

RESEARCH BRIEFING

Australasian Survey of Student Engagement

Volume 6 May 2010

Highlights

- Indigenous first years report greater development in their self-awareness, understanding of others and contribution to the community than all other students.
- First years in Australia are less likely to ask questions in class, make class presentations, participate in community-based projects or tutor other students than later-year students or first-year American students.
- One in ten first-year students in Australia are planning to change to another degree, and one in 15 are planning to move to another university.
- The frequency with which first-year students in Australia and New Zealand discuss their grades, their career plans or ideas from classes with teaching staff is less than half that of their counterparts in the USA.
- First-year students in Australia who do not speak English at home are more likely than others to have conversations with people from different ethnic groups and with people who are different to them in terms of religion, political persuasions or values.
- Students in science-related fields spend more time memorising facts than students in other disciplines. Humanities students participate in more forms of analysis, and engineering students in applying theories or concepts to practical problems or new situations.
- The most common reasons cited by first year students who discontinue their studies are difficulties balancing university studies with personal commitments and the need to work more hours to support themselves. These factors are particularly important for females.

Getting first-year students engaged

Regarding first years

This research briefing offers a snapshot of how Australian students' engage in their first year of university study. It reviews participation in key learning activities, perceptions of support, correlates of retention, and important educational outcomes.

The Australasian Survey of Student Engagement (AUSSE) is the largest cross-institutional survey of first-year students yet conducted in Australia, with 12,356 respondents in 2009 from 30 institutions, representing a population of 93,501. AUSSE results help universities understand the experiences of first-year students, and better grasp the factors linked with retention and success.

For universities, getting the early years of study right is particularly essential given that many of the gains in critical thinking, knowledge and academic skills occur in the first two years (Pascarella & Terenzini, 2005). AUSSE results show that in comparison with first-year students in the USA (also surveyed in 2009) first years in Australia are less likely to be challenged to learn, are less engaged in actively constructing knowledge, and participate in fewer broadening educational activities.

First-year students are more likely to remain at university and continue to subsequent years if they are able to have regular contact with teaching staff and if they feel supported by their university. Yet first-year students in Australia are significantly less likely to have contact with their lecturers and tutors than their counterparts in the USA, and also feel less supported by their universities.

The AUSSE Research Briefings are produced by the Australian Council for Educational Research (ACER), drawing on data from the Australasian Survey of Student Engagement (AUSSE). The aims of the series are to bring summaries of findings from AUSSE research to a wider audience and to examine particular topics in brief. Related resources are listed at the end of the paper.



This briefing spotlights key characteristics of firstyear students' engagement. It supplements the broader analysis given in the 2009 Australasian Student Engagement Report -- Getting More from Higher Education (Radloff & Coates, 2010).

A focus on retaining talent

Like many other advanced countries, Australian governments and institutions are working to get more people involved in higher education. But large proportions of students do not remain at university long enough to progress beyond the first year. Finding a way to improve retention rates is a pressing challenge for institutions and the system overall.

In Australia, around 20 per cent of domestic students and 10 per cent of international students who begin university do not continue to their second year (DEEWR, 2009). This early departure of students represents a waste of potential, resources and skills.

The reasons students drop out are complex, but a number of factors have been linked with retention. Examples include:

- sense of belonging (Hausmann et al., 2007);
- social integration with peers (Wilcox et al., 2005);

- class sizes and interactions with teaching staff (Cuseo, 2007);
- engagement in study and broader life on campus (Pascarella & Terenzini, 2005);
- self-efficacy (Chemers et al., 2001); and
- exposure to new people and ideas (Pascarella & Terenzini, 2005).

If students feel that their university supports them, not only academically but also socially and personally, and if they feel that they are intellectually challenged, they will be more likely to gain academic competence, which will encourage them to remain at university (Reason et al., 2006). Previous analyses of AUSSE data have shown that challenging students and giving them the support they require to succeed are vital (Coates, 2008).

The vast majority of first-year undergraduate students are undergoing a period of great transition as they move from childhood to adulthood and learn to become independent. They are exploring the world around them and engaging with new experiences and perspectives at the same time as defining their own identities and deciding on their future directions. As the location in which many of these transitions take place, universities fulfil a number of roles. They provide social contexts in which students are able to engage with new people and to build lifelong relationships. They deliver intellectual stimuli which



Figure I Age distribution of first-year students

challenge students to reconsider their views about the world around them and their places within it. And they allow students to gain the skills and attributes which will enable them to succeed in their future lives.

Using findings from the 2009 AUSSE, this briefing highlights areas in which Australian universities are effective in engaging first-year students, and uses the data to spotlight areas in need of attention. As Kuh et al. (2008) suggest, if universities wish to improve retention rates of first-year students they first need to know who their students are, what their students expect and how much effort their students are prepared to make.

Clearly, the smaller class sizes the better the engagement.

– First-year male humanities student

Who are Australia's first-year students?

The 12,356 first years who responded to the 2009 AUSSE provided a wealth of information on today's students.

What are their key demographics?

- Just under 60 per cent are female
- 76 per cent are 20 years or younger and 16 per cent are older than 25 (Figure 1)
- 12 per cent speak a language other than English at home
- 40 per cent are the first in their family to undertake higher education
- Based on location of home residence, 18 per cent are from a low socioeconomic background
- 6 per cent report having a disability, impairment of long-term condition
- 4 per cent are Indigenous

Being the first in the family to participate in higher education has almost no impact on key facets of engagement or on outcomes. Figure 2 reports scores for selected AUSSE scales (described below). People who are first-in-family are marginally more likely to be satisfied with their courses, to feel supported by the university community, to have integrated employmentfocused work experiences as part of study, and to develop general competencies. The same students, in contrast, are marginally less likely to participate in enriching educational experiences. These differences are trivial, however, and on all other measures of engagement and outcomes the differences between the average scores of each group is less than one scale point. Overall, therefore, being the first in the family to attend higher education has minimal impact on educational engagement or outcomes.

Where do first-year students live?

- 51 per cent with their parents or guardians
- 15 per cent on campus in a university college or hall of residence
- 12 per cent in a share house
- 78 per cent have home addresses in metropolitan areas
- 22 per cent have a home in a regional or remote area

What do first-year students study?

- 21 per cent are enrolled in the humanities
- 20 per cent are enrolled in health-related fields
- 14 per cent are enrolled in business courses
- 12 per cent are enrolled in education
- Each of these fields contain less than 10 per cent of students: sciences, creative arts, engineering, IT, architecture, agriculture

How do first-year students study?

- 27 per cent are either enrolled on a part-time basis or attend university as an external or distance student
- 81 per cent do at least some of their study online

What funding do first-year students receive?

- 82 per cent report having a government-funded place
- 31 per cent receive direct financial payments from government
- 15 per cent receive financial support from their university



Figure 2 First in family learners - engagement and outcomes



Figure 3 Hours each week spent travelling to campus

How many hours per week do first-year students spend on various activities?

- Relaxing and socialising: 11 15 hours
- Preparing for class: 6 10 hours
- Working for pay off campus: 6 10 hours
- Participating in extracurricular activities: 6 10 hours
- Managing personal business: 6 10 hours
- Providing care for dependents: 1 5 hours
- Travelling to campus: 1 5 hours (Figure 3)
- Working for pay on campus: 0 1 hours
- Providing care for dependents (Figure 4)

Broad national statistics suggest that male and female first years spend their time differently. Male students spend more time on campus overall (Figure 5), more time relaxing and socialising and more time participating in extra-curricular activities, but female students spend more time looking after dependents, preparing for class, working for pay off campus, and managing their personal business.

Many analyses of students' participation in paid work assume that paid work interferes with academic engagement. But findings from the AUSSE suggest that this is not necessarily the case, at least until students are working over 30 hours per week. Figure 6 shows that average scores for the AUSSE's Higher Order Thinking scale begin to drop off when first-year students work 21 to 25 hours a week, and average scores for the AUSSE's General Learning Outcomes and General Development Outcomes scales begin to fall when students work 26 to 30 hours a week. All other engagement and outcome scores, however, begin to decrease only when students work more than 30 hours a week. This suggests that moderate hours of paid work have very little impact on the extent to which first-year students engage in studies, or on their educational outcomes.

When first-year students who do paid work are asked to describe the extent to which it relates to their studies (Figure 7), 12.0 per cent report that it is related 'very much' while 51.2 per cent report that it is 'not at all related'. Participating in a range of employment experiences can be good for students, giving them a sense of the community in which they live, but working in jobs related to study is most likely to boost students' work- and career-related skills.

Looking at student engagement

As mentioned, this briefing looks at how first-year students engage in key facets of university education, drawing on data from the 2009 AUSSE.

The AUSSE was conducted with 25 Australasian universities in 2007, 29 in 2008 and 35 in 2009. For the first time in Australia and New Zealand, it has offered institutions information on students' involvement with the activities and conditions that research has linked with high-quality learning and development. The AUSSE provides key insights into what students are actually doing, a structure for framing conversations about quality, and a stimulus for guiding new thinking about good practice.



Figure 4: Providing care for dependents





Figure 5: How students' spend their time each week

Student engagement is an idea specifically focused on students in higher education and their interactions with their institution. Once considered behaviourally in terms of 'time on task', contemporary perspectives embrace other aspects of teaching, the broader student experience, learners' lives beyond university, and institutional support. Students lie at the heart of conversations about student engagement, conversations that focus squarely on enhancing individual learning and development.

This perspective draws together decades of empirical research into higher education student learning and development – much of it focused on first-year students. In addition to confirming the importance of ensuring appropriate academic challenge, this research has emphasised the importance of examining students'

integration into institutional life and involvement in educationally relevant, 'beyond-class' experiences.

The AUSSE measures student engagement through administration of the Student Engagement Questionnaire (SEQ) to a representative sample of first- and lateryear bachelor degree students at each institution. Its formative links to the USA National Survey of Student Engagement (NSSE) enable benchmarking between these collections.

This briefing draws on data from the most recent AUSSE. It focuses on students enrolled in Australian universities, of which there were 25,795 responses in 2009. Of these responses, 12,356 were first-year students and 13,439 were later years.



Figure 6: Impact of paid work on engagement and outcomes



The academic staff make it part of their own personal agenda to ensure each student is treated like an individual and that their needs are catered to. This is something that entices students to attend every hour, of every class, every week and spend time preparing for their classes to really get involved

- First-year male engineering student

The data presented below are based on weighted response data from the 2009 AUSSE – 12,356 raw responses from 30 institutions representing a target population of 93,501. Given that the sample of institutions reflects the overall population, it is reasonable to assume that the responses reflect the national population. The AUSSE website (http://ausse.acer.edu.au) provides further details on survey resources and methods. The annual Australasian Student Engagement Report (Coates, 2008, 2009; Radloff & Coates, 2010) provides consolidated analysis of AUSSE results.

The engagement of first years – an initial snapshot

The SEQ measures six defined areas of students' engagement: Academic Challenge, Active Learning, Student and Staff Interactions, Enriching Educational Experiences, Supportive Learning Environment, and Work Integrated Learning. Scale scores are calculated for each of these areas, and are reported here using a metric that runs from 0 to 100. In general, a difference of five points or more reflects a meaningful educational effect. Figure 8 compares average scores of first- and later-year students in Australia with those in the USA.

As the chart illustrates, the average scores for both first- and later-year students in Australia are lower than those of first-year students in the USA on every





measure. The greatest difference is found for Student and Staff Interactions, for which there is a 13.9 point difference against Australian first-year students and a 9.2 point difference against Australian later-year students. First-year students in Australia are less likely to be challenged to learn, are less likely to actively construct knowledge, are less likely to have interactions with teaching staff, are less likely to participate in broadening educational activities and are less likely to feel supported by their university community than their counterparts in the USA. All of these findings provide cause for further investigation.

The sooner students can interact in a real working environment and get a taste of their future career, the more engaged and motivated they'll be to succeed ... If I was able to even visit a place of work and talk to real people in the real world, that would be a huge motivator.

- First-year female humanities student

Figure 8 shows the average Work Integrated Learning score for first-year students is 40.3 points, 10.4 points below the score for later-year students. This scale refers to activities such as industry placements, the application of learning to the workforce and the acquisition of job-related knowledge and skills. It is common for students to engage in such activities in later years of their university studies and this explains the much lower average score for first-year students. However, there is no reason why first-year students cannot participate in these activities and giving them the opportunity to do so may enhance their interest in their studies.







Interactions with staff

Research has highlighted the vital importance of interactions with staff for the retention of first-year students. Hausmann et al. (2007) refer to this as a 'sense of belonging', incorporating interactions with both peers and with staff. Wilcox et al. (2005) particularly emphasise social integration with peers, and Cuseo (2007) highlights interactions with teaching staff. Figure 9 shows the percentage of first-year students in Australia, New Zealand and the USA who report participating in various forms of student/staff interaction 'often' or 'very often'. It is clear that first-year students in Australia are less likely to engage in every interaction than their American counterparts.

In comparison with first-year students in the USA, firstyear students in Australia are less than half as likely to discuss their grades with teaching staff (a difference of 31 points) and are also less likely to talk about their career plans with teaching staff (a difference of 21 points). At the same time, they are less likely than first-year students in the USA to receive prompt written or oral feedback from teaching staff on their academic performance, discuss ideas from their classes with teaching staff, and work with teaching staff on activities outside coursework.

Ditch the conservative lecture. It's a tradition that continues, I believe, just because it always has. I doubt many students benefit from them ... as I watch many eyes glaze over in the halls ... From my point of view, it's difficult for a student to be 'engaged' in a sea of 300 faces

- First-year male engineering student

Smaller tutorials, enabling student and teacher to be more familiar with each other as well as their fellow students, a feeling of familiarity would make the student feel safer and then perform better within a class

First-year female society and culture student



Figure 9: Students' interactions with staff

Overall, it seems clear that first-year students in Australia have far fewer opportunities to interact with the teaching staff of universities than do first-year students in the USA, which may reflect the tendency towards large class sizes at the first-year level in Australia. Given the importance of interactions with staff on the retention of students, these findings suggest that Australian universities may need to seriously review their approach to teaching and supporting first-year students.

Despite these findings, first-year students in Australia report having similar perceptions of their relationships with teaching staff to their American counterparts. On a scale of 1 to 7, where 1 represents 'unhelpful and unsupportive' and 7 represents 'helpful and supportive', Figure 10 indicates the percentages of first-year students from each country who report relationships with each group at levels 5, 6 or 7. It is clear that very similar proportions of first-year students in both the USA and Australia feel that their relationships with teaching staff are as good as possible and equally close scores can be seen for relationships with other students and relationships with administrative personnel and services.

Given the importance of personal relationships for retention and university outcomes, this finding is reassuring. Moreover, as Reason et al. (2006) have found, those students who feel that their university supports them are most likely to gain in academic competence, hence making this a crucial factor in educational outcomes.



The lecturers and tutors provide a sense of hospitality in the way that they encourage students to participate in class and come across as easy to talk to, fun and kind people which encourages students to ask questions and thus further their education

– First-year female business student



Figure 10: Perceptions of supportive relationships





Figure 11: Engaging with difference

Relations with peers

AUSSE and NSSE results about relationships between students and their peers shows that more than half of all first-year students in the USA and Australia have frequent conversations with students who are very different to themselves and with people from different ethnic groups. Figure 11 shows the proportions of students from Australia and the USA who report doing each of the four activities either 'often' or 'very often'. As this makes clear, institutions in the USA are generally more likely to encourage students to have contact with people of different backgrounds, and to understand people of other racial and ethnic backgrounds. Interesting differences show up between the engagement of Australian first years who do and do not speak English as their home language.



Figure 12: Development of higher-order thinking

Clearly, being open to people from different backgrounds is likely to enhance students' social awareness and relations. Moreover, it also has the potential to significantly impact their educational outcomes in terms of challenging them to consider their perspectives and assumptions. As Pascarella and Terenzini (2005) note, the more students are exposed to new people and ideas, the more likely they are to remain at university.

I think the best aspect the university uses to get students to engage in learning is social interaction. This makes learning a more enjoyable experience, and usually even heightens the learning experience, in that students are learning about each others' cultures, beliefs, etc., whilst learning about the particular field they are studying. Therefore students are more motivated to engage in learning activities.

- First-year male science student

Learning activities

While interactions and relationships are clearly crucial in determining the likelihood that students will persist beyond first year, the extent to which they learn and are intellectually challenged is also vital. Looking at the proportions of students who reports that coursework emphasises higher-order forms of learning either 'quite a bit' or 'very much' (Figure 12), brings out interesting patterns across certain fields of education. People studying in science-related fields, for instance, report engaging in more memorisation than others. Humanities students participate in more forms of analysis, and engineering students in notably more work that involves applying theories or concepts to practical problems or new situations.

First-year students' reports of the extent to which they engage in various active learning activities 'often' or 'very often' (Figure 13) is similar to that for later years, with a few exceptions. These are that first years are less likely to



Figure 13: Participation in active learning activities

ask questions than later years, make fewer presentations, participate in fewer community-based projects, and are less likely to tutor or teach other students.

It is interesting to note that much smaller proportions of first-year students in Australia than in the USA are likely to engage in specific forms of active learning. Around three per cent fewer first-year students in Australia are likely to report that they 'often' or 'very often' participate in a community-based project than their counterparts in the USA. This difference is accounted for by the much greater profile of service learning activities in universities in the USA than in Australia. More curious, however, is that a full 10 per cent fewer first-year students in Australia report asking questions or contributing to class discussions either 'often' or 'very often' than do first-year students in the USA. This suggests the use of more didactic teaching methods in Australian universities than in the USA, perhaps a factor which is exaggerated by large class sizes at the first year level. Taken together, the differences



Figure 14: Indigenous and non-Indigenous learners' outcomes





Figure 15: Factors shaping retention considerations

suggest that Australian first-year students are less likely to be engaged in actively constructing knowledge than their American counterparts, which is a concern for their intellectual development. This is particularly so because it is likely to reduce their self-efficacy, and previous research has shown that this is a critical component of academic success as well as the ability of first-year students to adjust to universities (Chemers et al., 2001).

Promote higher learning. There may be some students who can go above and beyond the current curriculum, and their thoughts and ideas could encourage and stimulate further thought. These could be thoughts stemming from the current curriculum.

- First-year female humanities student

An examination of the qualitative data collected by the AUSSE makes clear that student engagement at the firstyear level is particularly related to two factors – support in gaining basic study skills and the ways in which subjects are taught. Both of these areas benefit from constant revision in order to ensure that they engage first-year students in their studies as much as possible.

Student outcomes

When students achieve positive outcomes in the first year, this is likely to reinforce their commitment to university. Figure 14 charts scores for a range of selfreported outcomes for both Aboriginal or Torres Straight Islanders, and for students who do not identify as an Aboriginal or Torres Strait Islander. These scores reflect students' perceptions of the extent to which their institution has contributed to their knowledge, skills and personal development in each of the areas listed.

Results for these two groups are very similar, but Indigenous students report higher outcomes in a handful of areas related to broadening self and community awareness. These differences are important, particularly given that they stand-out statistically against the responses of so many other first-year students.

To improve how the university engages students, I would have to suggest more workshops to help students expand important skills such as critical reading and research strategies to further this part of learning.

– First-year female agriculture student

They should hire lecturers that not only understand their field, but also understand teaching, for knowledge of a subject does not translate to being a good teacher.

- First-year female humanities student

Students' future plans

Students were asked whether they had seriously considered leaving their current institution in the year in which they were surveyed and, if so, for what reason. The results indicate that 91.4 per cent of first-year Australian students plan to continue their current study and 71.4 per cent have not considered change of any kind. Figure 15 graphs the percentage of students who reported considering leaving for a number of quite broad reasons. The AUSSE asked those first-year students who flagged that they had discontinued their studies to identify more detailed reasons driving their intentions. Table 1 lists these specific reasons for departure, ranked in order of frequency. Percentage figures are shown, along with the approximate number of first-year students in the total population across the 30 institutions implied by these figures. Percentage estimates over one could be considered significant from a statistical perspective.

A higher proportion of female first-year students cite difficulties balancing university studies with personal commitments and work, and the need to work more hours to support themselves or their dependents. This underscores the importance of providing support services on university campuses that assist female students complete their degrees.



Table I: Specific reasons for considering leaving university

Reason	All first years (%)	Male first years (%)	Female first years (%)	Approximate numbers
Had difficulty balancing university studies with personal commitments	2.5	2.1	3.0	2,300
Needed to work more hours to support myself or dependents	2.4	2.4	2.5	2,200
Needed a break from study	2.3	2.0	2.7	2,100
Felt the course/program would not adequately prepare me for my future career	2.0	2.1	2.1	١,900
Had difficulty keeping up with the work	1.9	2.0	2.1	1,800
Changed career goals	1.7	1.6	1.7	I ,600
Had difficulty balancing university studies with work	1.7	1.3	2.2	I ,600
Disliked the assessment methods	1.5	1.7	1.5	I,400
Found a better path to my future career	1.4	1.6	1.4	I,300
Was not adequately prepared for university	1.4	1.3	1.6	I,300
Received insufficient government assistance	1.3	1.7	1.2	1,200
Was ineligible for government assistance	1.3	1.1	1.6	1,200
Wanted to study a similar course/program elsewhere	1.2	1.3	1.2	1,100
Did not like the way the course/program was taught	1.1	1.2	1.1	1,000
Needed a break from university	1.1	1.0	1.3	1,000
Work load was too great	1.1	1.1	1.3	I ,000
Had difficulty paying upfront fees	1.0	0.9	1.1	900
Moved further away from current institution	1.0	1.0	1.1	900
The institution was not prestigious enough	1.0	1.3	0.8	900
The course/program was not as expected	0.9	0.9	0.9	800
The course/program was not interesting enough	0.8	1.0	0.7	700
Was unwell	0.8	0.5	1.1	700
Was unable to study my preferred course/program	0.7	0.8	0.6	700
Found university not challenging enough	0.6	0.7	0.5	600
Offered more hours at work / a better job	0.6	0.6	0.6	600
Always intended to move to a different institution	0.5	0.7	0.4	500
Wanted to study a different course/program elsewhere	0.5	0.6	0.5	500
The course/program was not challenging enough	0.4	0.5	0.3	400
Was offered a good job	0.4	0.4	0.3	400
Changed jobs	0.3	0.3	0.3	300
Was offered a place at a different institution	0.1	0.2	0.1	100

While it is inevitable that some first-year students will move from one degree to another as they decide what area of study suits them best, in general the loss of students from university study is a negative outcome. It is hoped that the information examined in this research briefing provides universities with more information on which to base retention activities in the future

Having come from a small high school I find university lacks the intimacy which I had always associated with educational institutes. I'm not sure whether it's the university which is in need of improvement or rather myself just getting used to the transition.

- First-year female humanities student

Improving engagement in first-year study

Overall, it would seem that the ability of first-year students to fulfil their academic and intellectual potential is not yet being fully optimised in Australia. This is of concern not just because the initial year of a degree is so vital for gains in critical thinking and for overall learning but also because those students who feel that they are intellectually challenged are most likely to gain the competence in academic skills which will enhance their performance and contribute to the likelihood that they will persist with their university studies. If retention rates of first-year university students are to improve, there is a need for more attention to be paid to ensuring that students are supported in gaining basic study skills at the same time as being intellectually stretched from the very beginning of their degrees.

There is always much that can be done to improve an endeavour as complex and significant as education. Two key areas for improvement are highlighted by way of conclusion.



Lecturers that teach the course are probably the most influential people in gaining and maintaining my attention. If lecturers are more laid back, formal and humorous I find I learn a lot more and remember the content, not to mention enjoy the course. More group activities to get students to interact with one another.

- First-year male science student



Sue began her education degree in 2009 as a 33 year old. She is from a low socioeconomic background and she receives financial support from her university. Neither of her parents have any education beyond high school. She lives with her partner and children and spends 18 hours a week providing care for them but does not do any paid work. She is enrolled as a fulltime distance student and does all of her study online, spending no time at all on campus. Academically, Sue is doing very well, with average grades of 82 per cent. She is usually able to keep up to date with study and often works harder than she thought she could. Most of her assignments are between 1 and 5,000 words and she has not had any exams.

Sue finds that teaching and administrative staff are very helpful and supportive, which is reflected in her feeling of being very highly supported by the university. Indeed, she finds that the best aspect of how her university engages students in learning is that staff are "accessible and they answer things relatively quickly and are there for the students when needed". Sue's perceptions of all other levels of engagement and all outcomes are very close to the average of other first-year students and, overall, she is satisfied with the educational experience and plans to continue next year. She would, however, like to receive more information about her subjects, as well as study guides, "a little earlier than the first day of the semester".





Mark began his engineering degree in 2009 as a seventeen year old. He studies full-time, receives HECS and lives with his parents, both of whom have undergraduate degrees, in a metropolitan area close to his university. He finds that the best aspects of his studies are online resources which "allow further study if I am unable to understand in the lecture". He also finds that "practical work in the course can be very helpful at understanding". Although he complains that 10 hours a week for study is "way too much", Mark is still able to spend six to 10 hours a week working for pay off campus and 21 to 25 hours a week relaxing and socialising.

Academically, Mark is doing reasonably well, finding that he is usually able to keep up to date with his studies and has achieved average marks around 72. He finds that he often works harder than he thought he could and that exams usually challenge him to do his best work. Compared to the average first year student, Mark feels that he is more involved in actively constructing knowledge and that he is more supported by the university community. In contrast, he feels that he spends very little time integrating employment focused work experiences into his studies and that he has very little interaction with staff members. Despite his disappointment with these aspects of his studies, which are reflected in his lower-than average overall satisfaction, Mark has not considered changing his course and plans to continue next year.

The first is the ability of students to interact with teaching staff. While first-year students often participate in small classes led by tutors, their encounters with more senior academic staff are often limited to lectures. As comments from first-year students make clear many find large lectures to be alienating. The results affirm the vital importance of universities limiting the size of lectures in the first year in order to allow all teaching staff to have meaningful interactions with students. This would give students more confidence to engage with their lecturers and to interact with them on a more regular basis, enhancing the extent to which they engage in actively constructing knowledge.

The results flag, second, the need to ensure that students are developing all of the elements of higher order thinking, whatever the discipline. As Figure 12 indicates, there is a great deal of variation in the extent to which students in each area of study are required to analyse, synthesise, make judgements and apply theories. Balancing these is essential if students' intellectual development is to be optimised.

As this briefing suggests, student engagement offers a highly informative lens for interpreting key aspects of the education of first-year university students. While the observations discussed above provide some crucial insights into the ways in which first-years experience university, further analysis is likely to yield relationships between different aspects of engagement which would offer universities a deeper understanding of the factors which engage first-years in their studies. Not only would these be valuable for ensuring that first-year students are fully challenged intellectually and supported in the transition from high-school, they would also help universities to understand the factors which lead students to drop out of university. Ultimately, the prospects of retention are boosted when students feel supported, challenged and connected to their universities.

Many courses are taught as lectures, which is obviously an effective way of conveying information to a large number of people all at once. However, all teachers acknowledge that it is not the best way to convey information as people learn best by engaging and learning by doing. Where possible, I believe more courses should focus the core learning in seminars and smaller discussion groups. It is often intimidating for students to ask questions in large lecture theatres, and so their learning can be hindered by this.

- First-year female humanities student





Resources

- Chemers, M., Hu, L. & Garcia, B. (2001). Academic selfefficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, *93*(3), 55-64.
- Coates, H. (2008). Attracting, Engaging and Retaining: New conversations about learning. Australasian Student Engagement Report. Camberwell: Australian Council for Educational Research.
- Cuseo, J. (2007). The empirical case against large class size: adverse effects on the teaching, learning, and retention of first-year students. *The Journal of Faculty Development*, 21(1), 5-21.
- Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Students: Selected Higher Education Statistics*. Canberra: Australian Government.
- Hausmann, L., Schofield, J. & Woods, R. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education*, 48(7), 803-839.
- Kuh, G., Gruce, T., Shoup, R., Kinzie, J. & Gonyea, R. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540-563.

- Longden, B. (2006). An institutional response to changing student expectations and their impact on retention rates. Journal of *Higher Education Policy and Management*, *28*(2), 173–187.
- Murtaugh, P., Burns, L. & Schuster, J. (1999). Predicting the retention of university students. Research in Higher Education, 40(3), 355-371.
- Pascarella, E. & Terenzini, P. (2005). *How College Affects Students: A third decade of research.* San Francisco: Jossey-Bass.
- Porter, S. & Swing, R. (2006). Understanding how first-year seminars affect persistence. *Research in Higher Education*, 47(1), 89-109.
- Radloff, A. & Coates, H. (2010). *Getting More From Higher Education: Enhancing learning and outcomes. Australasian Student Engagement Report.* Camberwell: ACER.
- Reason, R., Terenzini, P. & Domingo, R. (2006). First things first: developing academic competence in the first year of college. *Research in Higher Education*, 47(2), 149-175.
- Wilcox, P., Winn, S. & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': The role of social support in the first year experience of higher education. *Studies in Higher Education*, 30(6), 707-722.

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