

# RESEARCH BRIEFING

Australasian Survey of Student Engagement

Volume 2 **July 2008**

## Highlights

- Basic statistical analysis of the AUSSE scales show that there are relatively few differences between international and domestic students on measures of engagement.
- Within the international student cohort, later year students are more likely to feel engaged in their course than students in first year.
- Those international students who are first in their families to attend university are less likely to record high levels of engagement.
- Across different fields of education, management and commerce students record lower levels of engagement on most of the AUSSE scales. This may be of particular concern because a large proportion of the international student cohort is studying in this field.
- When other individual and institutional factors are controlled for, the impact of being an international student ranges from about one point to negative 4.5 points on the 100 point AUSSE scale. Other factors have more influence on engagement than international student status.

## *International engagements: The characteristics of international students' engagement with university*

The international student market is important and lucrative for Australian universities and the Australian economy in general. In 2006, nearly 15 per cent of all income of Australian tertiary providers was derived from international student fees, a total of \$2.3 billion (Rout, 2008). This makes international education Australia's largest service export and its third largest export industry overall (Rout, 2008).

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Between 2001 and 2006, enrolments of undergraduate international students in Australian universities increased 43.3 per cent. By comparison, the growth in enrolments of domestic undergraduate students in this time was much smaller at 1.7 per cent (DEST, 2001 - 2006). In 2006, 14.2 per cent of all undergraduate onshore university students in Australia were classified as 'overseas' or international students (DEST, 2006).

# *The characteristics of international students' engagement with university*

The income from these students has helped universities to expand over this period, despite indications of a real-term reduction in federal government investment in the sector (Larkins, 2008).

However, recent evidence indicates that yearly growth in this market is slowing. Figures from Australian Education International show that international enrolments grew by 5.6 per cent between 2005 and 2006, a considerably smaller rate of growth than that experienced between 2002 and 2003, when international student numbers increased by 17.2 per cent (Australian Education International, 2007).

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*it is clearly important for universities to understand how the experiences of international students differ from domestic students*

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It is unclear as to whether this trend will continue, but regardless of forecasted numbers, it is clearly important for universities to understand how the experiences of international students differ from domestic students and recognise areas in which engagement of this group could be enhanced.

This is important so as to ensure that international students are well supported, motivated and challenged, and that they have successful outcomes. It is important in order to help maintain the important contribution of the international student market to the financial stability of institutions and the economic prosperity of Australia.

To this end, this Australasian Survey of Student Engagement (AUSSE) Research Briefing provides research-based insights on the engagement of international students. It first examines the engagement of international students, focusing on this cohort as a whole, and on specific sub-groups. Using this foundation, it explores more detailed differences between the engagement of international and domestic students.

## Comparing levels of engagement

The AUSSE uses sampling methodology to enhance the efficiency of data collection and validity of results. For the purpose of this briefing paper, only responses from undergraduate students in Australian universities have been analysed.

There were a total of 6,605 responses from 20 Australian universities participating in the 2007 AUSSE. Of these respondents, 5,793 provided information on whether they were an international or domestic student. Within this sample, 354 (6.1%) were international students and 5,439 (93.9%) were Australian domestic students. This number of responses from international students is sufficient for statistical analysis.

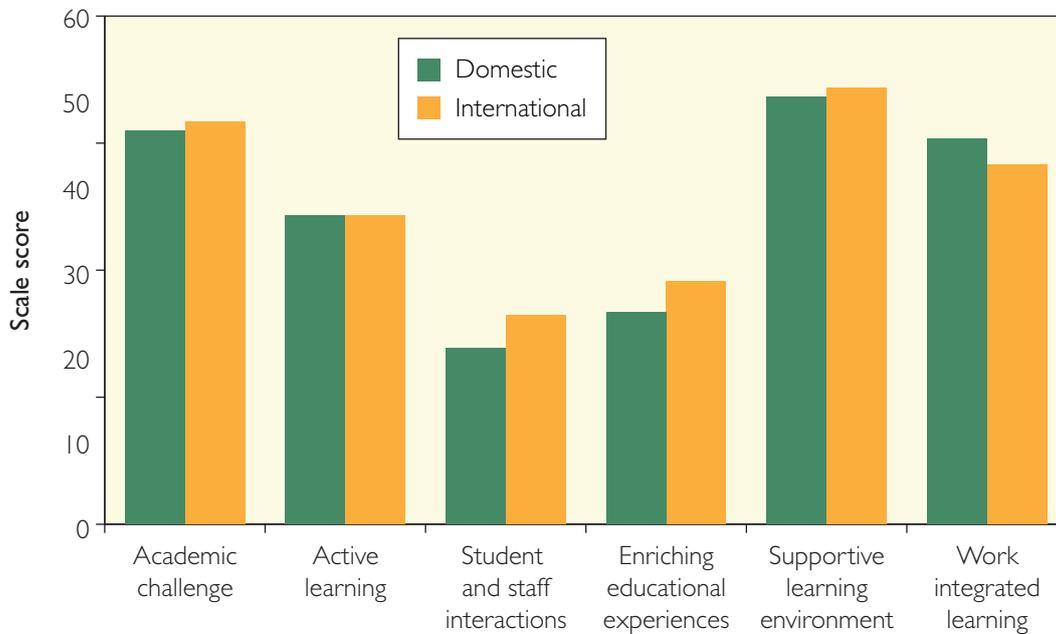
However, it must be noted that the share of international students in the AUSSE population is smaller than that across all Australian universities. According to Australian Government figures, 14.2 per cent of all undergraduate onshore students in Australian universities in 2006 were international students (DEST, 2006). Despite this under-representation within the wider population, figures comparing individual characteristics of the international student sample from the AUSSE and those in the overall international student population show that the students in the AUSSE sample are representative of the whole international student cohort.

This analysis focuses on the engagement of international students rather than on the characteristics of students themselves. Such demographic differences should not, of course, be taken for granted and it is important to be sensitive to these in reading this AUSSE Research Briefing.

The AUSSE 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 based on responses to numerous psychometrically-linked questions in the AUSSE Student Engagement Questionnaire. These scores are reported using a metric that runs from 0 to 100. In general, a difference of five points or more reflects a meaningful educational effect.

*More study guides, more help to international students.*

*– Later-year nursing student*



**Figure 1** Engagement for domestic and international students

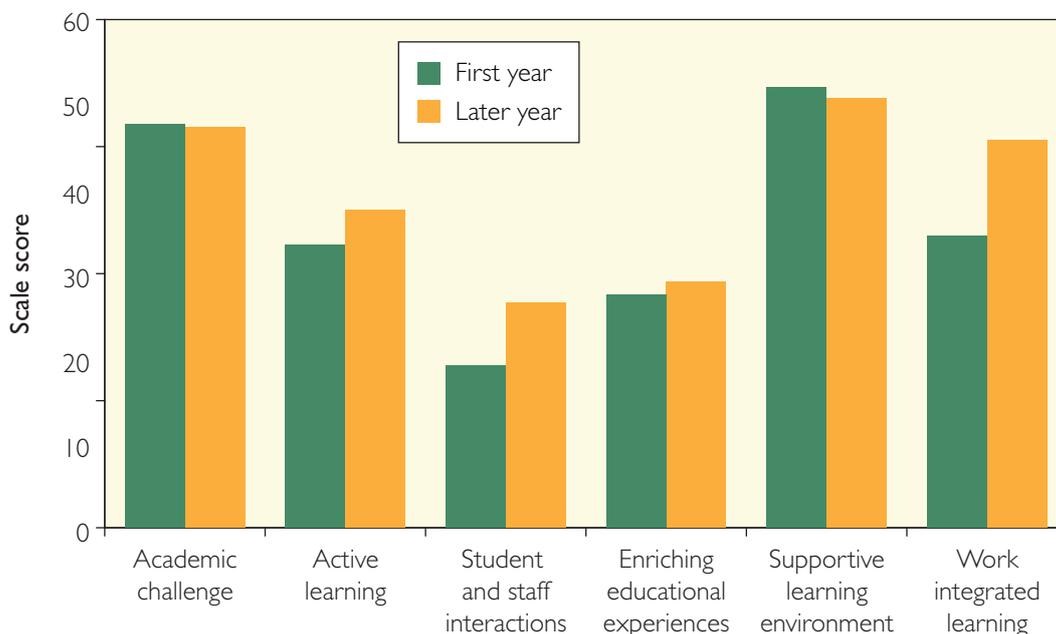
Figure 1 displays mean scores of international and domestic student cohorts on the six AUSSE scales. There is not much difference on most of the scales. The international group appears to have greater engagement on the Student and Staff Interactions and Enriching Educational Experiences scales. Domestic students recorded a higher score on the Work Integrated Learning scale.

The scale with the largest difference between these two groups is the Student and Staff Interactions scale, where the mean score for the international group was 25 and the score for domestic students was 21.

The closeness of these scores is interesting given the diversity between these two groups. To form a greater

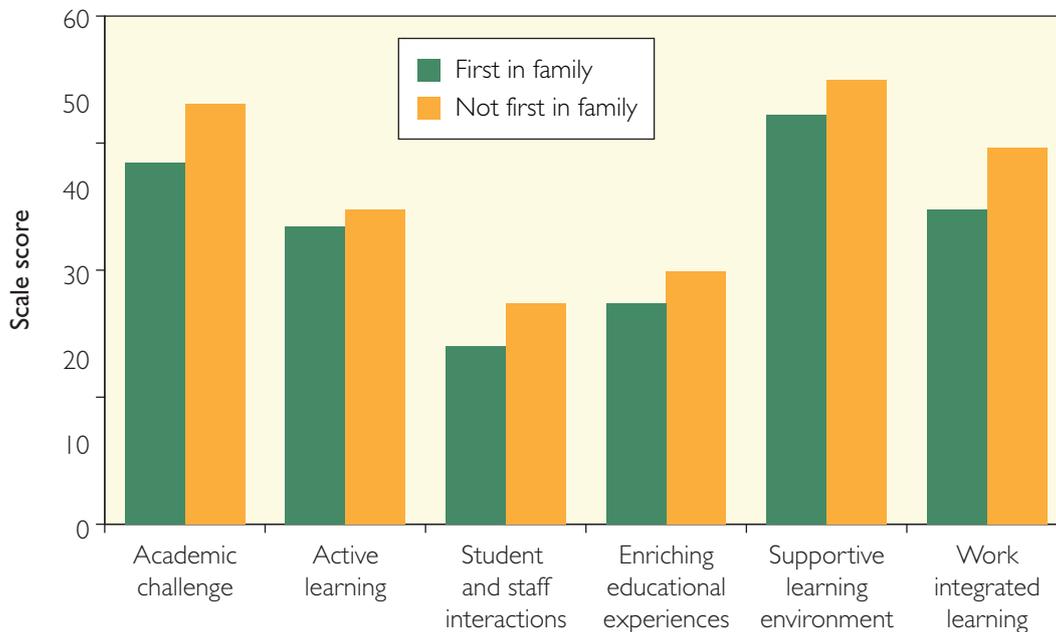
understanding of the international student group and the overall factors that drive student engagement, it is helpful to explore differences in scale scores for particular characteristics among the international student group.

Within this cohort, there are notable differences in perceptions of engagement between first year and later year students (Figure 2). Large differences, in which the later year students have higher scores, are apparent for the Work Integrated Learning, Student and Staff Interaction, and Active Learning scales. It is reassuring to see that those international students who have had more time to adjust to university are generally feeling more engaged than those who have recently begun. The fact that the later year students appear to have greater engagement



**Figure 2** International student engagement by year level

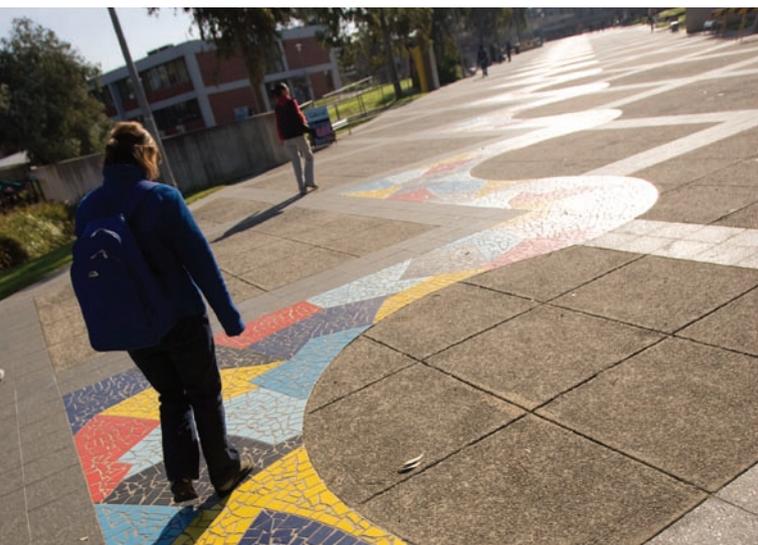
# The characteristics of international students' engagement with university



**Figure 3** International student engagement by family education background

in specific areas such as personal interactions, active learning and work related facets of their course indicates that universities in Australia appear to be improving the levels of engagement among the international student cohort over the course of their degree.

*First-in-family international students appear to have greater trouble than others engaging with their course and institution.*



*International fees could be reduced. The university should stop being so much profit orientated and put the quality of education first because the actual level of teaching does not justify the huge cost of fees.*

– Later-year Global Logistics and Transport student

Figure 3 shows that among the international student group, those who are not the first in their family to attend university appear to have higher levels of engagement than the ‘first generation’ university attendees. The results on all six of the AUSSE scales reflect this. Overall, 27 per cent of international students are the first in their family to take part in higher education. First-in-family international students appear to have greater trouble than others engaging with their course and institution. This may be due to a compounding effect of having to settle simultaneously into Australian and tertiary education cultures. This has immediate implications for marketing, transition arrangements and supports provided to this cohort.

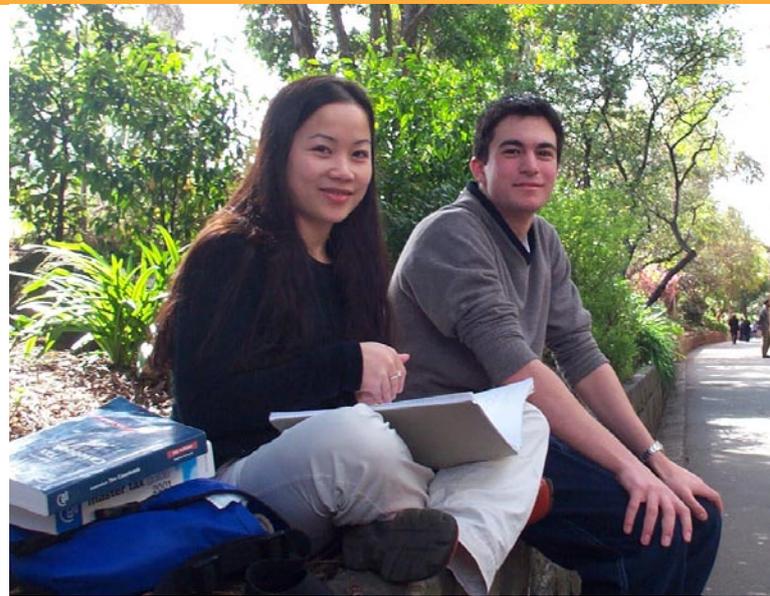
When examined across a number of fields of education, the engagement levels of international students are shown to vary substantially. Figure 4 shows the AUSSE scale scores for the five fields of education with the largest international student numbers. The data for mean scale scores on the six scales show that international

students studying courses in society and culture recorded higher levels of engagement than those in the other fields listed here on all scales but Work Integrated Learning. On this scale, health students recorded the highest scores. International students undertaking health courses also had relatively high scores on most scales in comparison with the other four fields, although the outcome for Student and Staff Interactions was very low. Management and commerce students tended to record lower levels of engagement across all of the AUSSE scales. Only on the Active Learning scale did the results for this group match well when compared with the other fields.

*Management and commerce students tended to record lower levels of engagement across all of the AUSSE scales.*

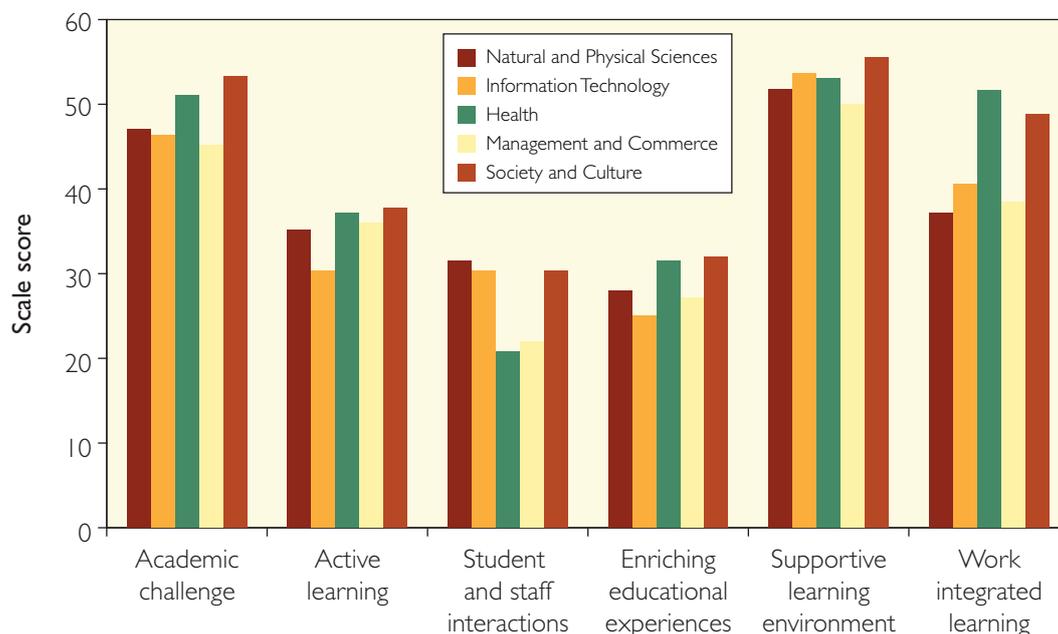
The low scores of the management and commerce group are noteworthy because of the relative size of this cohort within the international student population. Thirty-nine per cent of all international students in the AUSSE sample were enrolled in management and commerce courses. This is clearly an important area for improving engagement within the international student cohort.

The AUSSE scales are underpinned by a number of specific items. Examining differences between international and domestic scores on specific items teases out further differences between international and domestic students' engagement in university study.



*There is a great international student community within which there is much interaction.*

*– Later-year marine biology student*

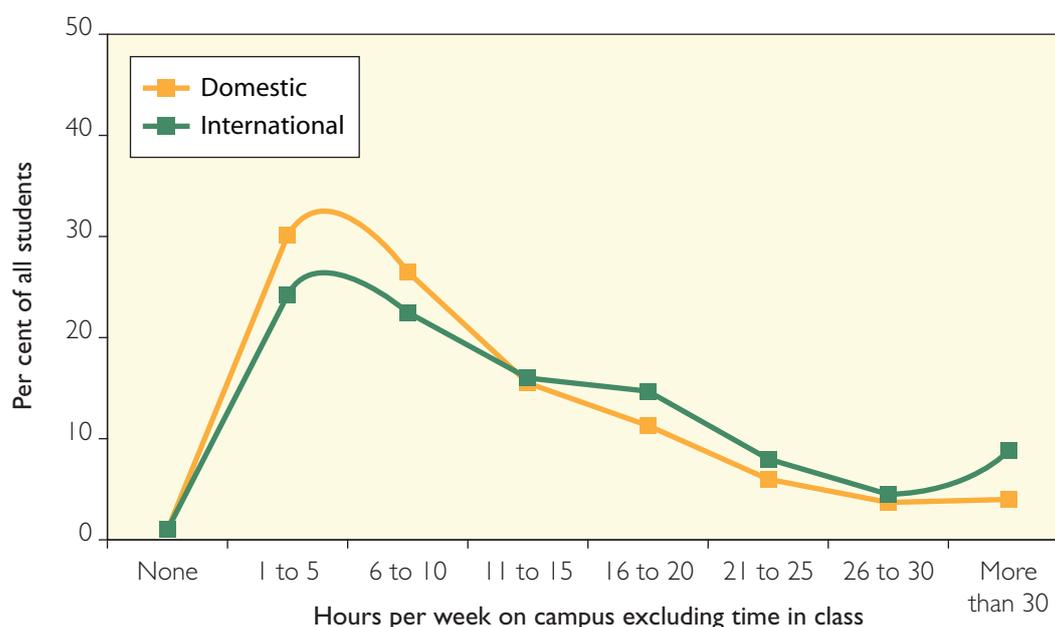


**Figure 4** International students' engagement for selected fields of education

# The characteristics of international students' engagement with university

**Table 1** Differences in international and domestic student engagement

International students more engaged	Domestic students more engaged
Learning in a community or study group	Asking questions in class
Working with students during class	Improving knowledge and skills that will contribute to employability
Using computers in academic work	Writing essays or reports between 1000 and 5000 words
Keeping up to date with study	Discussing ideas from classes with others
Discussing ideas from classes with teaching staff	Including diverse perspectives
Helping to cope with non-academic responsibilities	Learning something that changed understanding
Preparing for class	Community service
Studying a foreign language	Developing communication skills relevant to the discipline
Preparing two or more drafts	Relaxing and socialising
Completed readings	Integrating information from various sources
Using an electronic medium for assignment	Spending significant time on academic work
Spending time on campus including classes	Reading subject-related assigned texts
Working harder than the student thought they could	
Spending time on campus excluding classes	
Doing work that takes more than an hour to complete	
Using student learning support services	
Working with teaching staff on other activities	



**Figure 5** Beyond-class time on campus per week

Table 1 lists some specific educational practices and conditions which most distinguish the engagement of international and domestic students. It is important not to draw too much from item-level differences even though analysis of these specific educational factors is instructive. Similar themes appear to underpin these items. A possible interpretation of the differences in item scores is that domestic students appear more engaged in social and professional aspects of their university education while international students report greater engagement in academic preparation and enrichment.

By way of example, Figure 5 shows the distribution of time spent on campus for international and domestic students. International students tend to spend more time on campus per week outside of class than their domestic counterparts. Overall, however, the most common amount of time spent on campus is the same as for domestic students – between one and five hours per week.

### The relative influence of international student status on engagement

The above analyses show that the international student cohort as a whole compares favourably in relation to their domestic counterparts, but that there are a number of notable differences within the international student group. Given these findings, it is important to determine whether the differences apparent within the international student group on variables such as field of education and year level are unique to this group, or occur in the general population and therefore are not specific issues for international students, but factors that effect the engagement levels of all students. To do this, the six AUSSE scales have been analysed using a regression

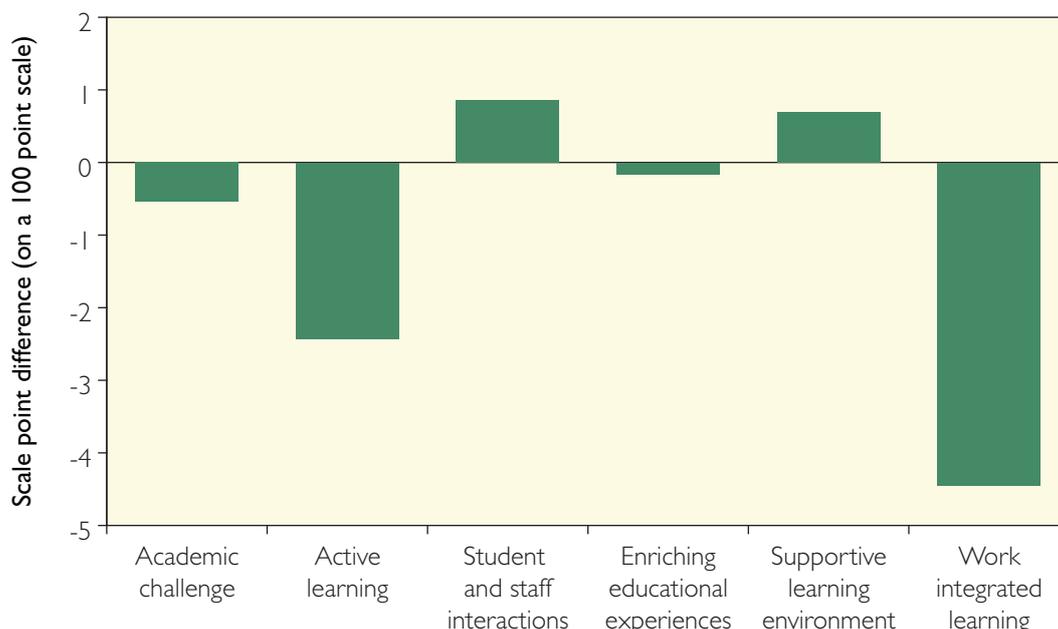
technique which measures the effects on engagement of each student characteristic independently.

The regression models used for this analysis include institution, course and individual characteristics, although the coefficients for these are not shown. The independent variables used in the models are the same for each scale and their explanatory power ranges from 4 to 21 per cent.

*The results suggest that overall being an international student has a small influence on engagement.*

Figure 6 displays the unstandardised coefficient for international student status from the regressions for each of the AUSSE scales. The results suggest that overall being an international student has a small influence on engagement. However, there is variation across the six scales. In terms of participation in work-integrated forms of learning, for instance, the model predicts that, regardless of other measured individual or course characteristics, international students are likely to rate their engagement 4.4 points lower than domestic students. International students report an average scale score which is 2.4 points lower on the Active Learning scale.

Conversely, the Student Staff Interactions and the Supportive Learning Environment scales have positive coefficients for the international student group after controlling for other factors. However, the positive impact of being an international student is predicted to be less than one point on these scales.



**Figure 6** Scale score predicted differences between international and domestic students, unstandardised coefficients of regression analyses

# The characteristics of international students' engagement with university

there are relatively few differences between international and domestic students on measures of engagement

## Key Findings

- 1 Basic analysis of the AUSSE scales show that there are relatively few differences between international and domestic students on measures of engagement. The slight differences that are apparent reveal that the mean score for international students is higher on measures of Student Staff Interactions, Enriching Educational Experiences and is lower on Work Integrated Learning, but very similar on the other three engagement scales.
- 2 Within the international student cohort, later year students are more likely to feel engaged in their course than those students in their first year. This was consistent across most of the AUSSE scales, with slightly larger differences apparent in the Student Staff Interactions and Work Integrated Learning scales.
- 3 Those international students who are first in their families to attend university are less likely to record high levels of engagement. This finding is notable and consistent across all six AUSSE scales.

*Giving more help for international students like social life, how to find job, or communication with local society...*

– Later-year marketing student

*The university provides student learning support in many ways to help students, especially international students.*

– First-year accounting student

*More interaction with international students.*

– First-year accounting student

*Financial aid for international students needs to be handled better.*

– Later-year veterinary science student

- 4 Across different fields of education, management and commerce students record lower levels of engagement on most of the AUSSE scales. This may be of particular concern because a large proportion of the international student cohort is studying in this field.
- 5 Across the AUSSE scales, when other factors are controlled for, the impact of being an international student ranges from nearly one point to negative 4.5 points on the 100 point AUSSE scale. Four of the six scales recorded negative coefficients for the international student group and for two scales, being an international student was shown to have a positive impact on engagement scores. The largest coefficients were in the negative realm and were for Work Integrated Learning and Academic Challenge. The two positive coefficients were for Student Staff Interactions and Supportive Learning Environment, however international student status improved engagement on these scales by less than one point.

## Resources

- Australian Council for Educational Research. (2008). *Australasian Student Engagement Report (ASER)*. Camberwell: ACER.
- Australian Education International. (2007). *Research Snapshot: International student numbers, Number 25*. Canberra: Australian Government.
- Department of Education Science and Training. (2001). *Higher Education Statistics Collection*. Canberra: DEST.
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Larkins, R. (2008, 23 April). A battle we must not lose. *The Australian*, p. 25.

Rout, M. (2008, 13 February). Unis rely on 'risky' income. *The Australian*, p. 35.

## Analytical foundations

'Student engagement', defined as students' involvement with activities and conditions likely to generate high-quality learning, is increasingly understood to be important for higher education quality. The concept provides a practical lens for assessing and responding to the significant dynamics, constraints and opportunities facing higher education institutions. It provides key insights into what students are actually doing to learn, a structure for framing conversations about quality, and a stimulus for guiding new thinking about best practice.

Student engagement is an idea specifically focused on learners and their interactions with university. The idea touches on aspects of teaching, the broader student experience, learners' lives beyond university, and institutional support. It is based on the premise that learning is influenced by how an individual participates in educationally purposeful activities. While students are seen to be responsible for constructing their knowledge, learning is also seen to depend on institutions and staff generating conditions that stimulate and encourage involvement. Learners are central to the idea of student engagement, which focuses squarely on enhancing individual learning and development.

Despite its importance, information on student engagement has not been readily available to Australasian higher education institutions. The Australasian Survey of Student Engagement (AUSSE), conducted with 25 institutions for the first time in 2007, provides data that Australian and New Zealand higher education institutions can use to attract, engage and retain students. The AUSSE builds on foundations laid by the North American National Survey of Student Engagement. By providing information that is generalisable and sensitive to institutional diversity, and with multiple points of reference, the AUSSE plays an important role in helping institutions monitor and enhance the quality of education.

*As an international student, my parents have paid A LOT (HEAPS more compare to Australians!!!!!!!) to study abroad in Australia.*

*– Later-year nutrition and dietetics student*



*More student interaction - town & campus students, international & local students. - through outings, meetings, socials etc.*

*– Later-year accounting student*



*First semester of the first year student (international) should be allowed to engage more time to develop academic skills.*

*– Later-year criminology student*

This briefing was prepared by Dr Daniel Edwards, with assistance from Mr Stefan Nesteroff and Dr Hamish Coates.



## Australasian Survey of Student Engagement (AUSSE)

Australian Council for Educational Research  
19 Prospect Hill Road (Private Bag 55)  
Camberwell VIC 3124 Australia

Telephone +61 3 9277 5487  
Facsimile +61 3 9277 5500  
Email [ausse@acer.edu.au](mailto:ausse@acer.edu.au)