

RESEARCH BRIEFING

Australasian Survey of Student Engagement

Volume 4 **June 2009**

Highlights

- Students living in residential colleges are more likely than those in the general population to be younger, in their first year of study, from a provincial area, studying full time or an international student.
- Students living in residence are equally, and in many instances, more engaged than others, particularly in terms of participation in active learning and enriching experiences, their interactions with staff, and their perceptions of support.
- Differences between residential and non-residential students' engagement grew between first- and later-year cohorts, suggesting that the effects of college accumulate over time.
- Residential students report greater levels of individually focused support – the kind that retains students in university study.
- Residential students' learning, development and satisfaction is greater than for those who lived off campus.

Engaging College Communities: The impact of residential colleges in Australian higher education

Living communities

This briefing affirms that residential colleges make a significant contribution to higher education in Australia. Colleges have been part of university life in this country for over 150 years, with the first college being founded in 1856, just six years after the foundation of University of Sydney. Collegiate education is growing today. Colleges are strengthening their links with academic and professional communities. The Association of Heads of Australian University Colleges and Halls Inc (AHAUCHI) provides national leadership. Markwell (2007) has explored the contributions made by colleges to excellence and equity in Australian higher education. Recent educational redesigns hint that the renaissance of residential life underway in the USA and UK is taking shape in Australia.

While relatively quiet achievers, residential colleges form part of a vibrant, diverse and growing community. Today many tens of thousands of students live in residence, and there are around 100 colleges or halls of residence at Australia's public universities. Colleges vary from those that offer a full suite of academic and enriching experiences, to those which focus on providing accommodation. For students, residential life is often seen as a formative part of the overall university experience.

Engaging College Communities

Residential colleges play a vital role in many of the best universities in the world (Daniel, 2008). Intuitively, it seems clear that living in a university-affiliated residence would enhance students' educational involvement and outcomes. Reports from those closely involved in residential colleges provide a considerable amount of support for this proposition. Anecdotal reports help build a rich picture of residential life in Australian higher education, but overly relying on such data limits the extent to which colleges can be situated, compared and understood within broader contexts. Hence it is helpful to complement perceptual reports with data that offer more objective insights into colleges and universities. Quantitative data are particularly helpful because with careful management they can inform analysis of the quality and impact of defined aspects of residential education.

To that end, this briefing uses insights from the 2008 Australasian Survey of Student Engagement (AUSSE) to explore the educational and demographic characteristics of first- and later-year students who are living in residence at an Australian university. Importantly, it looks beyond the social myths that often surround discussion of residential colleges - in particular that they are elitist or ancillary to the educational function of the system - and focuses on key educational fundamentals. The briefing synthesises research findings, and uses these as a background to report AUSSE results.



[The best aspects of university include...] meeting people from all areas of Australia and living in a college

— First-year male agriculture student

What key research says

As intuitive reports suggest, research findings have consistently affirmed that living in residence is positively related to learning and development outcomes. Residential colleges have been shown to enhance many of the educationally productive characteristics of undergraduate education as well as making direct contributions of its own (Blimling, 1989, 1993; Pascarella, Terenzini & Blimling, 1994; LaNasa, Olson & Alleman, 2007). In their review of longitudinal studies of university impact, for instance, Pascarella and Terenzini (1991: 611) note that 'living on campus is perhaps the single most consistent within-college determinant of impact'. Such findings are important, for they affirm the core rather than supplementary role played by residential colleges in university education.

In the last decade, a substantial body of empirical research has affirmed that it is the 'whole experience' that counts for student learning and development, not just what happens in formal instructional contexts (see, for instance: Griffin, Coates, James & McInnis, 2001; Pascarella & Terenzini, 1991, 2005; Scott, 2006; Pike, 2002). Residential programs can play a very important role in this regard, offering a range of enriching experiences that enhance the formal curriculum, and engaging students in the social life of the college. Importantly, such programs have the capacity to link formal learning with community settings – supporting contexts that boost the relevance of study.

Research has also affirmed the importance of student support, particularly support which is focused on and responsive to individual student needs. This implies more integrated management of the university's academic and support activities – change which is playing out in many curriculum redesign projects. Colleges are 'human-sized communities' (Kuh, Schuh & Whitt, 1991) that have always had it as part of their mission to provide such support. They have sought to help students develop their identity within a year-level or disciplinary cohort, develop relationships with staff who know their name, and access forms of pastoral support that may not be offered by much larger institutions.

Research and experience in the past decade has highlighted that the support provided by residential colleges in the first year of university study is likely to be particularly

I live at university hall of residence – they have tutors available to give advice on all work

– Later-year female nursing student

significant. Many entering students, particularly those from disadvantaged backgrounds, encounter higher education as a complex and foreign activity. Through integrated academic and support activities, colleges can play an important role in retaining students through the first few weeks of university, enculturating them into academic life and setting in place productive approaches to study. By exposing students to new communities and opportunities colleges can, importantly, help shape the goals that encourage students to persist in and excel at their undergraduate education.

While broader environmental supports are important, the intrinsic contribution made by the residential function of colleges should not be overlooked. Through residential programs, colleges have traditionally provided a means of including key subgroups in higher education – international students, interstate students, and students with rural and regional backgrounds. While national statistics have been limited to date, cursory analysis alone is sufficient to debunk the myth that colleges serve only the urban elite.

In addition to the more general forms of support and enrichment, many colleges offer supplementary academic programs that can have a direct impact on learning and development outcomes. Small-group tutorials may reinforce or raise academic expectations, prompt active and integrative forms of learning, build collaborative relationships that extend beyond formal instructional settings, or facilitate mentoring relationships between early- and later-year students. By relating to the student as an individual, immersing them in an intellectual climate, providing for greater informal contact with academic staff, linking learning with people's lives, and exposing them to enriching academic contexts, colleges can play a very important role in shaping student expectations and their sense of what they would like to achieve.

As this brief review suggests, residential programs support and enhance aspects of learning and development that are central to university education. Normative links have been outlined, but it is important to back these up with empirical evidence of such contribution in contemporary Australian higher education. Surprisingly, given the palpable value of residential programs, very little contemporary evidence exists on its effectiveness or extent of contribution. As noted, this briefing addresses this gap by using data from the 2008 AUSSE to examine the educational impact of living in a university college or hall of residence.



[The best aspects of university include...] student services, independent learning, ability to live in residence, ability to work in groups

– First-year female behavioural science student

A perspective on student engagement

The AUSSE was conducted with 25 Australasian universities in 2007 and 29 in 2008. 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.

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 now embrace 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 students living in residential colleges. 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.

Engaging College Communities

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 has formative links to the USA National Survey of Student Engagement (NSSE), enabling benchmarking between these collections.

This briefing utilises data from the most recent AUSSE. It focuses on students enrolled in Australian universities, of which there were 18,912 responses in 2008. Of these responses, 17,443 answered the AUSSE question: 'Do you live on campus in a university college or hall of residence?' 1,545 students, or around nine per cent of these respondents, indicated that they lived on campus in a university college or hall of residence.

The data presented below are based on weighted response data from the 2008 AUSSE, meaning that the 1,545 responses reflect 10,942 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 population. The AUSSE website (www.acer.edu.au/ausse) provides further details on the weighting of the AUSSE and other information about the instrument. The 2007 and 2008 Australasian Student Engagement Report (Coates, 2008, 2009) provide broad results.

Characteristics of residential students

Hitherto, little information has been available on the characteristics of students who are living in residence. Students living in residential colleges in Australia have different characteristics to other students attending Australian universities. Figure 1 presents comparative figures on a number of key characteristics taken from the AUSSE respondents for students who live in residential colleges at university and those who live elsewhere. As the results show, students from residential colleges are slightly more likely to be male (42.4 per cent are male compared with 40.5 per cent of other students), are less likely to speak a language other than English (13.6 per cent compared with 15.2 per cent) and have a similar (and very small) share of students who are of Aboriginal and Torres Strait Islander (ATSI) descent.

The most striking differences between residential students and other students shown in Figure 1 are for part-time study, international student status and year level variables. Students living on campus are much less likely to be studying part time (4.2 per cent of all residential students) than those who do not live on campus (14.1 per cent). International students are also more prevalent among the on-campus residential student population, comprising 15.6 per cent of all student respondents compared with 9.9 per cent among the rest of the student respondents. Further details

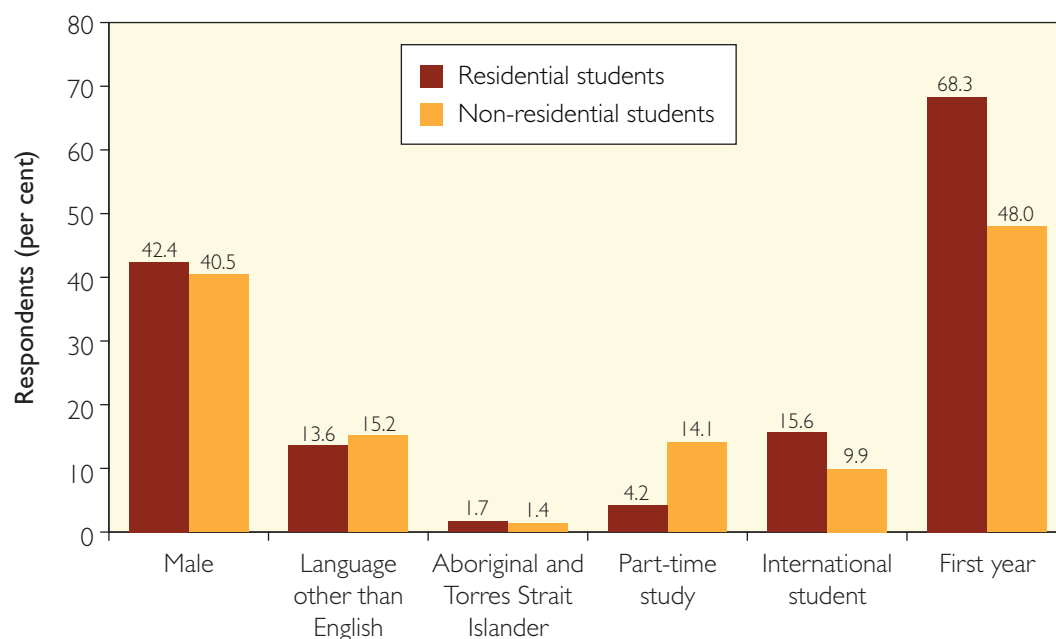


Figure 1 Selected student characteristics

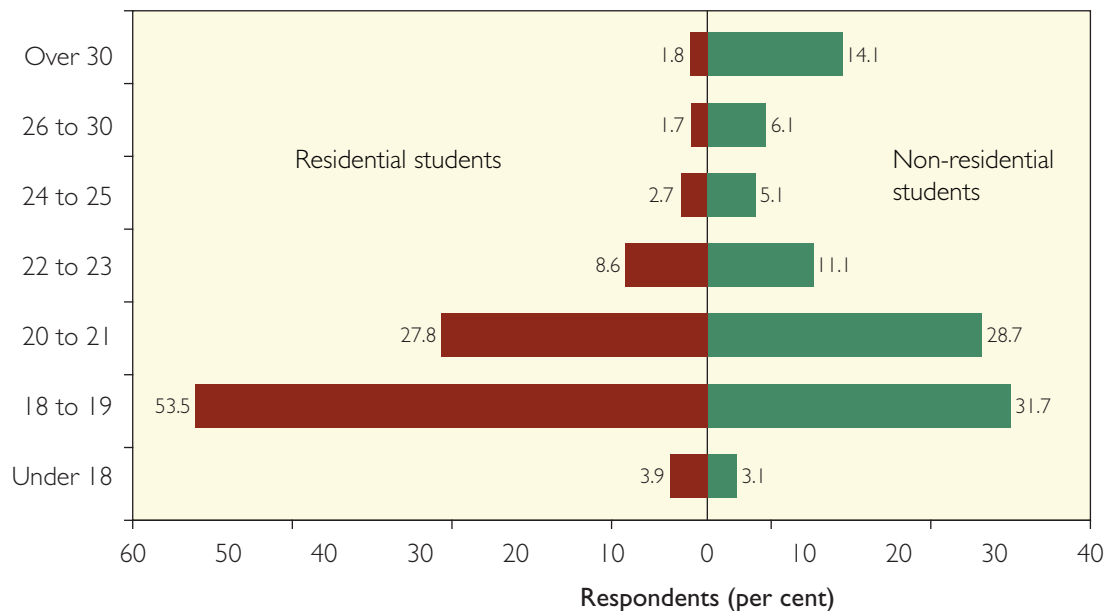


Figure 2 Student age distribution

relating to the international student group are explored in a later section of this briefing paper.

In addition, Figure 1 shows that a larger proportion of the on-campus residential student respondents were in their first year of university (68.3 per cent) when compared to the rest of the cohort examined in this analysis (48.0 per cent).

As would be expected given the higher proportion of first-year students in the on-campus residential group, there is also a substantial difference in the age structure of these students when compared to those who live elsewhere. As the population pyramid in Figure 2 shows, more than 50 per cent of residential college students are in the 18 to 19 year age group, while the comparative figure for other students is just over 30 per cent. At the other end of the age spectrum, more than

14 per cent of those not living on campus were aged over 30, while less than two per cent of the on-campus residential students were in this age bracket. Overall, according to the AUSSE response data, 85 per cent of residential college students are aged 21 or younger, a much higher proportion than for the rest of the student population (64 per cent).

Another key point of differentiation between the student group who live on campus and those who live elsewhere is the 'home' postcode of the student. In the AUSSE survey, students are asked to state their home postcode. For students in on-campus residential accommodation, many would consider their home to be the locality in which they return during the semester breaks. For many, this would be their parent's home or the home where they lived before beginning university. As Figure 3 shows, only 36.2 per cent of respondents living on campus

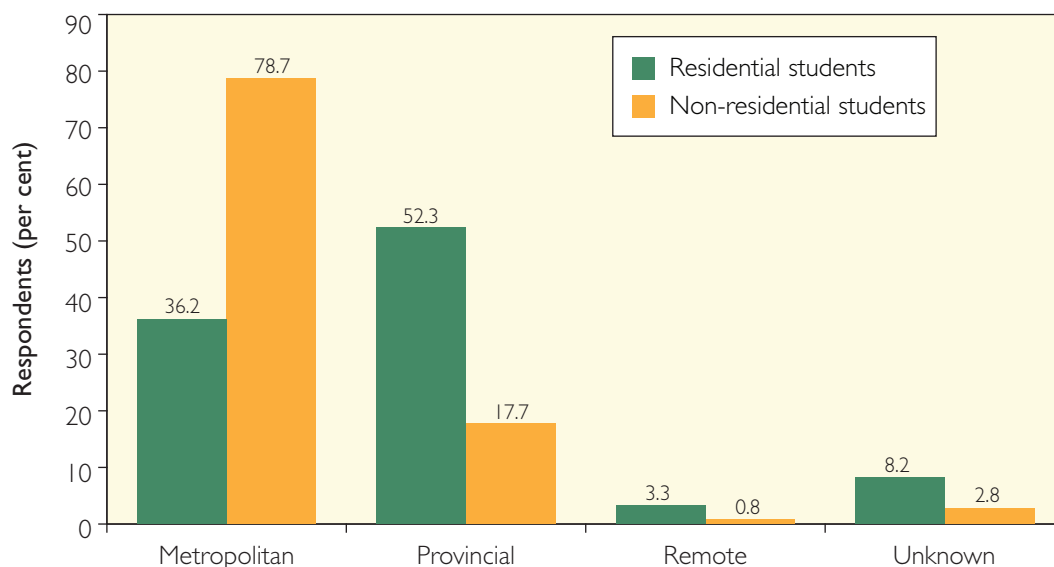


Figure 3 Students' 'home' location

Engaging College Communities

indicated a home postcode that was in a metropolitan area. The share of those not living on campus who recorded a home postcode in a metropolitan area was more than twice that of the residential campus students (78.7 per cent). More than half (52.3 per cent) of those students who lived on campus recorded a postcode from a provincial area of Australia and a further 3.3 per cent came from a remote area of the country. The 'unknown' category included in Figure 3 refers to those students who recorded a postcode that was not able to be identified as metropolitan, provincial or remote – in many cases this was due to an overseas postcode being recorded by respondents. Therefore, the main reason that a larger proportion of students in this category are from the group of those living on campus is because of the larger share of international students in this group.

On two measures of equity captured in the AUSSE, there is an interesting mixture of response outcomes for the on-campus residential students. The results in Figure 4 show that students living elsewhere are more likely to be the first in their family to attend university compared with those living on campus. However, when the socioeconomic status (derived from the home postcodes of students) of these two groups are compared, those living on campus appear to be more concentrated in the bottom quartile of the socioeconomic (SES) measure than those living elsewhere. This may be because more residential students come from regional areas of Australia, which tend to have lower SES profiles than many metropolitan areas. More broadly, it affirms the role that college communities play in engaging students

from diverse backgrounds.

Overall the characteristics of students who live in residential colleges in Australian universities are quite different from those who live off campus. The most substantial differences between students who live on and off campus appear to be the younger age of those living on campus, the higher prevalence of international students among this group, and the fact that the home origin of the majority of students is outside Australia's metropolitan areas.

Comparing student engagement and outcomes

Given the notable differences between students living on campus and others in Australian universities, it is useful to examine features of student engagement in order to ascertain whether the differences in characteristics of this group impact on their levels of overall engagement. As prior research suggests, it may be hypothesised that those students who live on campus are likely to be more engaged with their institution than those who reside elsewhere due to the fact that so much more of their time is likely to be based on campus or with fellow students.

The AUSSE measures six defined areas of students' engagement: Academic Challenge, Active Learning, Student and Staff Interactions, Enriching Educational Experiences, Supportive Learning Environment, and

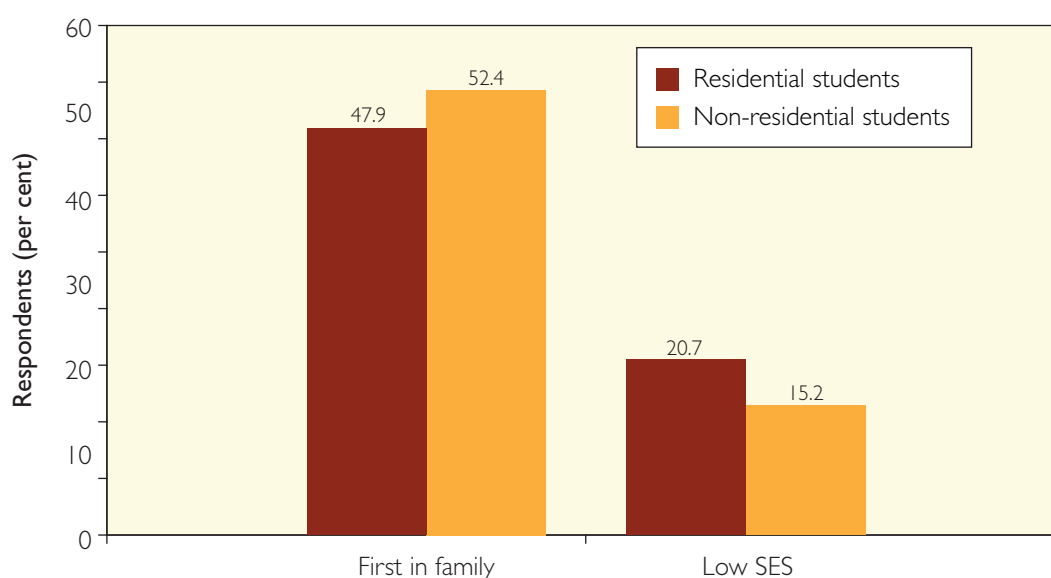


Figure 4 Selected equity characteristics

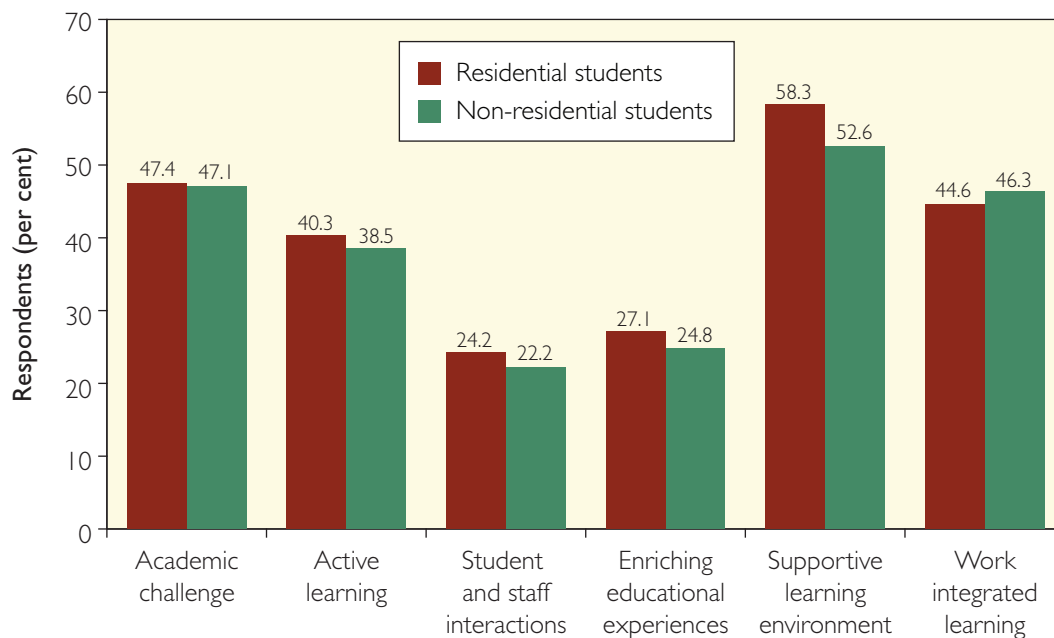


Figure 5 Engagement mean scores for students

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 (SEQ). 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.

Figure 5 shows the mean scores of students living on campus compared with those living elsewhere for each of the six AUSSE engagement scales. On all but the work integrated learning scale, the mean scores for students living on campus are higher. In general, the differences between these two groups are small. However, for the Supportive Learning Environment scale, there is a 6 point difference in favour of students living on campus. Given that a core role of residential colleges is to provide

academic and social support to its residential students, it is pleasing to see that there is a notable difference in the scores on this particular measure.

In examining these scores further, by breaking down the responses by first- and later-year students, some further variation in the engagement of students living on campus and those living elsewhere is evident (Figure 6). For the first-year comparison, those living in residential colleges have higher mean scores for engagement on all scales, with the Supportive Learning Environment scale showing the largest difference from the first-year students living off campus.

For later-year students, the differences between the students living on campus and those living elsewhere are more pronounced than for the first-year group.

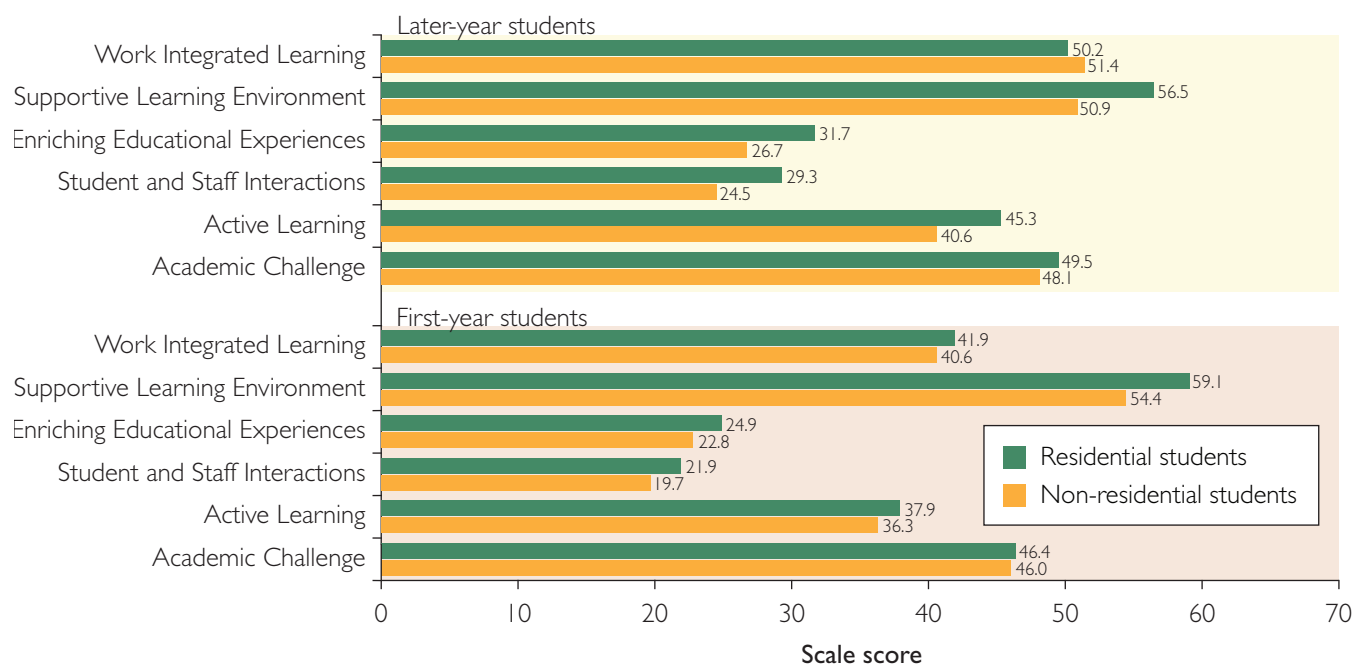


Figure 6 Engagement mean scores by year level

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Table 1 Participation in extracurricular activities (per cent)

Hours per week	Residential student	Non-residential student
None	24.3	43.4
1 to 5	44.0	33.6
6 to 10	19.3	13.9
Over 10	12.4	9.0

Positive score differences of five or more points were recorded by on-campus residential students for the Active Learning Environment, Student and Staff Interactions, Enriching Educational Experiences and Supportive Learning Environment scales.

The scale-level results mask variations which emerge upon closer inspection of students' responses to individual items. As noted, the research suggests that extracurricular activities play an important role in university education. Students in residence spend more hours per week participating in such activities – see Table 1. Figure 7 looks deeper at a number of enriching educational experiences, showing that residential students have greater plans to participate in these than others.

In the last five years, many course redesign projects have sought to blur traditional boundaries between academic and support activities. This takes the student perspective

seriously, creating a more effective alignment of individual needs with institutional provision. As noted in the research summary, this approach aligns naturally with the work of many residential colleges, both in terms of their direct contribution to student development, and the indirect value they add to university education. Figure 8 affirms this point, with residential students perceiving greater support in a range of academic and non-academic areas.

The broad scale-level results indicate that residential students feel more supported than their non-residential counterparts. This is significant, for broader analysis of the AUSSE data (Coates, 2009) has shown that the support provided by institutions is one of the most powerful determinants of graduate outcomes.

Three items in the AUSSE ask students to report on the quality of their relationships with other students, teaching staff and administrative personnel and services.

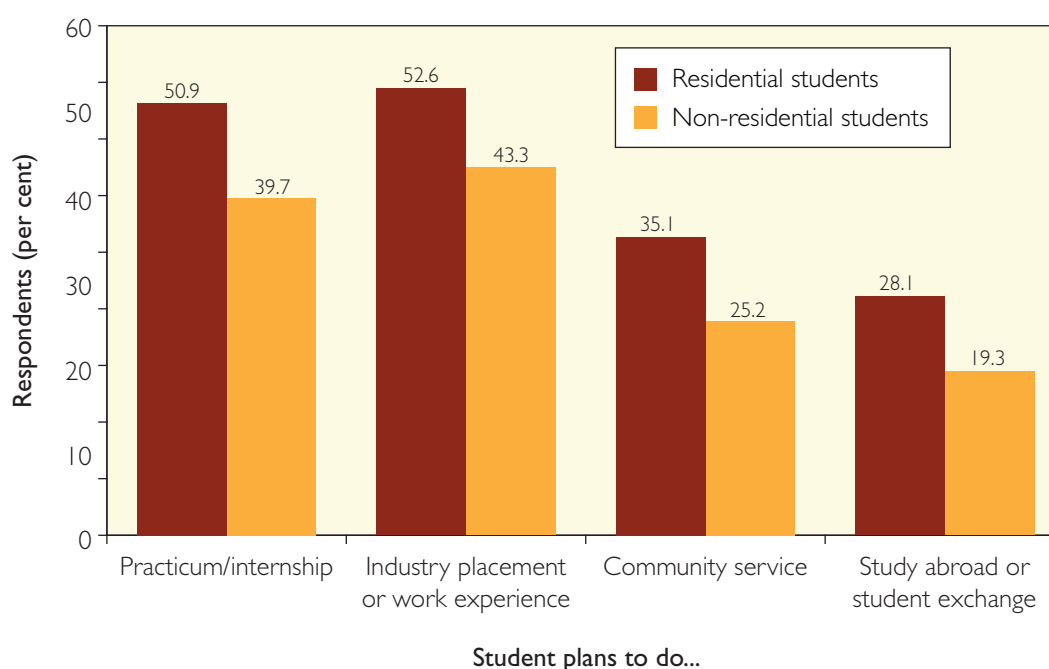


Figure 7 Participation in enriching experiences

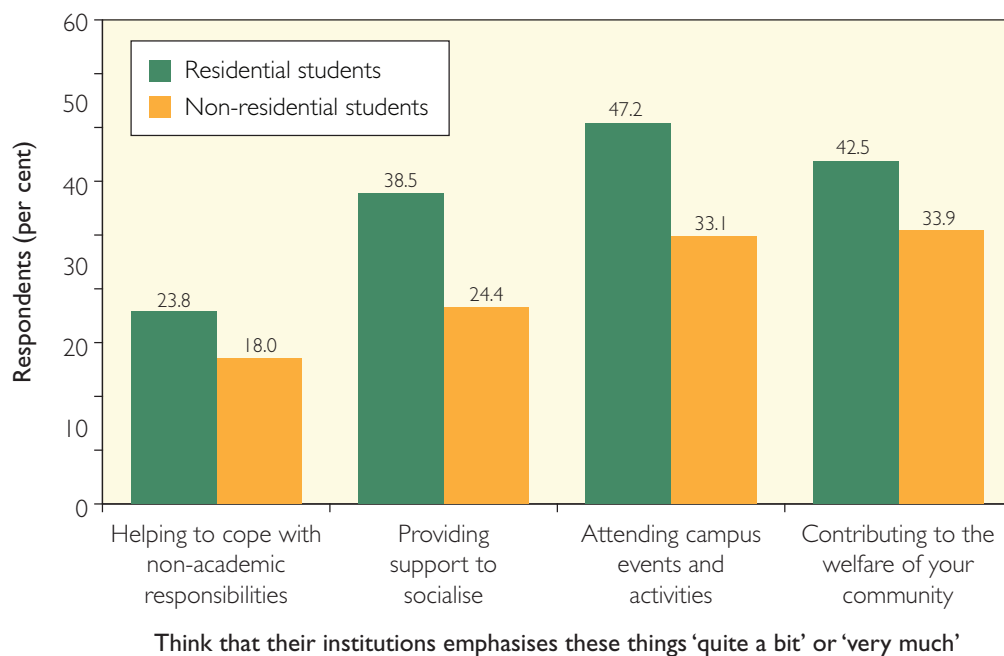


Figure 8 Institutional emphasis on academic and non-academic support

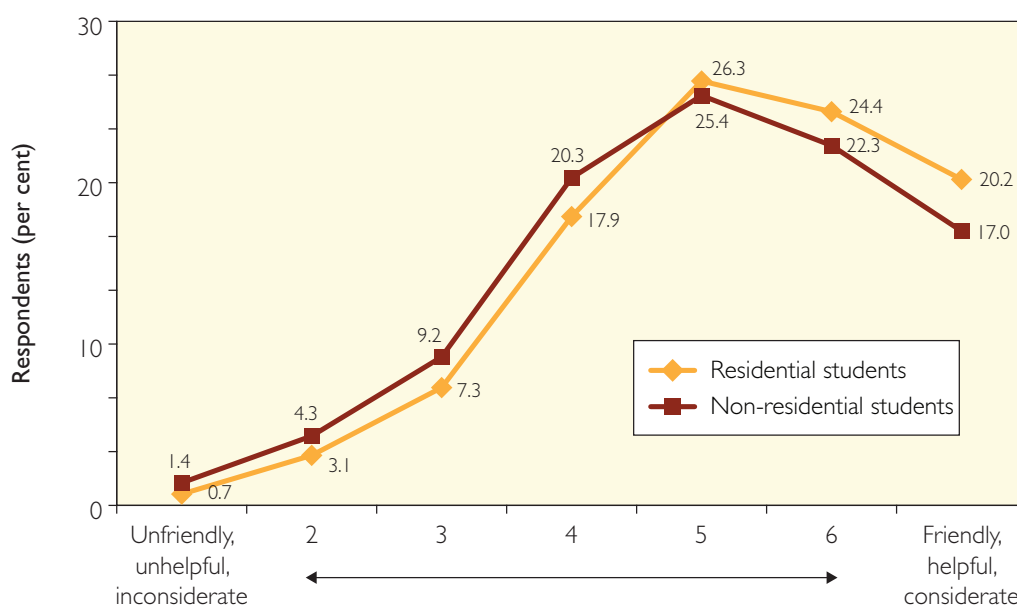


Figure 9 Quality of student, teacher and support relationships

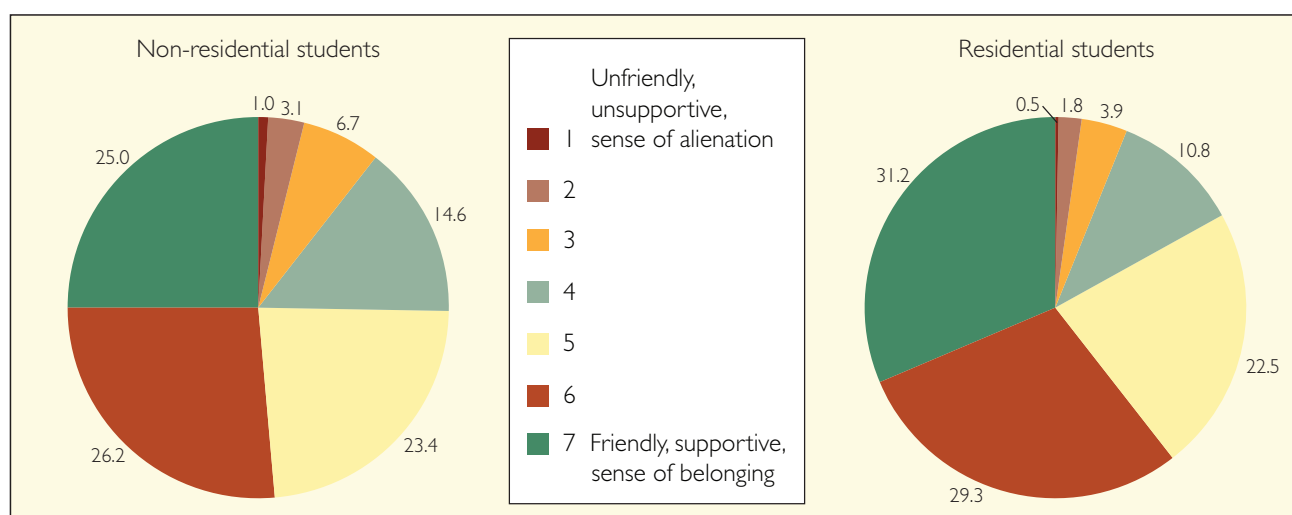


Figure 10 Quality of relationships with other students

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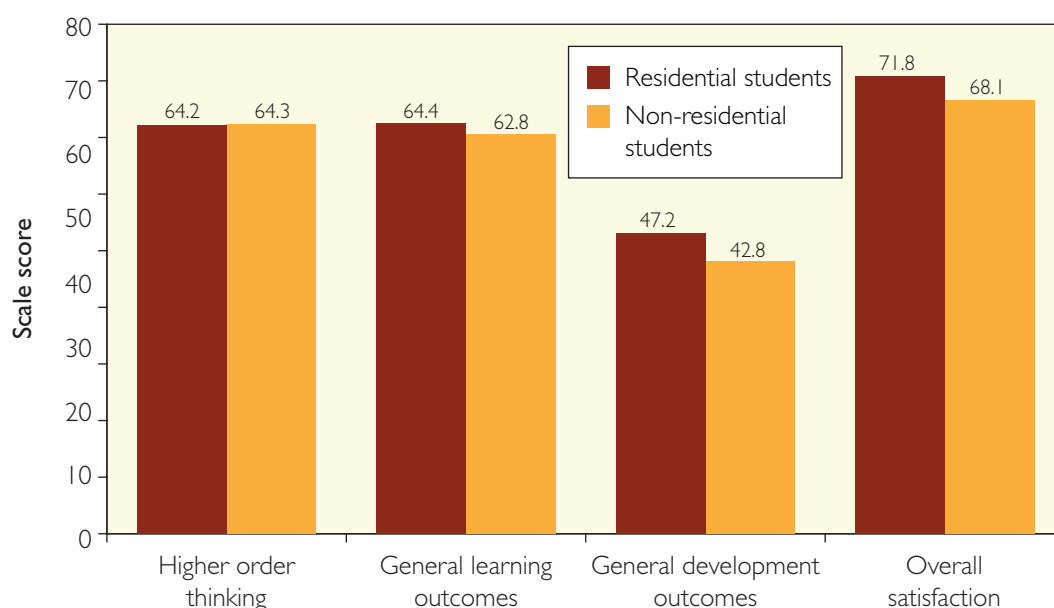


Figure 11 Outcomes mean scale scores for students for residential and non-residential students

Figure 9 combines results from these items. Overall, 70.9 per cent of residential students selected one of the top three (of seven) categories on the response scale provided for this item, compared with 64.8 per cent of non-residential students. This result is higher still for residential students' relationships with their peers (Figure 10), relationships which play an essential role in including students in university learning communities.

In addition to the different facets of student engagement, the AUSSE seeks feedback from students on several different outcomes of university study. These outcomes include scales for Higher Order Thinking, General Learning Outcomes, General Development Outcomes and Overall Satisfaction. Results for each of these are reported here on scale that runs from zero to 100.

Figure 11 shows that on these scales there is little substantial difference between students living on

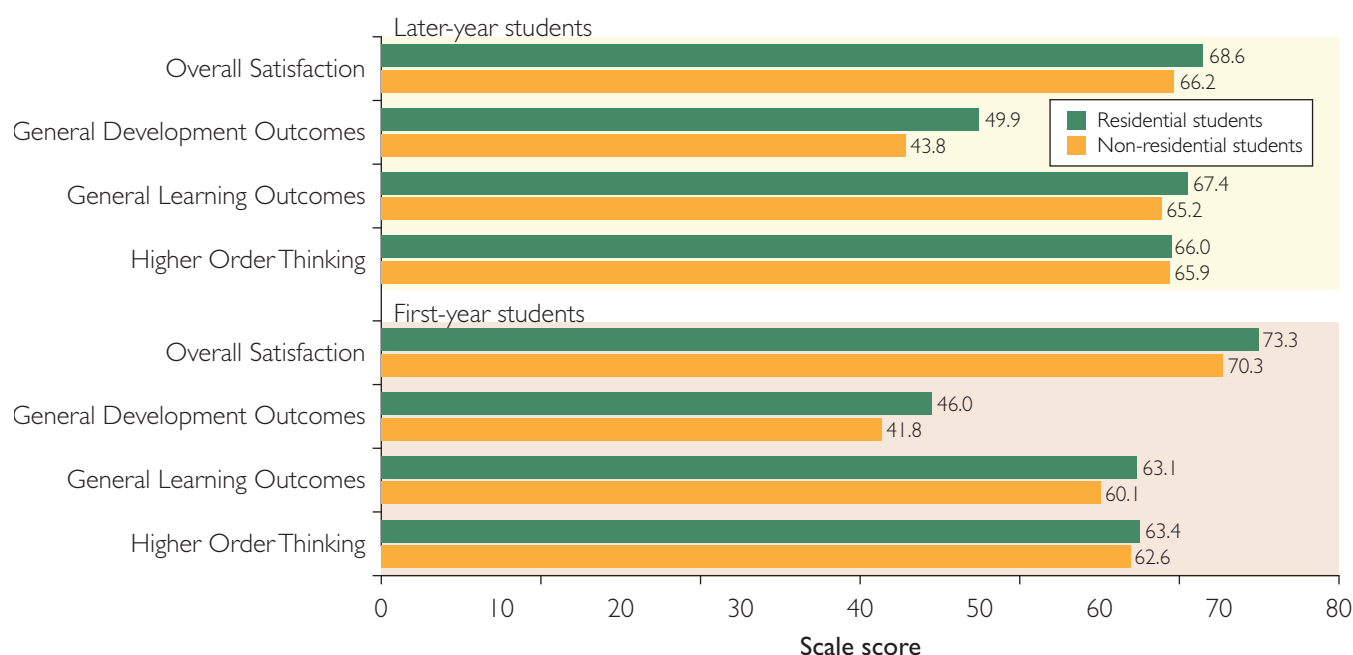


Figure 12 Outcomes mean scale scores by year level for residential and non-residential students



College encourages self-directed learning, where workshopping and student discussion often reveals the answers

– First-year female human welfare services student

campus and those living elsewhere. The largest score difference (a difference of four points) was in relation to General Development Outcomes, where on-campus residential students had the higher score.

Comparison of the outcomes scores by first- and later-year students in Figure 12 shows that as with the results presented in Figure 11, students living on campus had higher scores for most scales. In Figure 12, only the Higher Order Thinking score for later-year students (which was equal for on and off-campus residents) did not follow this trend. For both first- and later-year students, the largest score difference here was for the General Development Outcomes. This difference was notably larger (six points) for the later-year students living on campus when compared to the later-year students living elsewhere. In short, spending more years at college seems to enhance students' general development outcomes.

A focus on international students

As Figure 1 suggests, there is a disproportionately large number of international students living on campus in Australian universities. Overall, international students are in the minority of residential students, but they are a very important group in the residential halls and colleges of higher education institutions. Given their strategic importance to institutions and the overall system, a separate analysis has been undertaken below to identify differences in engagement and outcomes of the international students living on campus in comparison to other international students.

In Figure 13, which shows the mean scores for the international student cohorts who live both on and off campus, the AUSSE engagement scales are higher for those who live on campus for all but the Work Integrated Learning scale. As with the general population, the largest difference here is on the Supportive Learning Environment scale, where there is a notable 5 point gap in the mean scores of international students living on campus and international students living off campus.

The outcomes measures for the AUSSE, when isolated for international students only, also show that those who live on campus have higher mean scores on the four scales displayed in Figure 14 than international students living off campus.

The relative influence on engagement of living on residence

The above analyses align with previous empirical research in indicating that students living on campus at universities in Australia tend to have slightly higher

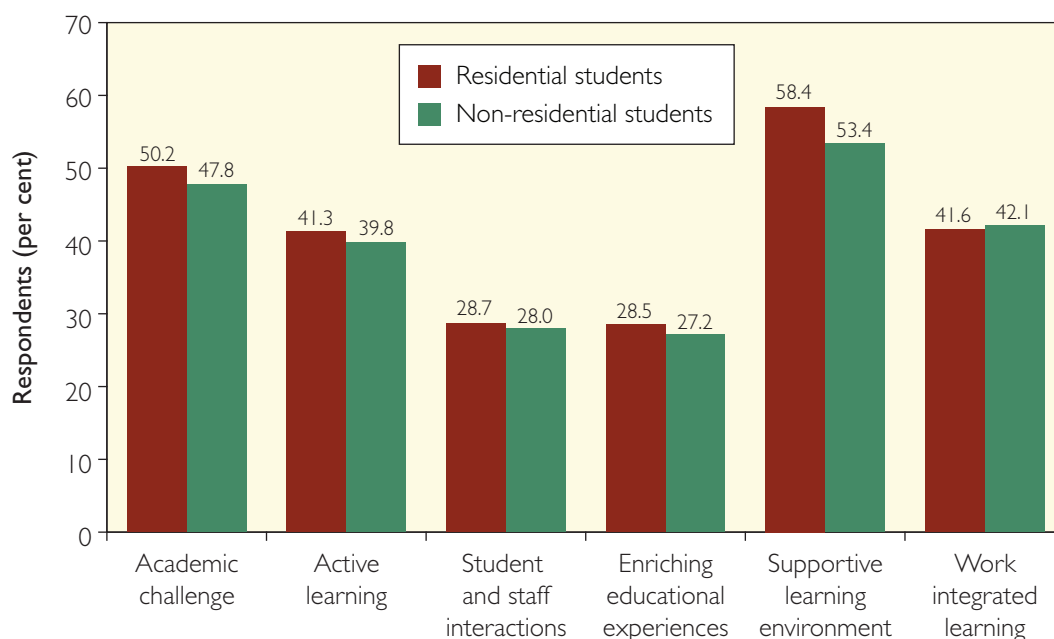


Figure 13 Engagement mean scores for international residential and non-residential students

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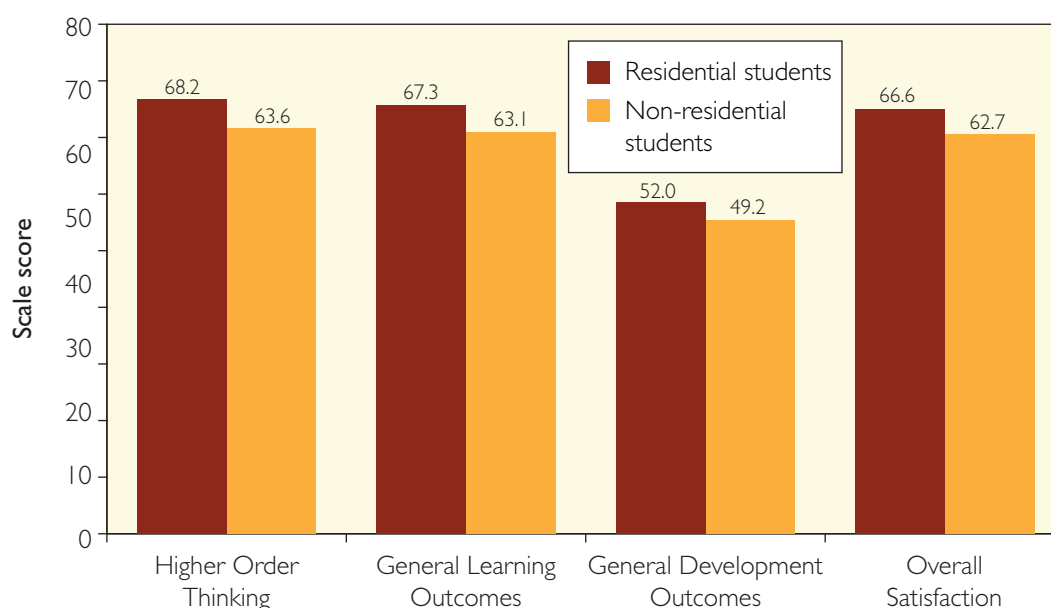


Figure 14 Outcomes mean scale scores for international residential and non-residential students

levels of engagement than those students who do not live on campus. To test these findings in relation to student engagement, a regression model has been created which explores the influence of living on campus on engagement when other influential factors are controlled for.

Regression analyses were conducted on each of the six AUSSE engagement scales to determine the relative influence on engagement of living in residence. These models have controlled for the following variables: year level, institution, field of education, study type (full- or part-time), student status (domestic or international), average grade, home location, age group, language background and socioeconomic status. The explanatory power for the models for each of the scales ranges from 4 per cent to 19 per cent.

The results of these analyses show that on all six of the AUSSE engagement scales, students living on campus have a more positive response than those living elsewhere. For each scale, this difference was statistically significant. Figure 15 displays the scale differences between the on-campus residential students and other students for each of the engagement scales after controlling for the variables noted above. The

regression model predicts that the relative impact on engagement of being an on-campus residential student ranges from 0.5 points to 3.5 points (on the 100-point engagement scale). The largest positive impact was seen for the Supportive Learning Environment scale.

Overall, given the fact that engagement is being measured on a 100 point scale, the size of these results indicate that living on campus provides a marginal positive contribution student engagement. When compared with the relative impact of other variables in the regression model, institution and course factors such as average grade, year level, study type, institution and field of education tend to contribute more substantially to variation in engagement. On the Supportive Learning Environment scale, however, the effect of living on campus was the third most influential variable in the model, suggesting that living on campus does contribute significantly to responses relating to engagement and satisfaction with the learning environment of a university.

Building evidence of impact

This briefing has used AUSSE 2008 results to shed light on the impact of residential college on undergraduates' learning and development. While largely descriptive in nature, it has charted some of the first insights into the vital role played by residential colleges in Australian higher education.

The residency staff are very enthusiastic and helpful

— First-year male agriculture student

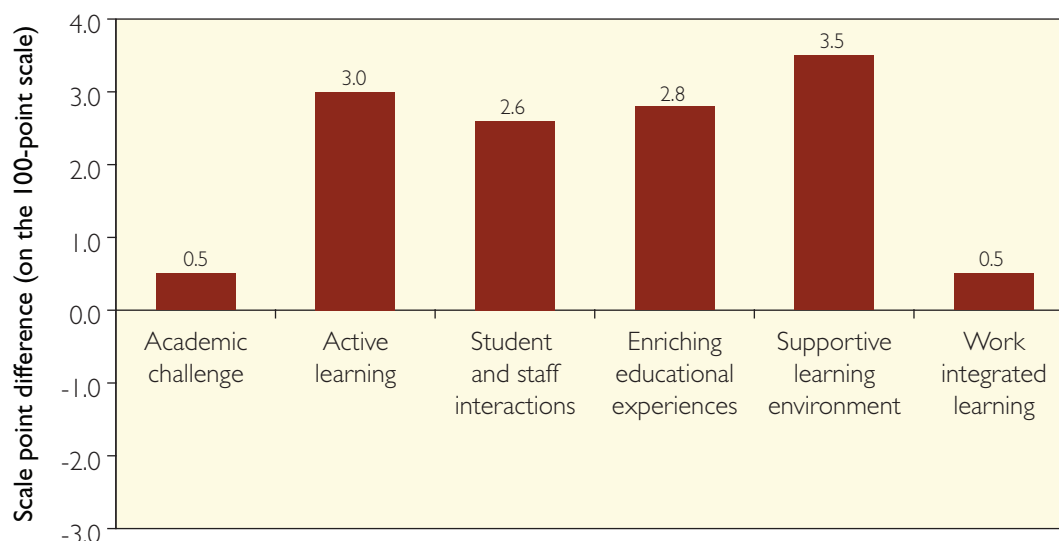


Figure 15 Scale score predicted differences for residential and non-residential students

Key findings include that:

- 1 in comparison with students living off campus, those who live in residential halls and colleges at university are more likely to be: younger, studying full-time, in their first year, and come from overseas or a non-metropolitan area of Australia;
- 2 on measures of student outcomes, those living on campus record more positive scores than those living elsewhere, with the most substantial difference in terms of students' general development;
- 3 residential students score higher than those living off campus in five out of the six areas of engagement measured in the AUSSE. The largest positive difference is in relation to perceptions of support; and
- 4 when other variables are controlled for, the relative impact of living on campus is positive in all six areas of engagement.

As this briefing suggests, student engagement offers a highly informative lens for interpreting key aspects of collegiate education. While powerful in their own right, these observations clearly provide a foundation and stimulus for a range of further analyses. These could spotlight areas of excellence in collegiate education and extrapolate these into broader contexts. The analyses could offer colleges a structure for monitoring and continuous improvement. Most broadly, future thinking could explore ways in which to further enhance the contribution that college communities make to higher education in Australia.

Resources

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One on one interaction with lecturers. It is good they are so approachable. College also helps a lot as you can learn much from your fellow students.

— First-year female communication and media studies student



The college system which I live within provides academic assistants and there is always someone on call from within the college that specialises in the field of study I might be having problems with

— Later-year male banking and finance student



Learning continues in the college living environment once classes are over, there is a lot of support available in all areas of the university...

— Later-year female economics and econometrics student

This briefing was prepared by Dr Hamish Coates and Dr Daniel Edwards.