

RESEARCH BRIEFING

Australasian Survey of Student Engagement

Volume 5 **January 2010**

Highlights

- *International students in USA universities have higher levels of engagement with their institution when compared to international students enrolled in Australasian universities.*
- *The largest difference between USA and Australian international students was related to student and staff interactions.*
- *The growth in engagement with their institution between first and later year students among the international cohort is more prominent among those enrolled in USA than those in Australia or New Zealand.*
- *Among Australasian higher education students the international student group on average have higher levels of engagement than domestic students.*
- *When compared cross-nationally, the engagement score difference between international students in Australasia and international in the USA is larger than the gap between domestic students from these countries. In a global context, there is room for improvement in the engagement of international students in Australia and New Zealand.*

International students' engagement with effective educational practices: A cross-national comparison

Introduction

Findings from the Australasian Survey of Student Engagement (AUSSE) provide a new and unique means of tracking international students' participation in higher education. The AUSSE is the largest cross-institutional collection of data from currently enrolled students in Australasia, and has formative links with the 1,200-institution USA National Survey of Student Engagement (NSSE). The AUSSE has been validated rigorously for use in Australasia, and taps into fundamental aspects of educational quality – students' engagement with effective educational practices, including important beyond-class experiences.

Evidence-based feedback such as this plays a critical role in growing and improving Australasia's international higher education industry. Cross-national perspectives are particularly important, for they mirror the global context in which the industry operates. To that end, this paper uses findings from the AUSSE and NSSE to benchmark the engagement and outcomes of international students enrolled at universities in Australia, New Zealand and the USA. Comparisons are made with domestic students to provide a context for interpreting the experiences of the international cohort.

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Engaging international learners

International fee-paying students are a large and important group within the higher education sectors of Australia, New Zealand and the USA. In 2006 these three countries enrolled nearly 30 per cent of all international tertiary education students worldwide (OECD, 2008). The USA has the largest share (20 per cent of all students), but the growth in market share of Australia (6.3 per cent of students in 2006, up from 5.6 per cent in 2000) and New Zealand (2.3 per cent of all students in 2006, up from 0.4 per cent in 2000) is remarkable.

As a proportion of all higher education participants, Australia and New Zealand have a much higher concentration of international students than the USA. Comparable figures from the OECD show that in 2006 19.7 per cent of all enrolments in Australian universities and 15.1 per cent in New Zealand universities were international students. By contrast, the figure for the USA was 3.1 per cent (OECD, 2008).

Despite difficult global economic circumstances, international trade in tertiary education continues to grow. This is reflected in the enrolment of international students in Australian higher education, which grew by five per cent in 2008 (AEI, 2009a) and reached an all-time high in 2009 (AEI, 2009b). Students from China and India made up 43 per cent of all international student higher education enrolments in 2008 (AEI, 2009a), with 56 per cent of these participating in bachelor degree study and 35 per cent in coursework masters programs.

International students provide each of these countries with billions of dollars in revenue each year through tuition fees and living costs. Australia provides a good example of the lucrative nature of the international student market. In 2006, nearly 15 per cent of all income of Australian tertiary providers was derived from international student fees and overall, international education was Australia's largest service export industry and its third largest export industry overall (Rout, 2008; AEI, 2009c).

The intellectual benefit of the international student cohort is clearly illustrated in the case of the USA, where the pedigree and excellence of international students is fostered and the outcomes for the nation are substantial. In the fields of science and engineering

in particular, international students are prevalent and many stay in the country after graduation, working in research and development and contributing to the country's innovation capabilities (Johnson & Regets, 1998; Kannankutty & Burrelli, 2007).

International students are learning through their cross-national educational experiences, but clearly they also influence the academic, professional and social contexts in which they move. Recent events in Australia have highlighted that careful management of the international student experience is imperative, both for individual success and for the health of the system as a whole. In July 2009, for instance, the Australian Prime Minister announced an 'International Student Strategy' that will facilitate the enculturation of international students and develop greater understanding of this group among the wider Australian community. According to the Prime Minister, "helping international students engage with the community in which they live benefits students and their communities" (Rudd, 2009).

A focus on student engagement

While legislative frameworks can be designed to set standards for the provision of education and training to international students, it is difficult to improve large-scale social systems without careful monitoring and analysis. Yet with the exception of a small number of studies (see, for example: Edwards, 2008a and Banks & Olsen, 2008) very few reports have examined international students' engagement with the academic or social facets of their university study. As the above discussion suggests, there are vital educational, social, individual and economic to have such tracking mechanisms in place.

The AUSSE (ACER, 2009) was conducted with 25 Australasian universities in 2007, 29 in 2008 and 35 in 2009. It offers institutions in Australia and New Zealand information on students' involvement with the activities and conditions that empirical research has linked with high-quality learning and development. The concept provides a practical lens for assessing and responding to the significant dynamics, constraints and opportunities facing higher education institutions. 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.

Student engagement is an idea specifically focused on learners and their interactions with university. Once considered behaviourally in terms of ‘time on task’, contemporary perspectives now touch 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.

This perspective draws together decades of research into higher education student learning and development (Pace, 1979; Pascarella and Terenzini, 2005; Ewell and Jones, 1996; Astin, 1985; Coates, 2006; Kuh, 2008). In addition to confirming the importance of ensuring appropriate levels of active learning and academic challenge, this research has emphasised the importance of examining students’ integration into institutional life and involvement in educationally relevant, ‘beyond-classroom’ experiences.

The AUSSE measures student engagement through administration of the Student Engagement Questionnaire (SEQ) to a representative sample of first- and later-year bachelor degree students at each institution. The SEQ measures six facets of student engagement: Academic Challenge (AC), Active Learning (AL), Student and Staff Interactions (SSI), Enriching Educational Experiences (EEE), Supportive Learning Environment (SLE), and Work Integrated Learning (WIL). The SEQ is the most thoroughly validated survey instrument in use in Australian higher education, and has been revised for use in Australasian higher education.

The AUSSE has close methodological links with the USA’s NSSE. To facilitate cross-national benchmarking, work has been done to align the instrument, population, sampling, analysis and reporting characteristics of AUSSE and NSSE. There are close ties between the SEQ items and those used in the College Student Report, NSSE’s main instrument. This enables comparison to be made across these collections, with the exception of the WIL scale which is unique to AUSSE.

This briefing uses data from the 2008 AUSSE and 2008 NSSE. Specifically, the results given in this briefing are based on responses from 1,750 (578 first year, 992 later year) international students at Australian universities, 426 (148 first year, 278 later year) international students at New Zealand universities, and 16,226 (8,250 first year, 7,976 later year) international students at USA universities.



The university should have more social events to promote interaction between domestic and international students. In addition, professors or tutors should attempt to have greater contact hours if possible to assist students in their studies if they are struggling.

– Later-year male science student

The data presented below are based on weighted response data from the 2008 AUSSE, meaning that the 2,176 international student responses reflect 15,662 individuals in the AUSSE population. Given that the sample of institutions reflects the overall population, it is reasonable to assume that the responses reflect the national populations. The AUSSE website (www.acer.edu.au/ausse) provides further details on the weighting of the AUSSE and other information about the instrument. Each year, broad results are published in the Australasian Student Engagement Reports (Coates, 2008, 2009).

Cross-national comparisons of international student engagement

Combining data from the NSSE and AUSSE provides a unique opportunity to identify differences in the engagement levels of international students in different higher education systems. Until now, there have been no substantial research-based analyses comparing the international student cohorts across the higher education systems of numerous countries. With a focus on international students, the results below help to highlight the differences in experiences and the variability of higher education sectors across Australia, New Zealand and the USA.

Figure 1 compares the engagement scores of first year international students according to five of the AUSSE/

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NSSE engagement scales. Among these students, those from the USA tended to be slightly younger, with 66 per cent age 19 or below, compared with 41 per cent in New Zealand and 29 per cent in Australia. The first year international student respondents in Australia were also more likely to be male (51 per cent) than those from New Zealand (41 per cent) and the USA (42 per cent).

The responses displayed in Figure 1 show that on all scales, the engagement levels of first year international students studying in the USA are higher than the scores for first year international students in Australian and New Zealand institutions. The largest differences are apparent for the Student and Staff Interactions measure. Other notable differences are seen for New Zealand students on the Active Learning scale and for both Australasian countries on the Supportive Learning Environment scale. The scale score differences between the Australian and New Zealand based international students are relatively small. In comparison to the New Zealand cohort, international students in Australian institutions had slightly higher engagement levels for the Active Learning, and Student and Staff Interactions measures, while differences on other scales were marginal.

Among the individual items in the engagement questionnaires, first year international students studying in Australian and New Zealand institutions had notably different responses to the USA-based

international students in relation to feedback, support and involvement in class activities. For example, 23.8 per cent of first year international students in USA institutions said that they asked questions in class 'very often', yet the comparable figure for Australian-based students was 8.3 per cent and New Zealand was 6.2 per cent. Within Australia and New Zealand, few international students indicated that they received feedback on their academic performance 'very often' (6.8 per cent and 2.8 per cent respectively). However, USA international students seemed to fare better with 20.7 per cent indicating regular feedback in this regard.

These large differences were not necessarily apparent on all individual items. For example, first year international students from all three countries had similar responses to two questions relating to the amount of work they did with other students. In Australia, New Zealand and the USA the proportion of international students who indicated they had 'very often' worked with students during class were relatively well matched (13.1 per cent, 10.1 per cent and 13.2 per cent respectively). Comparable proportions of international students in these countries also indicated that they 'never' worked with other students outside class (12.8 per cent, 13.4 per cent and 12.4 per cent). The first year international students also had similar amounts of contact with students from ethnic backgrounds different to their own with 21.8 per cent of Australian, 29.3 per cent of

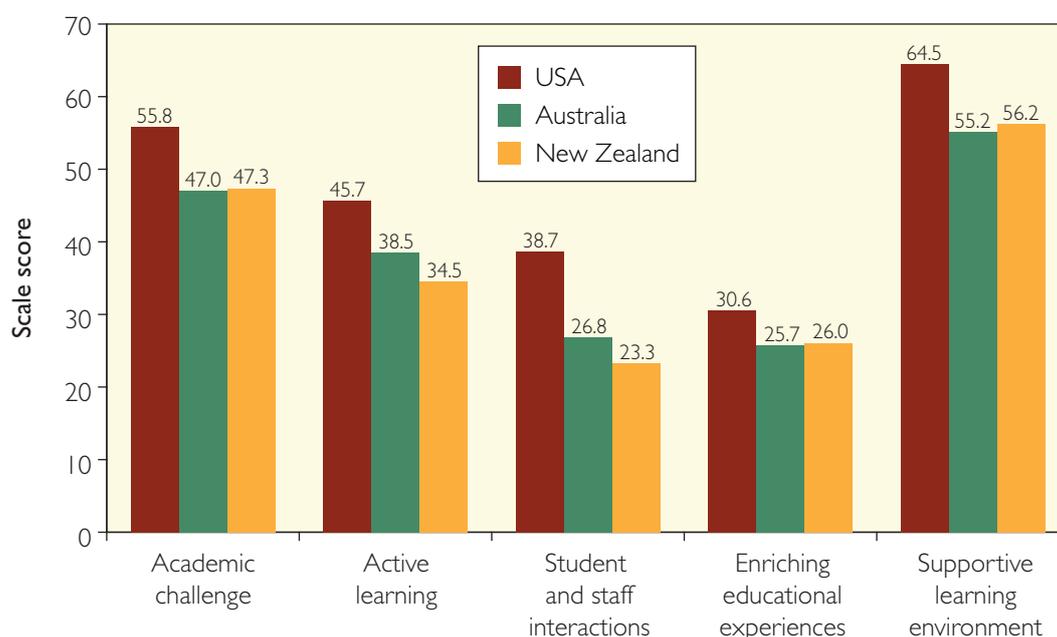


Figure 1 Engagement scale scores for first-year international students by country

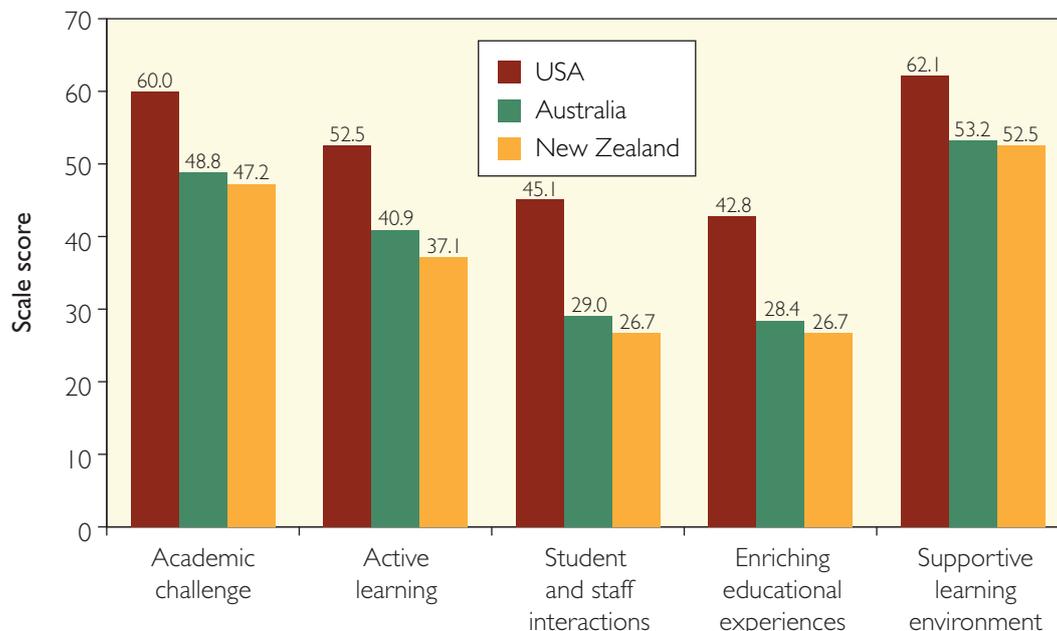


Figure 2 Engagement scale scores for later-year international students by country

New Zealand and 28.2 per cent of USA international students indicating that they were in contact with people from different backgrounds ‘very often’.

When the later year international student engagement scale scores are examined (Figure 2), international students in the USA again have notably higher outcomes than those students in the two Australasian countries examined here. Again, the largest difference is seen on the Student and Staff Interactions scale, with the Enriching Educational Experiences measure recording the second largest differences between USA and Australasian final-year international students. Within Australasia, the Australian international later year students have slightly higher engagement scores than those from New Zealand on all five scales. The largest difference in this regard is with the Active Learning scale.

Again, some individual items help to provide context to the outcomes in Figure 2. Later year international students in the USA recorded more positive relationships with teaching staff, with 29.9 per cent ranking their relationship as seven on a scale of seven. This compares with only 11.8 per cent of those in Australian institutions and 13.4 per cent of international students in New Zealand. The response comparisons also showed that Australasian-based international later year students were more likely to have ‘never’ tutored other students (59 per cent for Australia and 51.9 per cent for New Zealand) when compare with those in the USA where only 32.5 per cent indicated that they had not had any experience tutoring.

Later year international students from institutions in these three countries had similar responses to some items, including their prevalence of working with other

students outside of class (5.8 per cent, 8.1 per cent and 6.3 per cent of Australian, New Zealand and USA students said they ‘never’ did this).

Within country comparisons: Early and later year students

Figure 3 presents AUSSE and NSSE scale scores by country and year level. Overall, the engagement levels of later year international students from the USA are higher than those of first year students from the USA on all scales except the Supportive Learning Environment scale. For the USA international students, the Enriching Educational Experiences scale scores are notably higher for the later year respondents. The differences in engagement scores between year levels for international students in Australia and New Zealand are not as substantial as those recorded for the USA. However, interestingly the pattern is the same, with the Supportive Learning Environment measure being the only scale where the first year cohort has notably higher scores than the later year group for all three countries.

The example of some individual items in relation to the change between first and later year students also provide some interesting contrasts between the Australasian and USA international students. While the differences in relation to the extent to which students received feedback on their academic performance were large (as noted above in relation to first year responses), there was a greater level of improvement between first and later years for the Australasian international students. For international students in Australia, the proportion indicating that they received feedback ‘very often’ increased from 6.8 per cent among first year students to

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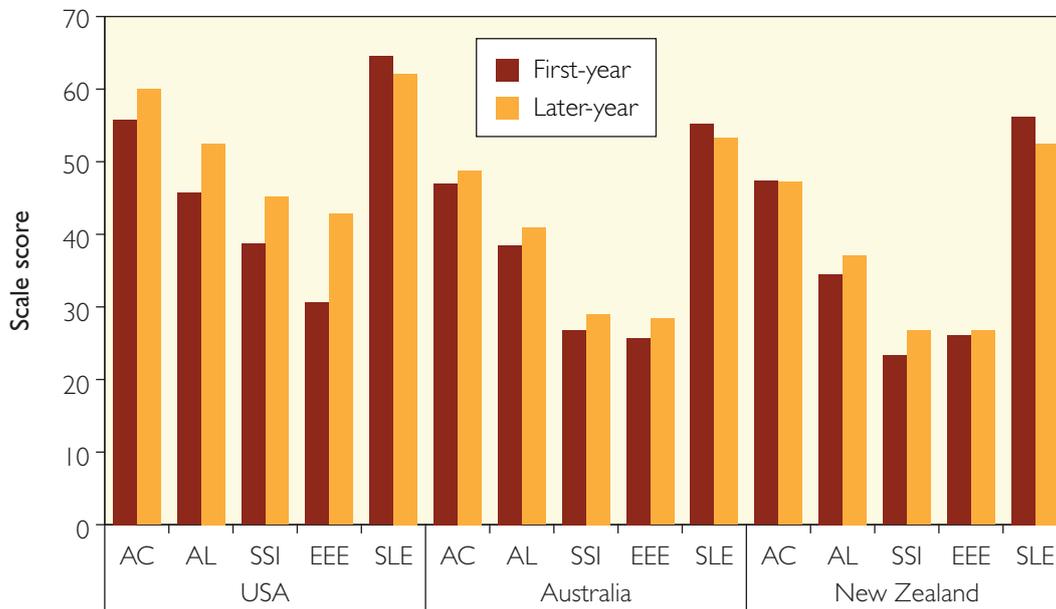


Figure 3 Engagement scale scores for all international students by country and year level

9.9 per cent of the later year group. The New Zealand cohort went from 2.8 per cent to 9.3 per cent. However, the USA rate was 20.7 per cent for first year and 22.8 per cent for later year students.

Change between first year and later year responses were also interesting in relation to the extent to which international students asked questions in class. For the USA and Australia, the proportion of students who asked questions 'very often' grew (from 8.3 per cent to 10.4 per cent in Australia and from 23.8 per cent to 33.8 per cent in the USA). However, there was a decline in this facet of engagement for international students in New Zealand institutions, with 6.2 per cent of first year students indicating that they 'very often' asked questions to only 3.4 per cent of later year students.

Differences between international students and domestic students

Analysis of the AUSSE data from 2007 has shown that on average, international student respondents in Australasia have higher scores on the engagement scales than their domestic classmates (Edwards, 2008a; 2008b). These findings are again replicated in the 2008 survey responses. Figure 4 shows that within Australian and New Zealand institutions the international student

average score was higher than for domestic students for both the first and later year cohorts on all five engagement scales focussed on in this paper. In general, the differences noted here are smaller than five points on a 100 point scale and are therefore not statistically significant. The largest difference for both cohorts is in the SSI scale, with a 7.4 point difference for the first year group and a 4.8 point difference among the later year students. While these differences are not substantial, they do help to illustrate that within the Australian and New Zealand higher education sectors, the overall differences between the engagement of international and domestic students are not substantial.

Another form of comparing engagement scores between international and domestic students – this time a cross-national comparison – is to examine the differences in scores between countries for both these types of students. The analyses reported in the following tables examine the point difference between the engagement scores of international students from Australia (Table 1) or New Zealand (Table 2) and those in the USA, while at the same time examining the relative difference between these countries for domestic students. Comparisons of these differences for domestic and international students help to examine the components of the overall gap between the engagement scores of Australasian and USA students. In other words, this analysis seeks to find out whether the engagement score variation

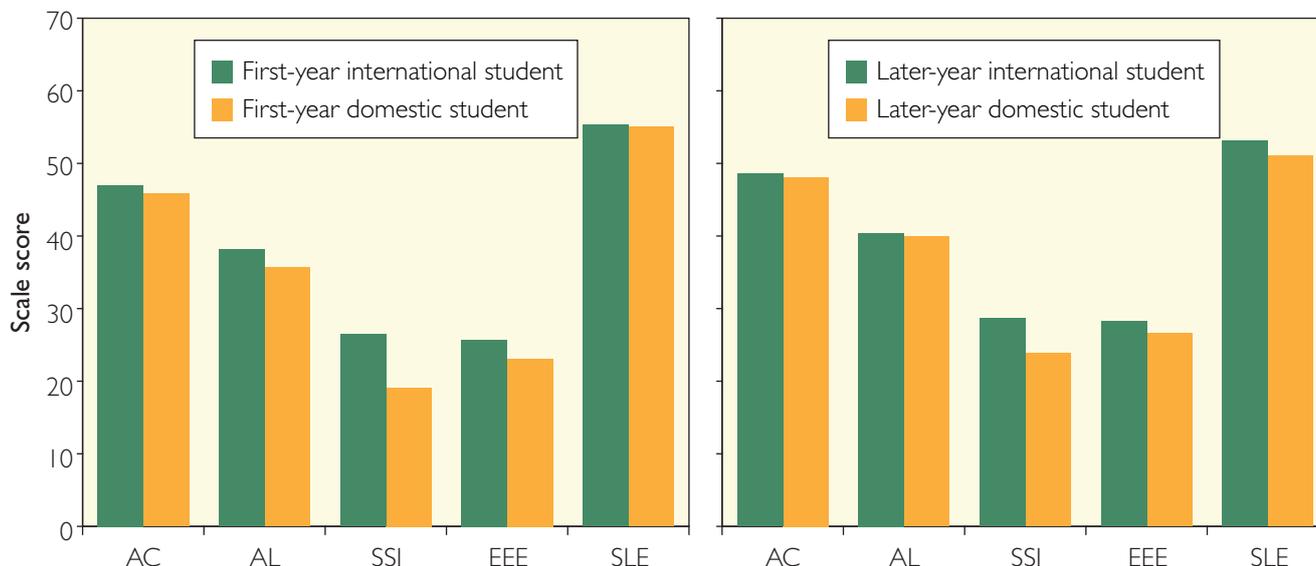


Figure 4 Engagement scale scores for international and domestic students in Australia and New Zealand by year level

between Australasian students and USA students is the same for domestic and international students, or if there are differences in these two student types in a cross national comparison.

Overall, research has shown that the higher student engagement scores among USA students are apparent in the data for the whole student cohort (Coates, 2008, 2009) as well as within the international student group. This overall pattern of cross-national difference is replicated in both the international student and domestic student analyses. But there is variation in the size of this difference for the international and for the domestic student groups.

Table 1 shows that the difference on the Academic Challenge scale between USA and Australian international first-year students is 8.8 points in favour of the USA cohort and at the senior year level, this difference is 11.2 points. When the engagement scores of domestic students are compared, the difference between students from the USA and Australia is smaller, at 6.9 points for first year and 8.4 points at the senior year level. As the final two rows in Table 1 reveal, the gap in the engagement scores between

the USA and Australian students is larger for the international student scores than for the engagement scores of domestic students. This pattern exists for all scales except the Student and Staff Interaction scale.

The trend observed in Table 1 is also present in Table 2, where the engagement scores of New Zealand students and USA students are compared across the five scales common to the AUSSE and NSSE. The largest difference in this regard can be seen among the later year cohort on the Academic Challenge scale where the difference between USA and New Zealand international students was 12.8 points, but the gap between USA and New Zealand domestic students was smaller at 8.7 points.

These cross national/cross student type comparisons help to show that the disparity in student engagement between the USA and Australasia is larger within the international student groups than it is among the domestic students of these countries. This finding is important in terms of Australia's international reputation and future growth. Even though Australasian international students on average have higher levels of engagement on the AUSSE scales than

Table 1 Engagement score point difference between USA and Australian international and domestic students, 2008

		AC	AL	SSI	EEE	SLE
International students	First year	8.8	7.1	11.9	4.9	9.3
	Later year	11.2	11.6	16.1	14.4	8.9
Domestic students	First year	6.9	6.2	15.2	4.7	6.1
	Later year	8.4	9.9	18.1	13.7	7.0
Difference: international & domestic students	First year	6.9	6.2	15.2	4.7	6.1
	Later year	8.4	9.9	18.1	13.7	7.0

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Table 2 Engagement score point difference between USA and New Zealand international and domestic students, 2008

		AC	AL	SSI	EEE	SLE
International students	First year	8.5	11.2	15.5	4.6	8.3
	Later year	12.8	15.4	18.4	16.1	9.7
Domestic students	First year	7.7	9.9	16.8	3.3	6.0
	Later year	8.7	15.1	19.8	14.6	6.5
Difference: international & domestic students	First year	0.8	1.3	-1.3	1.3	2.4
	Later year	4.2	0.3	-1.3	1.5	3.2

domestic students in these two countries, this group is further behind on engagement when compared with international students in the USA than is the case for the domestic group.

While there are substantial contextual differences between the Australian and New Zealand higher education systems and those in USA, the overall differences in scores on identical items and scales of engagement suggests that there may be some important lessons that can be learnt by Australia and New Zealand in relation to engaging students. It is clear that although within a national context the international student group is relatively well engaged, in a global context – which is essentially the context in which the international student market operates – there appears to be some room for improvement within higher education institutions for lifting the engagement of international students to the levels witnessed elsewhere in the world.

Key findings

- 1 International students in USA universities have higher levels of engagement with their institution when compared to international students enrolled in Australasian universities.
- 2 The largest difference between USA and Australian international students was related to student and staff interactions.
- 3 The growth in engagement with their institution between first and later year students among the international cohort is more prominent among those enrolled in USA than those in Australia or New Zealand.
- 4 Among Australasian higher education students the international student group on average have higher levels of engagement than domestic students.
- 5 When compared cross-nationally, the engagement score difference between international students in



Offer internships with other companies for international students with some work experience related to their course. International students don't have much of a chance to get a job that relates to their course, especially professionals. It can be an unpaid job. the important thing is allowing students to gain knowledge through real experience.

– Later-year female accounting student

Australasia and international students in the USA is larger than the gap between domestic students from these countries. In a global context, there is room for improvement in the engagement of international students in Australia and New Zealand.

Resources

- Astin, A.W. (1985). *Achieving Educational Excellence: A critical analysis of priorities and practices in higher education*. San Francisco: Jossey Bass.
- Australian Council for Educational Research (ACER). *Australasian Survey of Student Engagement (AUSSE)*. Accessed 1 March 2009 from: www.acer.edu.au/ausse.
- Australian Education International (AEI) (2009a). International student enrolments in higher education in 2008. *Research Snapshot April 2009*. Canberra: AEI.
- Australian Education International (AEI) (2009b). 'Study in Australia 2010', July update. Canberra: AEI.
- Australian Education International (AEI) (2009c). Export income to Australia from education services in 2008. *Research Snapshot June 2009*. Canberra: AEI.
- Banks, M. & Olsen, A. (2008). *Outcomes and Impacts of International Education: From international student to Australian graduate, the journey of a lifetime*. Canberra: IDP Education.
- Bradley, D., Noonan, P., Nugent, H. & Scales, B. (2008). *Review of Higher Education in Australia, Final Report*. Canberra: Australian Government.
- Coates, H. (2006). *Student Engagement in Campus-based and Online Education: University connections*. London: Routledge.
- Coates, H. (2008). *Attracting, Engaging and Retaining: New conversations about learning. Australasian Student Engagement Report*. Camberwell: Australian Council for Educational Research.
- Coates, H. (2009). *Engaging Students for Success. Australasian Student Engagement Report*. Camberwell: Australian Council for Educational Research.
- Edwards, D. (2008a). International Engagements: The characteristics of international students' engagement with university. *AUSSE Research Briefing, 2*. Melbourne: Australian Council for Educational Research.
- Edwards, D. (2008b), 'Using National Data Sets to Monitor Course Experience and Engagement: An Example of International Students', *Proceedings of the Australian Universities Quality Forum 2008*, Canberra, 9-11 July, pp 18-23.
- Ewell, P.T. & Jones, D.P. (1996). *Indicators of 'Good Practice' in Undergraduate Education: A handbook for development and implementation*. Colorado: National Centre for Higher Education Management Systems.
- Johnson, J.M. & Regets, M.C. (1998). *International Mobility of Scientists and Engineers to the United States – Brain Drain or Brain Circulation?* Arlington: Division of Science Resources Studies, National Science Foundation.
- Kannankutty, N. & Burrelli, J. (2007). *Why Did They Come to the United States? A Profile of Immigrant Scientists and Engineers*. Arlington: Division of Science Resources Studies, National Science Foundation.
- Kuh, G.D. (2008). *High-Impact Educational Practices: What they are, who has access to them, and why they matter*. Washington: Association of American Colleges and Universities.
- Organisation for Economic Cooperation and Development (OECD). (2008). *Education at a Glance, 2008: OECD Indicators*. Paris: OECD.
- Pace, C.R. (1979). *Measuring Outcomes of College: Fifty years of findings and recommendations for the future*. San Francisco: Jossey Bass.
- Pascarella, E.T. & Terenzini, P.T. (2005). *How College Affects Students: A Third Decade of Research*. San Francisco: Jossey Bass.
- Rout, M. (2008). Unis rely on 'risky' income. *The Australian, 13 February, 35*.
- Rudd, K. (2009). Enhanced Experience for International Students. *Media Release, Prime Minister of Australia*. Accessed 1 July 2009 from: <http://www.pm.gov.au/node/5069>.

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