psychology*, 7, 49-62.
- Rumble, G., & Latchem, C. (2004). Organisational modes for open and distance learning. Policy for open and distance learning. In H. Perraton & H. Lentell (Eds.), *Policy for open and distance learning* (pp. 117-140). London: Routledge Farmer.
- Singh, H. (2003). Building effective blended learning programs. *Educational Technology*, 43(6), 51-54. Stewart, C., Bachman, C. & Johnson, R. (2010). Students' characteristics and motivation orientations for online
- and traditional degree programs. *Journal of Online Learning and Teaching*, 6(2), 367-379.
- Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research*, 15(2), 171-193. doi: 10.1007/s10984-012-9108-4
- Sugahara, S., Boland, G. & Cilloni, A. (2008). Factors influencing students' choice of an Accounting major in Australia. *Accounting Education* 17 (sup1), 37-54. doi: 10.1080/09639280802009199.
- Tinto, V. (2005). Reflections on student retention and persistence: moving to a theory of institutional action on behalf of student success. *Studies in Learning, Evaluation, Innovation and Developmental Psychology*, 2(3), 89-97.
- Tucker, B., Halloran, P., & Price, C. (2013). Student perceptions of the teaching in online learning: an Australian university case study. In S. Frielick, N. Buissink-Smith, P. Wyse, J. Billot, J. Hallas, & E. Whitebread (Eds.), *Research and development in Higher Education: The place of learning and teaching*, 36, 470-484.
- Woo, K., Gosper, M., McNeill, M., Preston, G., Green, D., & Phillips, R. (2008). Web-based lecture technologies: blurring the boundaries between face-to-face and distance learning. *Research in Learning Technology*, 16(2), 81-93. doi: 10.1080/09687760802315895
- Ziguras, C., & McBurnie, G. (2011). Transnational Higher Education in the Asia-Pacific region: From distance education to the branch campus. In S. Marginson, S. Kaur, & E. Sawir (Eds.), *Higher education in the Asia-Pacific* (pp.105-122). Springer Netherlands.

Zimitat, C. (2003). The impact of full-time employment and family commitments on the first year experience of full-time students. First Year Experience Conference. Retrieved from http://www.griffith.edu.au/\_\_data/assets/pdf\_file/0009/91836/impact-of-full-time-employment.pdf.

**Please cite as:** Bailey, M., Ifenthaler, D., Gosper, M., & Kretzschmar, M. (2014). Factors influencing tertiary students' choice of study mode. In B. Hegarty, J. McDonald, & S.-K. Loke (Eds.), *Rhetoric and Reality: Critical perspectives on educational technology. Proceedings ascilite Dunedin 2014* (pp. 251-261).

Note: All published papers are refereed, having undergone a double-blind peer-review process.



The author(s) assign a Creative Commons by attribution 3.0 licence enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.