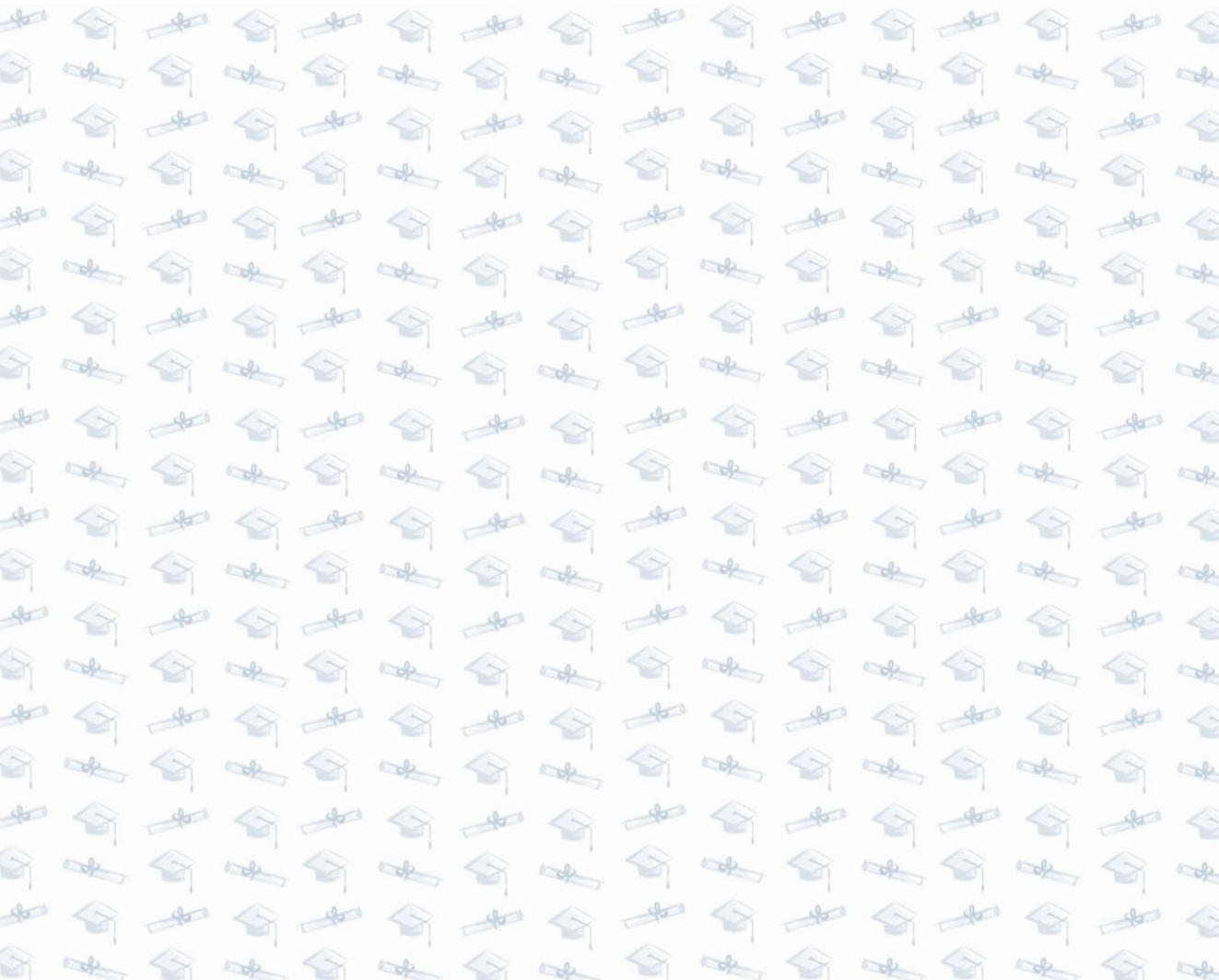


The First Year Experience in Australian Universities: Findings from 1994 to 2009

Richard James, Kerri-Lee Krause and Claire Jennings



© Centre for the Study of Higher Education, The University of Melbourne, March 2010

ISBN: 9780734041661

This work is copyright. It may be reproduced in whole or in part for study or training purposes subject to the inclusion of an acknowledgment of the source and no commercial usage or sale. Reproduction for purposes other than those indicated above, requires the prior written permission from the Centre for the Study of Higher Education, The University of Melbourne. Requests and inquiries concerning reproduction and rights should be addressed to Richard James, Centre for the Study of Higher Education, The University of Melbourne VIC 3010.

The views expressed in this report do not necessarily reflect the views of the Department of Education, Employment and Workplace Training.

The First Year Experience in Australian Universities: Findings from 1994 to 2009

Richard James, Kerri-Lee Krause and Claire Jennings

Centre for the Study of Higher Education, The University of Melbourne
and
Griffith Institute for Higher Education, Griffith University



Foreword

Expanding participation and social inclusion are key factors driving the Australian Government's higher education reform agenda. The Australian Government has set ambitious national targets that by 2025, 40 per cent of all 25-34 year-olds will have attained a qualification at bachelor level or above and that by 2020, 20 per cent of undergraduates will be people from a low socioeconomic status background. National targets for attainment and low socioeconomic status students will lead to a focus on enhancing the quality of higher education. A new national body for regulation and quality assurance is being established to enhance the overall quality of the Australian higher education system. The Tertiary Education Quality and Standards Agency (TEQSA) will accredit providers, evaluate performance, encourage best practice and provide greater national consistency. New indexation arrangements, performance funding and the Higher Education Participation and Partnerships Program (HEPPP) will provide universities with the funding required to invest in their future development and will reward universities in terms of participation and quality outcomes.

The Australian Government recently released a discussion paper *An Indicator Framework for Higher Education Performance Funding*, where student experience, alongside participation and social inclusion, student attainment and the quality of learning outcomes represent key indicators of the quality of higher education. In this context, the changing opinions and experiences of students represent an important means of assessing the quality of higher education services.

The Department of Education, Employment and Workplace Relations is continuing to support the First Year Experience Survey. This is a national level survey that provides valuable insights through more than 15 years of survey data into the academic and social experiences of first year university students. The current study will provide valuable benchmark information on transition, teaching support and curriculum responses in the first year of study as the sector enters a period of significant reform.

Department of Education, Employment and
Workplace Relations

March 2010





Acknowledgements

We thank the first year students across nine universities who participated in the 2009 survey, the fourth in a series of national studies on the first year experience in Australian higher education. We also express our gratitude to the academics and administrators in the participant universities who assisted with the student survey and to Hamish Coates and his colleagues at the Australian Council for Educational Research (ACER) who prepared the student samples for each institution.

The first year experience research relies on federal funding support. We are grateful to a number of DEEWR staff who actively supported the 2009 study, including Claire Atkinson, Phil Aungles, Julie Birmingham and Colin Walters.

Finally, we wish to thank Centre for the Study of Higher Education colleagues who contributed to the study, in particular Madeleine Shearer, Joanna Jellie and Michelle Segal. Not least, we thank Malcolm Anderson who performed the statistical analyses for this study as he has done in the past.

Richard James

Kerri-Lee Krause

Claire Jennings

March 2010



Contents

Foreword	v		
Acknowledgements	vii		
Executive Summary	1		
1. CSHE Research into the First Year Experience, 1994 to 2009	9		
The previous studies: An overview of key findings	9		
The 2009 context and the aims and method of the present study	12		
The institutions	15		
2. Going to University: Aspirations and Sense of Purpose	17		
Reasons for enrolling	17		
Sense of purpose	18		
Student experiences and decision-making prior to first year enrolment in 2009	19		
Change and uncertainty	22		
Summary	25		
3. Adjusting to University Study	27		
Student expectations of first year university	27		
Adjusting to university assessment and standards	28		
Making adjustments from school to university	29		
Adjusting to study in first year	30		
Summary	33		
4. The Changing Character of Student Engagement	35		
How students spend their time	36		
Measures of student engagement in the first year	39		
Patterns of subgroup engagement	47		
Summary	47		
5. Balancing Work and Study	49		
Financing of study	49		
Coping with study, employment and other commitments	52		
Summary	56		
6. Teaching, Learning and Overall Course Experience	57		
The changing patterns of teaching and learning	57		
Perceptions of the course overall	60		
Summary	61		
7. Distinctive Student Subgroups	63		
The effects of socioeconomic background	63		
Indigenous students	65		
Students from urban and rural backgrounds	66		
Females and males	67		
The influence of age	68		
International students	69		
8. Conclusions and Implications	71		
Implications for policy and practice	72		
References	75		
Appendix 1	77		
A1.1 Survey method and data analysis	77		
A1.2 Survey respondents across institutions, 1994 - 2009	78		
A1.3 Statistical analyses	79		
A1.4 Reliability of scales	79		
Appendix 2: Glossary of Terms	82		



The 2009 First Year Experience study in summary

Method

A stratified random sample of students drawn from nine universities was surveyed by a mailed questionnaire. We received 2422 responses, a response rate of 24 per cent.

Purpose

The principal purpose of this research is to provide information and insights for the Australian higher education sector that can assist in enhancing the academic and social experience of first year students and improving educational outcomes in first year and beyond. Our objectives are to build a picture of the overall character and quality of the first year experience across the nation and to explore possible trends in student experience that have implications for policy and practice.

This is not a comparative study of the participating universities. Institutions that participate are provided with their institutional data for internal purposes. They are able to use the findings to benchmark with other participating institutions as well as with findings from previous cycles of the survey.

Interpreting the report

The report is designed to be read by a wide audience. For convenience we report percentage agreement on the questionnaire items; that is, the percentage of students who marked '1' or '2' on a 5-point scale. We believe this approach offers readily accessible insights into student attitudes for policy-makers, university leaders, academic staff and professional staff who work with first year students.

Throughout the report we note statistically significant relationships between and among subgroups and across the different survey years. In all cases these relationships are significant at $p < 0.05$ or higher unless otherwise stated. Specific data on the respective significance levels are provided in the tables.

Appendix 2 contains a glossary of terms used for demographic student groups in this report. For the most part, we have adopted DEEWR and Australian Bureau of Statistics (ABS) classifications for the purposes of analysing and interpreting the data, but in some cases it has been necessary to adapt the nomenclature. The glossary supplements definitions provided in the text.

History

- The original First Year Experience study in 1994 was commissioned by the Committee for the Advancement of University Teaching (CAUT).
- The second study was conducted in 1999 for the Evaluations and Investigations Programme of the Department of Education, Training and Youth Affairs (DETYA).
- The 2004 study was funded through the Higher Education Innovations Programme of the Department of Education, Science and Training (DEST).
- In 2009, the study was undertaken for the Department of Education, Employment and Workplace Relations (DEEWR)



Executive Summary

Insights into the 2009 First Year Experience: Key findings and their implications

The 2009 First Year Experience survey is the fourth national study undertaken by the Centre for the Study of Higher Education at five-yearly intervals since 1994. This report therefore presents findings on the changing attitudes and experiences of first year students in Australian universities across a period of 15 years. Longitudinal datasets of this kind are rare in Australian higher education.

As the tertiary education sector commences a decade of significant transformation, the 2009 report will provide important benchmark data. The first year students who participated in the 2009 study are the last 'pre-Bradley Review' cohort to be surveyed by this research project. Future studies will take place in a vastly different tertiary education environment if the federal policy targets for expansion and social inclusion are progressively being achieved. The transition, teaching, support and curriculum responses of universities in the first year will be pivotal in achieving the new national goals that have been set for the higher education sector. The 2009 First Year Experience data offer significant reference points for monitoring the effectiveness of university efforts to cater for a larger and more diverse group of incoming first year students.

The 2004 and 2009 students compared

The first year students in 2009 are more organised, pragmatic and focussed than their 2004 counterparts. More believe they were ready to choose a university course, fewer considered deferring and fewer plan to change course or institution after first year. Parental expectations figure more highly in their decision to go to university.

The school-leavers in the sample report an easier academic transition to university, reflecting, it seems, the efforts of both schools and universities. The 2009 students are more likely to believe the final year of school prepared them well for university and their university subjects are building on their schooling. They are also more satisfied with the advice they received on subject choices.

The study reveals important trends in students'

study habits and patterns of engagement with university. Some of these are subtle, however they point to new dynamics in the student-university relationship that have implications for the quality of educational outcomes. First year students are spending fewer days and less time on campus. Fewer are involved in extra-curricular activities around campus. Fewer say they have made close friends. More indicate they keep to themselves at university. Yet, in apparent contradiction, the students of 2009 report more involvement in group work for study purposes, both in and out of class. These findings suggest students are instrumentally balancing their time commitments and are adept at regulating their academic experiences to achieve their goals.

The trend towards part-time work during semester continues. A growing proportion of first year students are undertaking paid work. In this sample, 61 per cent of the full-time students are working compared with 55 per cent five years ago. These students average close to 13 hours per week of paid work. Despite this, there has been no rise in students' belief that this work interferes significantly with their study. In fact, the 2009 first year students report significantly less interference than the students of 2004. This is consistent with the conclusion that most students appear skilled at managing their commitments.

The project's indicators of key staff-student interactions are down from the 2004 figures. Fewer students believe one of their teachers knows their name. Fewer believe academic staff show an interest in their progress. Information and communications technologies (ICTs) may be a major factor in these responses. Predictably, there have been dramatic rises in the use of various forms of ICTs for study-related purposes and students are embracing these opportunities and are highly positive about the benefits. One consequence is the on-campus, face-to-face experience is taking on less significance and students are having less direct contact with academic staff. Here the signs are clear. Lectures are now less central to first year study. More students report that it is possible to skip classes because notes are on the web, though there is no evidence they are doing so.

What are the effects of these changing patterns of student engagement on the quality of their learning? This study's findings do not provide an



Notable trends between 2004 and 2009

	In 2004	In 2009
Seriously thought of deferring or discontinuing	28%	23%
Paid work seriously or moderately interferes with study	57%	51%
Tend to keep to myself at university	28%	32%
Lecturers make good use of the internet	59%	66%
At least one teacher knows my name	66%	58%
Spend four days or fewer on campus	57%	65%

All differences between 2004 and 2009 statistically significant at 0.01

answer to this question, however they point to trends that warrant monitoring. 'Time on task' dropped for the 2009 students compared with their 2004 peers. Students' self-reported course contact hours declined significantly, from 16 to 15 hours per week on average. At the same time, the hours spent in private study has decreased to 10.6 hours per week. The overall decline in 'time on task' should be watched closely by the sector, for this is a highly salient, albeit blunt, indicator of the quality of learning. Of course, students' broad estimates of weekly time allocation say nothing about the quality, intensity and efficiency of their study-related activities. Given that the 2009 students appear committed to their studies and are highly self-regulating, we suspect they manage their time effectively and use ICT and peer support strategically to supplement the apparent reduction in course contact time.

Thirty important findings

Aspirations, expectations and adjustments (Chapters 2 and 3)

1. The expectations of parents or family continue to play a significant role in shaping students' decisions to enrol in university study. Over 15 years, there is a discernable increase in the number of students identifying this factor as key to their decision-making.
2. The clarity with which students express their reasons for coming to university continues to sharpen.
3. Student enrolments in online modes of delivery are growing. This increase is particularly evident among first year students from rural areas and low socioeconomic backgrounds who are studying part-time.

4. Half the school-leavers now say that school was a good preparation for university study. This is significantly above the 2004 findings. Overall, first year students are increasingly positive about the quality of advice given by their school teachers.
5. Students from rural areas and low socioeconomic backgrounds are less inclined to say that their final year was a good preparation for university.
6. Students from low socioeconomic backgrounds feel significant pressure from the financial commitment their parents have made, while at the same time are less likely to believe their parents have an understanding of what university is all about.
7. The factors associated with low achievement and risk of failure include pressure from financial commitments, perceived lack of parental understanding and social support, lack of preparation for university study, and excessive hours of paid work. Students at risk are less likely to study with other students, report they worked consistently through the semester and are more likely to be enjoying their courses.

Engaging with learning (Chapter 4)

8. There has been a significant decline in the amount of time first year students spend on campus. The majority spend four or fewer days on campus per week, with a third spending three or fewer days each week on their university campus.
9. On average, course contact hours have declined from 16 to 15 hours per week between 2004 and 2009. The norm for the majority of students is 15 or fewer hours per



week, with significantly more (14 per cent) having only 6-10 hours per week of course contact (compared with 11 per cent in 2004).

10. Time spent in private study has decreased to 10.6 hours per week. Students spend less than one hour of study outside of class for every course contact hour.
11. Only one half of first year students report they feel like they belong on their university campus, despite the vast majority of respondents being full-time, campus-based students.
12. Equally concerning is the significant decline in the proportion of students who feel confident that they are known by name by at least one teacher.
13. Signals of students' lack of engagement, such as skipping classes and coming to class unprepared, are no different from 2004.
14. Peer engagement for study purposes is alive and well. Significantly more students are reporting they study and work with classmates on assignments and projects out of class.
15. One of the standout changes over time is the number of hours students spend online. In 2009, students report spending 6.5 hours online per week for study purposes compared with 4.2 hours in 2004.
16. Nearly two-thirds of students agree that their lecturers make good use of the internet, compared with 60 per cent in 2004. Students report they are learning with a range of online technologies. The vast majority report that they find their university's learning management system useful.

Managing commitments (Chapter 5)

17. The proportion of students in paid work during semester continues to increase, with 61 per cent of the full-time students working, up from 55 per cent in 2004. The full-time students who are working average close to 13 hours per week of paid work.
18. Students' main motivations for work are affording extras and becoming financially independent. Nearly two-thirds of students work to afford basic needs.
19. International students now work to afford basic necessities; five years ago the most common reason was to afford extras.

20. Longer hours of work are associated with a lower grade average and an increased likelihood of considering deferral.
21. There has been a significant decrease in the proportion of full-time students with paid employment commitments who believe their work interferes with their study. This may be the result of the availability of ICT that assists students to study outside of formal classes.

Satisfaction with teaching, learning and the course experience (Chapter 6)

22. Improvements reported in the 2004 study in student responses on key aspects of the quality of teaching have been mirrored in the 2009 study, suggesting genuine progress has been made in advancing the quality of first year teaching since the 1990s. Seventy-seven per cent of students believe 'the quality of teaching is generally good'.
23. Fewer than ten per cent of students report they are not finding their course stimulating, are not enjoying their course, or are dissatisfied with their university experience overall. These students are unhappy or discontented with most aspects of their experience and are highly disengaged. They lack a clear sense of purpose and have had problems 'settling in'.
24. Feedback continues to be an issue. One-third of students do not believe they receive helpful feedback on their progress. Only 26 per cent of first year students believe staff take an interest in their progress.
25. The findings point to high levels of curriculum coherence and relevance. Seventy-eight per cent of students believe their subjects 'fit together well' and three-quarters consider their subjects are a good base for future studies and connect with their future career prospects.

Distinctive student subgroups (Chapter 7)

26. Students from low socioeconomic backgrounds and those from high/medium socioeconomic backgrounds report near identical levels of satisfaction with the quality of teaching and express the same levels of enjoyment of their courses and satisfaction with their university experience.
27. Indigenous students report slightly higher levels of overall enjoyment and satisfaction than non-Indigenous students, however the differences



in responses are not statistically significant.

28. Rural students tend to be more critical of the quality of teaching than urban students. The levels of satisfaction with the university experience and enjoyment of courses are comparable for both groups.
29. Mature-age students have far more positive perceptions of the quality of teaching than school-leavers. These attitudes appear closely aligned with their stronger clarity of purpose. They also have higher levels of satisfaction with their courses and the university experience overall.
30. International students express high levels of satisfaction with the teaching they experience. They are more engaged in their studies than domestic students and their responses show they are prepared to seize the opportunities available to them. Overall, international students have equivalent levels of satisfaction with their courses and with the university experience to those of domestic students.

Implications for policy and practice

The findings of the 2009 First Year Experience study suggest that good progress has been made in improving the transition to university and the quality of the educational experience for first year students. The investment in high quality transition programs and in monitoring and responding to the needs and experiences of first year students is yielding dividends.

The emphasis of the higher education sector on the first year must intensify as the student population grows and diversifies. The Australian Government has established national targets that by 2025, 40 per cent of all 25-34 year-olds will have attained a qualification at bachelor level or above and that by 2020, 20 per cent of undergraduates will be people from low socioeconomic status backgrounds. During the next decade, the first year will be a critical time for retention and for establishing sound patterns of study and academic engagement, perhaps even more so than now.

Institutions are likely to respond in different ways to the challenges of achieving these national targets. Diversification is likely to take place in selection and recruitment strategies and in first year curricula. The school-university interface is likely to change dramatically. These changes are welcome, for they will usher in a more responsive and accessible

tertiary education system.

In this context, this study points to a number of interrelated areas that might provide the focus for national and institutional policies and programs.

- ***Resolving the problems of student income support and students undertaking paid work***
The amount of paid work undertaken by first year students during semester continues to be a concern. First year students need uninterrupted time to concentrate on their study and they need to study free from financial stress for maximum educational progress. The high number of hours worked each week by a large proportion of first year students, often to provide for basic necessities, suggests educational outcomes are at risk of being diminished. Some improvements have been made in the national income support measures, but a further policy response is needed. For their part, universities might explore the options for providing more work opportunities on-campus, for this is not yet commonplace in Australia. Of course, not all of the paid work undertaken by students is for week-to-week financial survival, some is clearly discretionary and related to wider social trends and the goals and priorities students have for their lives. Neither is all of the work undesirable. Developing curriculum responses that continue to maintain high standards while acknowledging that the typical full-time student is also a working student who is sandwiching study and work remains a challenge for the sector.
- ***Monitoring the 'time on task'***
A related issue to the issue of paid work is the need for universities to monitor course contact hours and time students spend in class, as discussed previously in this overview section of the report. We stress that we do not assume that reductions in course contact time will necessarily have detrimental educational effects or that time spent on study is related in a simple way to educational outcomes, especially as the study options available to students diversify as a result of the penetration of ICT. However, diminishing course contact hours and private study time may reflect reduced engagement and reduced opportunities for learning. The drift in this direction should be watched carefully.
- ***Strengthening the interactions between students and academic staff***



Snapshots of the views of first year students in 2009

	Percentage of students in agreement
Overall judgements	
Very satisfied with the university experience so far	71%
Quality of teaching generally good	77%
Intellectual stimulation, excitement and sense of belonging	
Get satisfaction from studying	49%
Enjoy the intellectual challenge	62%
Find course stimulating	76%
Find it exciting to be at university	62%
Feel sense of belonging to the university community	50%
Specific challenges	
Find it difficult to get motivated to study	36%
Feel uncomfortable in group discussions	21%
Find the workload too heavy	33%
Money worries make it difficult to study	33%
On the move?	
Changed course during first year	7%
Hope to change course after first year	26%
Hope to change institution after first year	8%
Teaching, learning and the curriculum	
Staff are enthusiastic about the subjects they teach	75%
Teaching staff usually give helpful feedback on progress	35%
Subjects fit together well	78%
Subjects give an awareness of the latest research	50%
Getting a chance to learn about research in the university	31%
Planning an international study experience	27%
Presently studying or planning to study a language	23%
The ubiquity of ICTs	
Used an online Learning Management System (LMS)	92%
Used internet-based resources and information designed for the course	98%
Used podcasts of lectures	75%

In the 2009 First Year Experience study, the more 'personal' dimensions of teaching, such as the interest shown in student progress, are once again the aspects that students rate the lowest. The student-teaching interaction appears impersonal and distant for many students. There are many reasons for this, including class sizes, the rise in the use of ICT and the reduced time students spend on

campus. We believe greater attention needs to be paid to ensuring all students have the opportunity for closer personal interactions with academic staff at least at some stage during the first year. This is not a cry for a return to an imagined halcyon era, rather our recommendation is based in the belief that teacher empathy, demonstrated interest in students as individuals and respect for



students are important factors in students' academic and social engagement.

- ***Responding to students at risk and students who are highly disengaged***

There is perhaps no greater challenge facing the sector than that of identifying and monitoring the students who are 'at risk' of attrition or poor academic progress. Limited inroads have been made into this problem. However, the targets for expansion and equity are likely to lead to an enhanced focus on 'at risk' students. In some ways, first year retention is a proxy for the appropriateness of the matching of students to courses during recruitment and selection, for the relevance of courses, for the quality of teaching, for the quality of support, and so on. Among the 'at risk' students is a small but persistent proportion of first year students who are very disengaged and appear highly dissatisfied. The precise reasons for these attitudes are difficult to identify and probably quite varied. Whether there are opportunities to reduce the proportion of disaffected students we cannot be sure, however this group is an obvious target for intervention if they can be identified early. Overall, the problems of students at risk and students who are disengaged require institutions to have good data systems in place. We believe this is an area in which much progress has been made, with institutions conducting surveys and ensuring early opportunities for assessment and feedback are in place. Monitoring student subgroups is clearly essential, for this study shows that the student experience varies greatly according to students' backgrounds.

- ***Matching students to courses and institutions***

We find once again with the 2009 findings that some students appear to have a poor alignment between their objectives and the courses in which they are enrolled. This may be due to students having vague goals or misunderstandings, equally it may be due to courses simply not meeting their expectations in terms of relevance and quality. Helping students to clarify their personal objectives for undertaking higher education and improving the matching of the interests and aptitude of students to particular fields of study would be helpful. It is a difficult task to convey in advance the character of the university and course experience in any detail — these really need to be lived to be fully understood — but there

is much that can be done to better inform students of what is offered and to help them make informed decisions about what is best for them. The My University website proposed by the Australian Government can make a helpful contribution, particularly if it is structured so that field of study and course information, the primary interest of students and ultimately the locus of the student experience, is the central organising principle.

- ***Establishing academic standards for the first year***

As yet the quality of the first year experience has rarely been conceptualised or depicted in terms of academic standards. With the establishment of the Tertiary Education Quality and Standards Agency (TEQSA), attention has become centred on an interpretation of academic standards in terms of the learning and academic achievement of graduates. This emphasis on outcomes is appropriate and should be the major thrust of the sector's efforts to understand and gauge standards. However, an exclusive emphasis on outcomes may miss many important dimensions of higher education. Conceptions of standards might also usefully be applied to the quality of university provision in a range of areas and there may be merit in articulating a distinctive set of standards that pertain primarily to the provision of programs for first year students. At the least, an exploration of what might be possible would be worthwhile. Such standards might be interdisciplinary and might focus on standards of provision as well as standards of academic achievement in the first year. With institutional diversification and a likely intensification of competition to recruit students, a framework for academic standards in the first year might provide an important safeguard for the sector. Equally, a national framework for academic standards that is silent on standards for the programs and outcomes for first year students might sell the sector short.

- ***Alerting students to the expectations of higher education study***

The observations and suggestions thus far have been focussed in the main part on ways for enhancing the quality of the provision by universities. Universities have primary responsibilities for quality, of course, however higher education is a jointly produced enterprise in which students actively contribute



to the outcomes. Students have major responsibilities for their own engagement and academic progress. During the next few years attention might be given to ways in which students are informed of the kind of engagement that effective higher education requires. In other words, universities will need to do more to spell out their expectations for student involvement in learning. To some extent, assessment requirements have been the traditional, indirect method for describing the study expectations for students, with possibly undesirable outcomes, and there are a plethora of 'how to study' guides offering practical hints and tips to students. What we are suggesting, however, is that the sector explores the opportunities for developing more sophisticated strategies for making student responsibilities in the higher education partnership more explicit. A 'first year charter' might be a simple starting point, even though documents and statements of this kind are not yet part of the culture of Australian higher education. Regardless of the precise nature of the strategies that might be put in place, any efforts in making expectations clearer are likely to be useful in assisting the increasing number of students who will be entering higher education unfamiliar with its character and with lower levels of achievement in their previous educational experiences.





1. CSHE Research into the First Year Experience, 1994 to 2009

In 2009, the fourth in a series of studies into the experience of first year undergraduate students at Australian universities was conducted. Since 1994, the Centre for the Study of Higher Education of the University of Melbourne has conducted these national studies at five year intervals. The four national studies, spanning 15 years, have now assembled a unique database on the changing character of first year students' attitudes, expectations, study patterns and overall experiences on campus.

The original 1994 study was commissioned as awareness grew of the impact of student diversity in a 'mass' higher education system and the formative role of the first year experience in shaping student attitudes and approaches to learning was first being recognised. At the time of the 1994 study, there were 37 universities in Australia. Seven were selected as representative of the system as a whole and invited to participate in the project.

The 1999 study was an opportunity to repeat the 1994 research, using a slightly modified questionnaire but with a student sample selected from the original seven universities. This study established new benchmarks to monitor changes in patterns of teaching and student study habits.

In 2004, the project team recognised that it was necessary to increase the number of participating universities in order to capture the growing diversity of the higher education sector. Two additional universities agreed to take part, thus allowing for better representation of Indigenous students in the sample and an improved geographical distribution of the participating universities. The questionnaire was also modified in 2004 to reflect changes in the use of information and communication technology and to explore more fully the issue of student engagement identified in 1999. Otherwise, continuity with the earlier surveys was retained.

The nine institutions that participated in 2004 agreed to take part in the 2009 survey. The 2009 findings provide an insight into students' perspectives of their first year of university prior to the implementation of the recommendations from

the 2008 Review of Australian Higher Education led by Professor Denise Bradley. The Review led to the establishment of federal targets to boost the national attainment rate of Bachelor's degrees among 25 to 34 year olds and to increase participation levels of people from low socioeconomic backgrounds. These objectives are likely to influence the nature of course delivery, assessment, student support services and student expectations, at a time when concerns are being expressed about the demographic composition of the academic workforce and the declining attractiveness of the academic profession.

The 2009 First Year Experience findings will be an important benchmark for monitoring the reforms designed to universalise participation in higher education and will be critical for tracking changes in attitudes and experiences of future first year cohorts that are expected to be more diverse in character. As in previous years, the survey instrument was largely unmodified to provide continuity. There were, however, some important enhancements designed to capture the changing nature of the first year experience. These are outlined in more detail in the survey method section below.

The previous studies: An overview of key findings

In order to provide the context for interpreting the 2009 report, there is value in reviewing key findings from the previous three investigations of the first year experience conducted since 1994 across the Australian



- however, compared with 1994, a larger proportion of students in 1999 found university study more fulfilling than school and a smaller proportion believed it was more demanding than school;
- on the whole, there was little change in the level of students' academic orientation or their academic application between 1994 and 1999. However, the proportion of students who reported they got a great deal of satisfaction from study decreased from 43 per cent to 40 per cent; and the proportion who found it difficult to motivate themselves to study had increased significantly, from 42 per cent to 48 per cent;
- there was a striking difference between the 1994 and 1999 responses in the increased proportion of students who were enrolled full-time and engaged in part-time work and the increase in the average number of hours students were employed. There was a nine per cent increase in the proportion of full-time students who were working part-time, and a 14 per cent increase in the mean number of hours they worked. Fewer students were spending five days per week at university and average course contact hours dropped slightly from 1994 to 1999; and
- despite some of the negative perceptions of specific aspects of the first year experience reported in the 1999 study, there were small but significant increases in the proportions of students who were enjoying their course overall and in those who were very satisfied with their initial university experience.

Trends in the First Year Experience concluded that 'the findings suggest a trend of less attachment and commitment to a range of aspects of university life and academic work on the part of those [students] who work longer hours in paid employment' (McInnis, James and Hartley, 2000: xii). The report foreshadowed the likely impact on teaching, learning and the curriculum that might arise from a significantly new orientation of first year students towards the place of university in their lives:

It appears that university study occupies a smaller proportion of a growing number of students' lives. The slight but noteworthy decline in motivation to study, the increase in the hours of paid work, and the trend towards less engagement with the university have implications for policy and practice ... (McInnis, James and Hartley, 2000: xii).

The 2004 study

The purpose of the 2004 study was two-fold: to report on the current status of the first year experience for students and to document ten-year trends since the first year experience surveys commenced. In addition to the seven institutions that participated in 1994 and 1999, another two institutions participated in 2004 in order to reflect the diversity of the Australian higher education system.

The First Year Experience in Australian Universities: Findings from a decade of national studies (Krause, Hartley, James & McInnis, 2005) reported the following findings:

- First year students continued to rate both interest-related and job-related reasons as important in their decision to enrol in university. An increasing number of students also identified parental expectations as an important factor.
- While the proportion of students withdrawing from at least one subject increased, fewer students reported deferral or discontinuing with their study.
- There was a significant decline compared with the previous study in the proportion of students feeling that university had not met their expectations. However, international students were less satisfied than domestic students that their expectations had been met.
- Students believed there was room for improvement in the role school played in preparing them for university: 60 per cent of students reported that school was not sufficient preparation for university and just under one-third felt ill-prepared to choose a university course on leaving school.
- A key indicator of student engagement, the time devoted to academic endeavours, revealed that students were spending less time on campus and had fewer hours of class contact time each week compared with the 1994 students. There was also a significant rise in the number of full-time students undertaking paid work.
- In 2004, students had more positive perceptions of the quality of teaching, although the majority of students reported they did not believe teaching staff take an interest in their progress or provide them with helpful feedback.



- ICT played a significant role in changing the character of teaching, learning and interaction in the first year. The majority of students in first year accessed online course resources, however only a minority participated in online discussion.

We concluded in 2004 that while there were still areas of concern in the first year student experience, on the whole the 2004 students were more positive about their university experience than students in previous surveys. At the time, we speculated that this was partly because 'universities have become more responsive to the needs of first year students during their transition to university and their first year on campus.' (Krause, Hartley, James & McInnis 2005: 5).

One continuing source of concern, however, was the differing experiences of demographic subgroups, particularly equity groups. The report of the 2004 study concluded:

First year students in 2004 have a clearer sense of how university study will help them achieve career goals. They are typically more satisfied with their university experience as a whole than were first year students ten years ago. However, there is strong evidence of demographic subgroup differences that warrants close monitoring and further investigation. (Krause, Hartley, James & McInnis 2005: v)

The findings and lessons learned from this suite of three studies provide an educative backdrop for the 2009 study of the first year experience. Since 1994 we have observed many changes among the first year student cohort and in the sector as a whole. Like its predecessors, the 2009 investigation represents an important barometer for the sector as it continues to experience significant changes and reforms in a range of areas. The design of the 2009 study is described in the next section.

The 2009 context and the aims and method of the present study

Over the past 15 years, a variety of influences have changed the character of the higher education system in Australia. These influences include an increasing proportion of students who are managing study with other commitments such as paid work and the push for income from international and (until recently) full fee paying domestic students. These and other factors have increased the diversity of the student body and changed student expectations. Universities have been required to respond accordingly. Approaches to teaching have

been reconsidered and student support services have been adapted to respond to the challenges of transition.

A number of initiatives assist universities in their goal of providing high quality educational experiences. Several of these initiatives are undergoing noteworthy reform at the time of this report. A few key developments are outlined below and it is expected that the findings of this study will contribute to timely sector-wide discussions about how to further enhance the quality of policy and practice in relation to the first year experience in higher education.

- The Australian Universities Quality Agency (AUQA), established in 2000, conduct audits that determine whether higher education institutions have appropriate quality assurance mechanisms and appropriate academic standards. AUQA will soon be replaced by the Tertiary Education Quality and Standards Agency (TEQSA) - a single national regulatory body designed to assure the quality of higher education provision across the tertiary sector.
- The Australian Learning and Teaching Council (ALTC) aims to recognise, facilitate and communicate outstanding practice in teaching and learning through a suite of funding opportunities and other initiatives. ALTC's programs are now a well-established part of the sector.
- For a period following the 2004 study, DEEWR provided revenue to support learning and teaching in institutions via the Learning and Teaching Performance Fund (LTPF). The LTPF rewarded universities on the basis of a range of measures of the effectiveness of teaching and learning. The LTPF will soon be replaced by a new indicator framework for the higher education sector, reinforcing the federal government's emphasis on the quality of the student experience and outcomes. As part of this scheme, universities will be rewarded for their efforts in increasing the participation and attainment of students from under-represented backgrounds in the sector.

The survey method

Selection of the student sample occurred through one of two methods. If the institution was also participating in the Australasian Survey for Student Engagement (AUSSE), the AUSSE project team selected both samples to minimise the possibility that a student would receive both surveys. Where



the institution was not participating in AUSSE, a similar protocol to previous First Year Experience surveys was employed. We asked institutions and the AUSSE team to provide a randomly selected sample of 30 per cent of students who were:

- commencing higher education;
- internal;
- enrolled in bachelor, associate degree or undergraduate award programs (students enrolled in non-award or enabling courses were excluded); and
- stratified by the 11 DEEWR Broad Field of Education categories.

Once samples were selected, institutions had the opportunity to send students' details to the project team, or to distribute questionnaires internally. Two of the nine participating universities chose to mail the surveys themselves for privacy reasons.

The project sought to ensure that a sufficient number of responses were collected from Indigenous students. In recognition of the relatively small proportion of Indigenous students in higher education overall, the project team decided that a population survey of the participating universities was preferable to a sample. This sample included students enrolled in non-award and enabling programs.

The first mailout of questionnaires took place in early August 2009. A reminder was sent to non-responding students via email four to six weeks later in September. This email contained a link to an online version of the paper survey. Depending on response rates, a number of institutions' students were sent a second reminder, also via email. A small incentive of five \$50 gift vouchers was offered to students who wrote an email address on a separate front cover of the survey for inclusion in a prize draw (email respondents had to enter an email address on a webpage. Respondents' email addresses were sent to the project manager's email address and were not included in the file of respondents' answers). The students were assured that the email address would remain confidential and would in no way connect them to their responses. A total of 2422 useable surveys (24 per cent) were returned. The response rates varied across institutions from 16 per cent in two institutions to 33 per cent in one institution.

In 1994 the response rate was considerably higher, with an overall rate of 57 per cent and rates of over 60 per cent in several institutions. The response

rate dropped to 37 per cent in 1999, and then to 33 per cent in 2004. Declining response rates are of obvious concern in terms of representativeness and generalisability of the findings, but they are consistent with similar mailed surveys conducted by the Centre for the Study of Higher Education and other national research organisations. The response rate is most likely also affected by the increase in survey demands on first year students. We believe that the use of an online survey invitation to non-responding students helped ameliorate a larger decrease in the survey response rate, as well as resulting in a faster turn around time from survey dispatch in comparison to traditional mail-out methodology. Further details of the design of the study, the selection of samples from the nine institutions and the characteristics of the present sample of first year students are contained in Appendix 1.

The questionnaire used as the basis for the previous three studies (in 1994, 1999 and 2004) was largely retained. Nevertheless, a few key changes were made to optimise our chances of capturing some of the changing dimensions of the first year experience. A small number of items were discarded as they had failed to provide useful information in the previous survey, or were now considered too dated to use. Several questions were slightly re-worded for greater clarity and to best reflect the range of terminology used across the sector. The most significant amendments were as follows:

- the expansion of the 'managing your commitments' section, in light of the ongoing rise in the number of full-time students undertaking paid work and the impact of financial stress on students (James et al., 2007);
- the inclusion of items designed to assess student engagement in a range of important areas, such as community engagement activities, international study experiences, and awareness of research within the university;
- the inclusion of items to explore student perceptions of the coherence and relevance of their subjects; and
- as in 2004, the items on information and communication technologies (ICTs) were altered to reflect the emerging ICT landscape of the past five years. We also adjusted the response scale for ICT items to distinguish whether students were not using a particular



ICT through personal choice or lack of availability.

The 2009 sample compared with the national first year population

While we endeavour to obtain a sample that is representative of the first year population, the demographic subgroups in the 2009 sample differ in a number of ways from the national student population. Given that 2009 census data was not available during the preparation of this report, subgroup proportions are compared to the DEEWR 2008 national data (see Table 1.1).

As with previous surveys, international students continue to be underrepresented. Historically, the majority of survey respondents have been school-leavers. This pattern continued in 2009, with the students aged 19 years and under over-represented when compared to national statistics (67 per cent in the sample, compared with 53 per cent of the commencing population in 2008). In both the sample and the national statistics, the 20 to 24 year old group has increased while there are fewer students aged over 25 starting a university degree. A gender difference in survey respondents is also evident for the present survey (69 per cent of respondents are female, compared with 56 per cent nationally).

In 2004, attempts were made to ensure representativeness of Indigenous students and Broad Field of Education (BFOE) categories, by conducting a population survey of Indigenous students and using a stratified sampling process for BFOE across institutions. This methodology was relatively successful and was used again in 2009 to similar effect. The 2009 sample has a slightly larger proportion of Indigenous students compared to national statistics and the distribution across students in different BFOEs was relatively similar, although three were somewhat underrepresented: Management and Commerce, Creative Arts and Society and Culture. The other BFOE categories were relatively similar to the national figures, although no DEEWR data exist for commencing students undertaking a combined degree. Students from low socioeconomic backgrounds and those from rural areas of Australia were well represented in the survey sample. However, students from Non-English Speaking Backgrounds (NESB) were markedly overrepresented. Care must be exercised when interpreting this result, given that students were asked in the survey whether a language other than English was spoken at home, which, in itself, does not necessarily indicate that a student is of

NESB status as per DEEWR criteria.

The 1994—2009 samples compared

- There has been a slight downward trend in the proportion of students aged 19 years and under since 1994 (1994: 71 per cent; 1999: 74 per cent; 2004: 67 per cent; 2009: 67 per cent).
- The proportion of 20 to 24 year olds continues to increase (1994: 17 per cent; 1999: 13 per cent; 2004: 20 per cent; 2009: 22 per cent), while the proportion of students aged 25 years and over has remained relatively stable over time (1994: 12 per cent; 1999: 10 per cent; 2004: 13 per cent; 2009: 11 per cent).
- There was a higher proportion of females in the 2009 study, where they represent 69 per cent of the sample, compared with the previous studies.
- The proportion of students born in Australia has remained stable since 1994, with approximately 75 per cent of respondents born in Australia. There has been a decrease in the proportion of students with parents born in Australia, with 45 per cent of mothers (compared with 40 per cent in previous studies) and 46 per cent of fathers born overseas. The proportion of students with fathers born overseas has increased since 2004 (41 per cent) although was similar in 1994 and 1999 (45 per cent).
- The proportion of students who speak a language other than English at home has increased since the last survey although it is comparable with 1994 figures (1994: 28 per cent; 1999: 23 per cent; 2004: 25 per cent; 2009: 29 per cent). Fifty-one per cent of the current sample migrated to Australia within the last ten years. This is a significant increase on previous years (1999: 24 per cent; 2004: 46 per cent).
- Chinese and Malaysian students continued to represent the largest proportion of overseas born students (both 4 per cent). There was significant change in the proportion of Indian students over the last five years (2004: 1 per cent; 2009: 2 per cent).
- The proportion of students from low socioeconomic backgrounds has remained stable at 15 per cent. The proportion of students whose parents do not have a university degree has fluctuated over the past



Table 1.1 Proportionate comparisons between 2009 study sample and the 2008 commencing undergraduate population (% of total number of students)

Demographic subgroups	Proportion of 2009 study sample (%)	Proportion of 2008 commencing undergraduate population ^a (%)
Age		
19 years and younger	67	53
20-24 years	22	28
25 years and older	11	19
Gender		
Female	69	56
Male	31	44
Equity groups ^b		
ATSI	2	1.5
NESB	29	4
Low SES	15	17
Regional/remote	20	21
Student type		
International	11	32
Domestic	89	68
Broad Field of Education		
Society/Culture	14	21
Management/Commerce	11	30
Education	7	8
Health	18	15
Sciences	7	8
Creative Arts	5	9
Engineering	7	7
Information Technology	1	4
Agriculture	1	2
Architecture/Building	3	3
Food/Hospitality	0.2	0.2
Cross-disciplinary/combined degree	23	-- ^c

^a Figures are for commencing undergraduate students enrolled in Bachelors (including Graduate entry), associate degree, diploma and other award courses unless otherwise specified.

^b DEEWR equity group data are reported for commencing undergraduate domestic students.

^c Not recorded in DEEWR statistics.

15 years (1994: 64 per cent; 1999: 57 per cent; 2004: 64 per cent; 2009: 60 per cent). The proportion of parents with postgraduate university degrees has risen significantly over the past five years (mothers: 2004: 10 per cent; 2009: 12 per cent; fathers: 2004: 14 per cent; 2009: 17 per cent).

- After remaining stable at approximately 53 per cent in the first three studies, the proportion of government schooled students dropped to 49 per cent in 2009. The proportion of Catholic school students has remained stable over 15

years (21 per cent), while the proportion of independently schooled students has changed slightly over 15 years (1994: 24 per cent; 1999: 21 per cent; 2004: 23 per cent; 2009: 26 per cent)

The institutions

The seven institutions that participated in the 1994 and 1999 studies and the two additional institutions that participated in the 2004 and 2009 studies are briefly described below. As with the earlier studies,



it is not our intention to provide comparisons of performance or to rank institutions but to emphasise system-wide issues concerning the first year experience.

Universities included in the four national studies

Established University is a large and old university offering a wide range of professional programs. Most programs have high entry scores for admissions. International fee-paying students form a significant proportion of the student body. The student population is younger than other institutions in the study because of the high intake of school-leavers.

New University was created to service a large industrial suburban region of a capital city. It has a number of campuses in the area, and a significant city campus. New University has made a point of developing courses to serve the local area and has a policy of open access.

Suburban University had its origins in the expansion of higher education in the 1960s. It is a mid-sized university offering a wide range of courses. It includes a main campus some 30-40 minutes travel from the city and a number of smaller campuses, including several in rural areas.

International University is also a well-established university. It has a large student population and is well-known for the sizeable numbers of students from Asia that it attracts.

Regional University is a medium sized university in a rural location. A distinctive feature of this university is the high proportion of first year students who live in residential colleges in or near the campus, and the high proportion of distance education students in the overall student population.

The University of Applied Studies has a reputation for practical courses and applied courses, partly the result of its origins as an institute of technology. It is medium to large in size, has strong industry-education links and offers courses in many professional areas. The student population profile is close to the national average.

Consolidated University was established in the early 1990s, however, its combined campuses have a much longer history. It is a large university, well known for its vocationally oriented programs. It offers a wide range of courses. Consolidated University has a larger than average proportion of mature-aged students in first year courses and has

adopted policies to encourage alternative entry pathways.

Universities included in the 2004 and 2009 studies

Evolving University was established as a university in the 1980s. It is a relatively small institution, but it serves a large constituency that includes both an urban region and a dispersed rural region. It has a large proportion of part-time students in its undergraduate population.

Traditional University is a long-established institution with a wide range of degree programs. It is known for its highly competitive entry and the relatively high proportion of school-leavers in its first year intake.



2. Going to University: Aspirations and Sense of Purpose

- The expectations of parents or family continue to play a significant role in shaping students' decisions to enrol in university study. Over 15 years, we have seen an increase from one in four to more than one in three students identifying this factor as key to their decision-making.
- The clarity with which students express their reasons for coming to university continues to sharpen as an increasing majority agree that they know why they decided to enrol. The figure has increased from 72 per cent to 88 per cent over the last decade.
- The number of students considering deferral of studies has declined significantly since 2004, from 28 per cent to 23 per cent. However, reasons for possible deferral have intensified in some areas. There has been a sharp rise in the proportion of school-leavers saying they dislike study and university was not what they expected. Meanwhile, problems with daily travel, family commitments and paid work commitments have become even more significant for a notable proportion of students. Pursuing employment rather than study has also been identified by more students compared with previous years, particularly those in the 20-24 year age bracket.
- Student enrolments in online modes of delivery show a definite upward trend. This increase is particularly evident among first year students from rural areas and low socioeconomic backgrounds who are studying part-time. Engagement in this form of learning has significant implications for student support, particularly among those students who are first in their family to attend university or those who may not have experience in self-regulated, independent approaches to learning.

Reasons for enrolling

Over the past 15 years, first year students in Australian universities have consistently attached the highest priority to enrolling in university studies in order to pursue fields of interest. Table 2.1 shows the steady pattern of responses in this

regard from the vast majority of respondents. The response pattern of agreement is relatively uniform across demographic groups, though international students are somewhat less likely to indicate that they enrolled to pursue a field of interest. The item is also a potentially useful discriminator in terms of students' motivation for staying at university as those considering deferral of study are significantly less inclined to say they enrolled to pursue an area of interest. Overall, the positive trend on this item is an important one for it highlights the critical importance of ensuring that curricula and learning experiences in the first year are designed to provide ample opportunity to engage and intellectually stimulate students in their chosen field of study. There may also be merit in using items such as this to find out more about first year students' motivations for study in order to determine the most effective strategies for engaging and retaining them.

As well as enrolling in university studies to pursue areas of intellectual interest, the vast majority of first year students (86 per cent) also agree that they choose university as a way to improve their job prospects. A slightly smaller majority (75 per cent) say that university is important as it provides training for a specific job. Response trends on both these items have remained fairly steady, with a slight upward trajectory over the past 15 years (see Table 2.1). Selected demographic subgroup differences are as follows:

- students from rural backgrounds are significantly more likely to agree on the importance of improving job prospects through university study, compared with their urban counterparts;
- females and students from low socioeconomic backgrounds tend to attach significantly greater importance to the job training opportunities afforded by university study;



Table 2.2 **Sense of Purpose 1994-2004 (% of students)**
(1994, N=4 028; 1999, N=2 609; 2004, N=2344; 2009, N=2422)

		Disagree		Agree
I am clear about the about the reasons I came to university	1994	10	16	24
	1999	12	17	72*
	2004	4	11	85**
	2009	3	9	88*
I know the type of occupation I want	1994	21	18	62
	1999	24	17	59
	2004	17	16	67**
	2009	15	19	66
University is just marking time while I decide my future	1994	72	17	11
	1999	69	18	13**
	2004	69	18	13
	2009	66	19	15

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

by a modest rise in the proportion of students indicating that they know what type of occupation they want. As expected, students in the fields of Education and Health are most likely to agree that they have a clear sense of purpose with respect to their desired occupation. For all items on the sense of purpose scale, there are age effects with students progressively more certain within each age bracket about why they enrolled and what type of occupation they wish to pursue.

With respect to sense of purpose about one's chosen occupation, students from low socioeconomic and rural backgrounds are significantly more likely to have a clear idea of the career they wish to pursue. Similarly, females are more likely than males to be clear on this matter.

The third item in Table 2.2 'university is just marking time while I decide my future' still represents the minority of students, though there has been a small increase (from 13 per cent in 2004 to 15 per cent in 2009) in the proportion of students agreeing with this statement. Students from low socioeconomic backgrounds are slightly more likely (16 per cent compared with 13 per cent) than their peers to say they are marking time, while students with a language background other than English are significantly more likely to indicate that they are marking time, waiting to decide their future. By contrast, females and students from rural backgrounds are significantly less likely to feel this way.

As in 2004, the first year student sample shows an increased sense of purpose and greater clarity about occupation compared with the groups from

the previous three studies. Yet paradoxically, a growing proportion of students are using university studies as a way to mark time while they decide on their future plans. This apparent contradiction in the responses aptly depicts the challenges of working with heterogeneous student cohorts and the need for targeted strategies to meet the needs of different student groups.

The trends identified in this section are worth noting as the sector prepares to enrol more students from non-traditional backgrounds who may not otherwise have seen themselves as university students. Universities may benefit from devising strategies for identifying and monitoring students' sense of purpose and reasons for coming to university. It will be particularly important to consider the potential impact of these factors on student retention and engagement among non-traditional demographic subgroups.

Student experiences and decision-making prior to first year enrolment in 2009

Previous study experiences

A little more than one in four (28 per cent) respondents had commenced or completed a university course (including enabling courses) or a VET (vocational education and training) course before 2009. Table 2.3 shows the percentage of all students who had commenced or completed a previous course. These findings mirror those of 2004 and suggest that among those sampled, there is relatively little movement from the VET

sector to university. Only a quarter of respondents who reported prior studies had commenced or completed a VET course before enrolling in university. If the VET-to-university channel is considered to be an important pathway for increasing undergraduate participation rates in Australian higher education, further work will be needed across the tertiary sector to determine strategies for enabling and promoting such pathways.

Older students, international students and those from language backgrounds other than English tend to be over-represented among those who have commenced or completed a university or non-award preparatory course prior to 2009. Unsurprisingly, international students are far less likely to have come through the VET pathway. By contrast, Indigenous students in the sample are significantly more likely to have completed a VET course before coming to university (23 per cent compared with 7 per cent for non-Indigenous respondents).

Those considering deferring their study are slightly more likely than their counterparts to be students who have completed a VET course, though the difference is not significant. Those from low socioeconomic backgrounds are over-represented in the group who report having started but not completed a university course prior to the year of the survey (14 per cent compared with 11 per cent for mid and high socioeconomic groups).

These findings point to the need for more nuanced approaches to understanding the range of pathways students may pursue as they prepare to enter university. The trends with respect to previous study are not noticeably different to

those in 2004, however as the Australian higher education sector explores new ways to increase student participation, it will be important to examine strategic approaches to increasing the proportion of students who use pathways such as VET and enabling courses to enter university.

Course preference

Course preference is an important determinant of first year students' attitudes to study and motivation to stay at university. Over the past five years there has been a significant jump in the proportion of students reporting that they are in their first preference course (69 per cent in 2004 compared with 75 per cent in 2009). This is a noteworthy development given the relative stability of the trend in the decade prior to 2004.

Age tends to play a part in course preference trends, with 85 per cent of those aged 25 or more in the course of their first preference (compared with 72 per cent of those 19 years or younger). This older age group is also more likely to be studying part-time. The combination of part-time study in a course of first-preference may be considered an enabling factor in terms of engaging and retaining mature students in higher education. Indigenous students and those from rural backgrounds are significantly more likely to be studying in a course of first preference, as are international students in the sample.

On the other hand, students from language backgrounds other than English are significantly less likely than their peers to be studying in a course of first preference. Students from low socioeconomic backgrounds are also significantly less likely than their peers to be in their first preference course: 69 per cent of students from low socioeconomic

Table 2.3 Previous commenced or completed courses (% of 2009 respondents)
(N=2422)

Type of course commenced or completed before 2009	% of all respondents
Completed a university degree/ diploma course	5
Completed a university enabling course	3
Completed a VET course	7
Commenced a university course	12
Commenced a VET course	1
Total	28



backgrounds compared with 75 per cent of first preference enrolments for students from mid- to high socioeconomic groups. This represents a high risk factor for retaining disadvantaged students in the sector. Almost a third of students from low socioeconomic backgrounds find themselves in courses that are relatively low on their list of preferences. There may be various reasons for this, ranging from the quality of advice given to school students by teachers and guidance officers about course choices, to students' capacity to access sound advice from other sources such as the internet, family members and friends. Students from lower socioeconomic groups are more likely to be the first in their family to attend university and, as a result, may lack the social and cultural capital needed to make informed decisions about university study. This is an important issue to address across the sector as strategic approaches are sought to increasing not only participation, but engagement and success of under-represented groups in higher education.

Deferring first enrolment and the 'gap year' experience

The proportion of first year students who deferred their university enrolment the year prior to the survey has increased slightly but not significantly in five years: from 11 per cent in 2004 to 13 per cent in 2009. Among those who deferred, the experience is comparable to their peers in terms of enrolment in first preference courses and self-reported achievement. Some defining characteristics of this subgroup in 2009 are as follows.

- They tend to be in the 20-24 year age group.
- A significant proportion are from rural and isolated areas of Australia.
- They are significantly more likely to be enrolled in external units and in courses in other institutions. In other words, this group of students appears inclined to be more likely to experiment with their study configuration options.
- They are less likely to feel overwhelmed by the volume of work at university compared with their peers who went directly to university study.
- They are more inclined to be involved in extra-curricular activities and to be planning an international study experience.
- They report socialising with family and friends

for more hours each week than their peers.

Among those who deferred, one in seven chose to pay their university costs upfront, rather than taking the deferred payment option. This group is significantly more reliant on Youth Allowance or Austudy as their primary source of income, along with casual work. Socioeconomic status based on the postcode formula did not play any differentiating role in determining student deferrals, however using the parental education indicator, students from higher socioeconomic backgrounds tend to be over-represented in the sample who deferred their study. Using this indicator, significantly more students from a high socioeconomic background deferred study (32 per cent deferred compared with 25 per cent who went directly to university), highlighting the possibly increasing popularity of the 'gap year' among students with access to financial resources take the opportunity to travel and work overseas for a year.

As the gap year trend increases, it would be beneficial to investigate more deeply the relative merits of students taking time out to further develop their skill set and broaden their horizons. These data suggest that those who defer tend to have a more holistic, all-round experience, including involvement in extra-curricular activities such as sport and clubs and they also tend to be thinking about further travel options.

Increasing flexibility in enrolment configurations

Over the past five years there has been an observable shift towards increasing flexibility in the ways students configure their course enrolment. The popularity in flexible access to online learning has been widely documented and there is evidence in this study of a significant upward trend in student preferences for flexible study options. In 2009, eight per cent of first year respondents reported enrolling in externally delivered online courses, compared with only two per cent in 2004. Meanwhile, among those enrolled in external study modes, there has been a notable shift away from enrolment in distance education units that are not offered online. Enrolments in Open Learning Australia units – all online – also show an upward trend over the past five years (two per cent of the sample in 2009 compared with half a per cent in 2004). While the figures themselves are not large, they are worth noting and monitoring. These figures point to the need to watch closely the trends and associated implications of students' preferences for online course delivery.



As expected, those enrolled in external online study are more likely to be part-time and mature-age students. Online enrollees are also more likely to be from rural and remote areas of the country, and from low socioeconomic backgrounds. First year students enrolled in online environments regarding the additional support and self-regulatory skills that may be required for some students who study in online environments, particularly if they have limited real-time access to staff and peer interaction. The trends in these figures, small though they may appear, highlight the importance of ensuring that appropriate systems are in place to ensure successful outcomes for students who may be at risk of failure if they enrol in online study without appropriate support mechanisms. Since students from rural and remote areas are more likely to be the first in their family to study at university and given that they are over-represented among online enrollees, it is important to ensure that targeted assistance is made available to support them in their transition to new forms of learning and new approaches to engagement, particularly in online environments.

Change and uncertainty

Over the past 15 years the first year reports have documented first year students' responses to change and uncertainty during the many challenging transitions represented by the first year of university. As student demand for greater flexibility increases, it is important to monitor whether this includes increased patterns of movement between courses, between institutions and between study modes. These are the issues for consideration in the section to follow.

Course and enrolment changes in 2009

There has been no change in the proportion of students changing courses since the 2004 study. Surprisingly, the proportion of students changing courses has remained constant at seven per cent across both samples. Similarly, there has been no change in the very low three per cent of first year students who indicate that they changed institutions during the first semester of their first year. Further, there are significantly fewer students hoping to change to a different course after their first year (16 per cent in 2009 compared with 19 per cent in 2004), and an even greater decline in the proportion of students hoping to change universities (eight per cent in 2009 compared with 12 per cent in 2004).

Overall, the picture is that of a more stable first

year population that is less inclined to change courses or universities than was the case in 2004. There are some demographic subgroup patterns evident within these figures, with students from low socioeconomic backgrounds and rural areas significantly more likely to change institutions early in their first year. One reason for this may be the 'churn' or 'stepping stone' phenomenon in which students who may not have sufficiently high scores to enter the university of their choice use their first year in one institution as a stepping stone to a preferred destination. Another reason may be attributed to possible limitations in the quality of the advice these students received before making their university choices. These are suppositions, however, and a qualitative methodology would be warranted to gather data that would allow more detailed analysis of this noteworthy phenomenon.

With respect to changing courses, students who speak a language other than English at home are significantly more likely to want to change courses after their first year. Younger students in the school-leaver age group are also somewhat more inclined than their older peers to say they want to change courses. Among those who have changed courses during the first semester of their first year, low achievers are over-represented. This group is also significantly more likely than higher achievers to report difficulty comprehending course material and managing workload. These factors therefore provide some clues as to some of the reasons behind students' decision-making regarding course choice and change.

It is notable that those students who indicate that they are strongly considering deferring their study are also significantly more likely to have changed courses during their first year (10 per cent compared with six per cent of their more persistent peers). One in four of those wanting to defer also say they want to change courses, while one in six say they want to change universities. For the student considering deferring or leaving university study altogether, the experience is a complex one with many uncertainties and desires for change. These are important issues for universities to consider as they monitor student aspirations and put in place advising mechanisms to assist students who may be uncertain about their course and university choices and therefore resort to departure in the absence of support mechanisms to assist them during this challenging time of uncertainty.



Table 2.4 Reasons for considering deferring, 1999-2009 (% of students)
(1999, n=840; 2004, n=638; 2009, n=548)

		Not relevant	Neutral	Important/ very imp.
Emotional Health	1999	42	12	46
	2004	36	12	52
	2009	35	10	56
I wanted to change courses	1999	47	11	42
	2004	45	13	42
	2009	50	13	37
Financial reasons	1999	55	11	34
	2004	46	15	39
	2009	47	13	40
University wasn't what I expected	1999	45	19	36
	2004	48	24	28
	2009	43	23	34*
I disliked studying	1999	43	19	37
	2004	46	27	27
	2009	38	22	40**
Physical health	1999	64	10	26
	2004	62	11	27
	2009	59	11	30
Problems with daily travel	1999	71	10	19
	2004	70	11	19
	2009	62	10	28**
Paid work commitments	1999	71	8	21
	2004	78	10	12
	2009	74	8	18**
Family commitments	1999	75	9	16
	2004	73	10	17
	2009	65	10	25**
I found employment	1999	82	8	11
	2004	83	7	10
	2009	76	7	17**

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

27 to 40 per cent of students saying they dislike study. As one might expect, this reason was more prominent among the school-leaver age group (45 per cent) who planned to defer than it was among the more mature students (17 per cent). Males were slightly more likely to cite this as a reason for wanting to defer study. There has also been a significant increase in the proportion of students who plan to leave because university is not what they expected it to be. This is again more likely to come from school-leavers than from older students, though there are few other significant demographic subgroup differences on this item.

The sector would do well to take note of this development as the widening participation targets are likely to mean that more and more students will enter university from non-traditional backgrounds and possibly less well informed about what to

expect from a university experience. If this is an inhibitor to retention, it should be addressed through carefully designed orientation and ongoing transition programs to ensure that students have multiple opportunities to clarify mutual expectations of the university experience.

Over the past five years, significant increases are evident in the proportion of students attaching importance to the following factors that contribute to thoughts of deferring or departing:

- problems with daily travel – students under the age of 25 are more likely than older students to identify this as an important issue;
- family commitments – this factor is significantly more important to rural students, female students, mature students over 25 years and Indigenous students;





3. Adjusting to University Study

- First year students generally appear to be realistic about grade expectations and university assessment standards. The majority received grades the same or higher than they expected, though some still experience a mismatch between expectations and reality with a third scoring lower grades than they had expected in the first semester.
- One in two school-leavers now say that school was a good preparation for university study. This represents a positive development and is significantly up on 2004 findings. Overall, first years are more positive about the quality of advice given by teachers, though there are some noteworthy demographic differences.
- Among school-leavers there is notable diversity of experiences and views. International students and low achievers stand out as having significantly different experiences and greater pressures over such issues as money compared with their peers.
- Students from rural areas and low socioeconomic backgrounds are far less inclined to say that their final year was good preparation for university. This may point to the disparity in the range of subject choices and access to advice for young people in these demographic subgroups. In addition to feeling significant pressure resulting from the financial commitment their parents have made, this pressure is exacerbated among students from low socioeconomic backgrounds who also feel that their parents have little understanding of what university is all about. These tensions and pressures represent significant challenges for students from under-represented groups.
- There is a bundle of factors identifying students at risk of failure in the system. These include low achievement, pressure from financial commitments, perceived lack of parental understanding and social support, lack of preparation for university study, and excessive hours of paid work. Coupled with these factors is the likelihood that students at risk are also less likely to study with other students, to report working consistently through the semester, and to be enjoying their courses.

Student expectations of first year university

First year students' expectations of what it will be like to study at university are important for shaping their attitudes and approaches to the first year experience in all its dimensions. Unrealistic expectations of the amount of study time required or uncertainty about the standard of work expected inevitably leads to uncertainty, anxiety and potential failure in the first year. Since 1994 the proportion of students who express a belief that university has not lived up to their expectations has remained stable (18 per cent in 1994 compared with 17 per cent in 2009).

As noted five years ago, it would seem that students are increasingly well informed about what to expect at university. Factors such as achievement, socioeconomic background, rurality and enrolment mode did not play a significant part in determining students' assessment of whether or not university had lived up to expectations; neither are there evident gender or age effects. Nevertheless, noteworthy subgroup differences are apparent (see Table 3.1). For instance, differences emerge based on international background, number of hours of paid work per week and achievement. International students, low achievers and full-time students in paid work more than 16 hours per week tend to share the view that university has not lived up to expectations.

There may be various reasons for these findings. For example, international students may have completed their schooling in a very different learning environment to that of their Australian peers. They almost certainly do not have the same level of access to university



Table 3.1 'University just hasn't lived up to my expectations': Mean scores by selected student groups, 2009 (1=strongly disagree, 5=strongly agree)

	% of students	Mean
Low achievers	26	2.73
High achievers	13**	2.26**
Students considering deferral of study	31	2.89
Students not considering deferral	12**	2.23**
International students	22	2.68
Domestic Australian students	16*	2.35**
Paid work 16+ hours per week (full-time study)	20	2.53
Paid work 1-15 hours per week (full-time study)	16*	2.32**
Low scores on comprehending and coping scale	22	2.14
High scores on comprehending and coping scale	12**	2.62**

Asterisks denote a significant change from the finding five years earlier. (* = significant at .05, ** = significant at .01)

pre-enrolment information days and campus visits compared with students who live in the same city or state as their chosen university and thus their expectations may be influenced by only a limited number of factors. Students who are working more than 16 hours per week and carrying a full-time study load may have unrealistic expectations about what is manageable in terms of the work-study balance, though we acknowledge that for some, long work hours are a necessity to pay the bills. It is important for universities to monitor students' work patterns and to ensure that targeted advice is provided early and often with respect to managing work and study. Part-time study options should be strongly encouraged if students are not coping academically or are uncertain about their ability to balance work and study.

Students who are at risk of failure typically manifest a range of negative attitudes and low satisfaction with respect to their courses and university experience as a whole. Strategies for identifying and monitoring students at-risk of failure should be a feature of first year transition and support programs, particularly in the first semester. Shaping these students' perceptions about what to expect of themselves and of the university experience should be considered a strategic institutional priority. Equally important is a mutual emphasis on institutional expectations about time management and the development of study skills in order to avert the risk of failure.

Adjusting to university assessment and standards

One of the most telling indicators of whether or not first year students are prepared for success

at university is their achievement on their first major graded assignment. A major component of transition to first year study involves coming to terms with the standards of work expected and the required assignment preparation skills in particular discipline areas. These skills might involve learning how to reference in a certain style, understanding the genre of writing expected and coming to terms with what it is to produce scholarly output of an appropriate standard. For many students, the submission of the first assignment can be a very stressful experience because it brings together a range of requirements that may be quite alien to students who may not have previous experience of university study. Most universities provide extensive supports within and beyond the curriculum to help students to develop the requisite skills to assist with assignment preparation. These include online writing and referencing tutorials, examples of previous assignments in the unit by way of providing positive and negative exemplars and various other preparatory sessions. There is also a growing recognition of the critical importance of clear assessment guidelines and marking criteria so that expectations are explicitly communicated.

Compared with 2004, the grade distribution for students' self-assessment of their overall achievement for first semester is almost identical, with slightly fewer students in the 50-60 per cent band. Once again, this gives us confidence that students are making realistic assessments of their achievement. With a mean grade of 70 per cent and only two per cent of respondents recording a grade of less than 50 per cent and the majority above 60 per cent, it is fair to assume that the survey is somewhat skewed towards students who are



Table 3.2 School and university compared, 1994-2009 (% of students agreeing that a statement is important)

	1994 (n=2897)	1999 (n=1910)	2004 (n=1602)	2009 (n=1610)
I feel pressured by the financial commitment made by my parents to send me to university	25	25	23	20
I would have preferred starting with a general first year at university before choosing a specific course	28	23**	25	20**
The standard of work expected at university is much higher than I expected	45	43	41	40
I was not really ready to choose a university course on leaving secondary school	34	34	30*	26**
My final school year was a very good preparation for the study I am now doing	36	34	43**	51**
My parents have little understanding of what I do at university	31	31	32	32
The subjects at university clearly build on my study at school	34	33	42**	51**
I received good advice from teachers at my school about choosing my course	--	--	52	58**

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

array of choices in the first year, followed by later specialisation, may be helping to meet the needs of some first year students who prefer not to specialise early in their degree program.

Some subgroup differences pertaining to transition from school to university emerged from the data based on students' disciplinary background. These include:

- Society/Culture students experienced the most pressure to go to university;
- Management/Commerce and Science students are most likely to report receiving good course advice from school teachers;
- Science students say they feel most pressured by their parents' financial commitment to send them to university. They are also more likely than all other discipline groups to feel that first year university repeats a lot of what was done in school;
- Education students are the ones most likely to believe that the standard of work at university is higher than expected;

- Science, Health and Engineering students tend to find that their final year of school was good preparation for university and that their subjects build on what was done at school.

Adjusting to study in first year

Students' integration into the academic life of the university is an important predictor of success. To monitor students' academic adjustment, we have used several attitudinal and behavioural indicators over time. These are summarised in the form of two scales, as discussed below.

Academic orientation

Three items comprise the academic orientation scale (see Table 3.3 and Appendix 1). This scale gauges students' enjoyment of intellectual challenge and the satisfaction they derive from studying, as well as the stimulation they receive from lectures. On the whole, student views have remained steady in relation to intellectual challenge and level of satisfaction derived from study. We retained the item on lectures since this remains the dominant mode of engagement in large first year classes.



Table 3.3 Academic Orientation, 1994-2009 (% of students)
(1994, N=4 028; 1999, N=2 609; 2004, N=2344; 2009, N=2422)

		Disagree		Agree
I enjoy the intellectual challenge of subjects I am studying	1994	12	27	61
	1999	12	27	61
	2004	12	25	63
	2009	11	27	62
Lectures often stimulate my interest in the subjects	1994	20	35	44
	1999	19	35	46
	2004	19	31	50*
	2009	21	32	47*
I get a lot of satisfaction from studying	1994	22	35	43
	1999	25	35	40*
	2004	18	33	49**
	2009	18	33	49

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

Even in online modes, students often listen to podcasts or streamed versions of lectures as part of their course delivery. While we strongly advocate for the benefits of small group learning, we recognise that logistically lectures remain intrinsic to the university learning environment in most courses, particularly as the sector increases in size.

In 2004, half of the first year students surveyed reported that lectures often stimulated their interest in the subject matter they were learning. In the past five years, this figure has declined to 47 per cent agreement. As might be expected, support for lectures as a stimulating context for learning tends to increase with age. Almost two-thirds of students over 25 years are comfortable with the lecture mode, while only 44 per cent of school-leavers agreed with this item. Low achievers were also less likely to agree that lectures stimulated their interest. There has been much debate over the future of lectures as a learning mode and we see merit in innovation and experimentation in the configuration of learning experiences and contexts in the first year; nevertheless we also continue to see examples of innovative and excellent practice in lecture theatres. This is to be encouraged as one of many ways to engage students in meaningful learning in the first year.

Looking at the academic orientation scale as a whole, the following list summarises some statistically significant differences in the means for subgroups (1: strongly disagree; 5: strongly agree):

- international students: 3.7 – domestic students: 3.5;

- high achievers: 3.7 – low achievers: 3.3;
- part-time enrollees: 3.7 – full-time enrollees: 3.5;
- planning to progress to second year: 3.6 – planning to defer: 3.2; and
- language other than English spoken at home: 3.6 – English only spoken at home: 3.5.

The number of hours in paid work is not a discriminating factor in student's academic orientation, neither is gender, nor is socioeconomic background.

In 2009 we introduced two new items to gauge the extent to which first year students in Australian universities are oriented towards the international dimension of the academic experience. Internationalisation of the curriculum and of the student experience is a priority for Australian higher education and this may manifest itself in various ways. Two indicators of students' orientation towards the international aspects of their learning are as follows: one in five (27 per cent) of the first year sample in 2009 have aspirations to pursue an international study experience and 23 per cent intend to study a foreign language as part of their degree program. While these indicators are limited, they nevertheless provide a useful starting point for distinguishing between the wide range of aspirations and experiences evident among first year student cohorts.

Of the minority who plan an international study experience, those significantly more likely to be

Table 3.4 Academic Application, 1994-2009 (% of students) (2009)
(1994, N=4 028; 1999, N=2 609; 2004, N=2344; 2009, N=2422)

		Disagree		Agree
I find it difficult to get myself motivated to study	1994	28	31	42
	1999	23	29	48**
	2004	36	28	36**
	2009	33	31	36
I regularly seek the advice and assistance of the teaching staff	1994	49	30	20
	1999	50	31	19
	2004	36	36	29**
	2009	32	39	29
I worked consistently throughout first semester	2009	29	28	43

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

considering overseas study, as well as a language elective, include students from:

- a language background other than English;
- urban rather than rural backgrounds; and
- higher socioeconomic backgrounds.

These data highlight the value of continuing efforts to internationalise the curriculum and the student experience both within and beyond the classroom. It is telling that those students who have had some life experience in the form of a gap year are far more likely to be planning an international study experience. Meanwhile, it is no surprise that students from socioeconomically disadvantaged backgrounds are far less likely to consider an overseas study experience. Universities should continue to prioritise the orienting of students towards academic experiences with an international dimension. In particular, they should provide targeted support and assistance for students for whom financial barriers potentially play a part in order to provide international opportunities for as many students as possible. It may also be necessary to educate students about the benefits of expanding their knowledge through the study of another language. Investing time in academic orientation of this kind will pay dividends as universities seek to prepare graduates to engage in international communities and work environments.

Academic application

While the academic orientation items on the First Year Experience Questionnaire gauge students' satisfaction with and enjoyment of academic endeavours early in their university experience, it is also important to monitor behaviours and attitudes towards study during the adjustment process. Table 3.4 shows three indicative items in this regard (see also Appendix 1).

Since 2004, there has been no overall change in the extent to which students report seeking assistance from staff (20 per cent), nor in the proportion of students finding difficulty getting motivated (36 per cent). However, as is often the case, there are several telling subgroup differences, as noted below.

Those more likely to find it difficult to motivate themselves to study in the first year include:

- younger students, 19 years or less;
- domestic students, as compared with their international counterparts;
- students scoring lower overall grades in their first semester;
- full-time students;
- students seriously considering deferring their study; and
- school-leavers who came straight to university without taking a gap year.

From a positive perspective, those who are more likely to seek advice from teaching staff and work consistently are students in the following demographic subgroups:

- mature students, 25 years and older;
- rural students;
- students who took a gap year; and
- high achievers.

Further significant subgroup differences include the following: part-time students, females and students from Indigenous backgrounds report working consistently through the year, more so than their peers.

In addition to behavioural and attitudinal dimensions



such as those captured by the academic application scale, several other contextual factors contribute to the quality of the student experience and outcomes in the first year. Over time we have asked students whether they have a quiet place to do their university study. Gratifyingly, this figure has increased from 71 per cent of students to 74 per cent. However, it remains a concern that for one in five students, this is not the case. Students from rural areas were slightly less likely to report that they had a quiet place to study compared with their urban peers, though the difference was not significant. Of particular concern is that only two-thirds of students from low socioeconomic backgrounds have an appropriate place to study, compared with three-quarters of their more advantaged peers. A similar statistic is apparent among low achievers (only 66 per cent have a quiet place to study) compared with their high achieving counterparts (79 per cent). These are the often unseen factors that work together to increase the risk of student failure and departure from university. There may be merit in universities conducting institution-level surveys to monitor these contextual factors among their first year student population as a way of managing various risk factors that may not always be readily apparent. Students are often embarrassed to admit their access to resources may be sub-standard, so universities need to devise sensitive and context-appropriate ways to address these issues if they are serious about targeting and supporting students at risk among their first year cohort.

Summary

On the whole, first year students emerge as increasingly well informed about what to expect at university. For the majority, university is living up to their expectations and the standards of academic achievement are more or less as expected. This may be interpreted as students being better prepared and informed about university study on the whole, however the aggregated sample data mask the diversity of experiences among various demographic subgroups. Notably, international students are less satisfied than domestic students regarding expectations being met. Similarly, lower satisfaction levels in this regard are reported among low achievers, those working longer hours per week and those who report difficulty understanding and coping with first year study. Around one half of first year students derive satisfaction from studying at university and over 60 per cent enjoy the intellectual challenge. However there are significant

subgroup differences with regard to students' academic application in the first year. Particular risk factors include low achievement, pressure from financial commitments, perceived lack of parental understanding of university life, lack of preparation for study, and excessive paid work hours.

The school to university transition appears to be improving in quality for the majority of students. Half feel that school prepared them well for university, but this was not the case for students from rural areas and those from lower socioeconomic backgrounds. There continues to be a disparity in the level of university preparedness of students from certain demographic subgroups. Enhancing the quality of targeted pre-enrolment support and information continues to be a challenge for universities seeking to engage students from under-represented groups. Strong partnerships between schools, communities and tertiary institutions is particularly important for enhancing students preparedness for university and for developing realistic expectations among potential university students of the future.





4. The Changing Character of Student Engagement

- There has been a significant decline in the amount of time first year students spend on campus: the mean in 2009 is 4.0 days per week, compared with 4.4 days per week 15 years ago. The majority spend four or fewer days on campus per week, with a third spending three or fewer days each week on their university campus.
- On average, course contact hours have declined from 16 to 15 hours per week on average. The norm for the majority of students is 15 or fewer hours per week, with significantly more (14 per cent) spending only six to ten hours per week on course contact compared with 2004 (11 per cent).
- Time spent in private study has declined from an average of 11.3 hours per week in 2004 to 10.6 hours each week in 2009. This means that, on average, students spend less than one hour of study outside of class for every course contact hour.
- Only half of the students report feeling like they belong on their university campus, despite the fact that the vast majority of respondents are full-time, campus-based students. Equally concerning is the significant decline in the proportion of students who feel confident that they are known by name by at least one teacher: 58 per cent in 2009, down from 66 per cent in 2004.
- Signals of students' lack of engagement, such as skipping classes and coming to class unprepared, are no different from 2004. However, significantly more students (one-third) believe online lecture notes can be a replacement for attending classes.
- Peer engagement in the first year is alive and well with significantly more students reporting that they study and work with classmates on assignments and projects out of class.
- One of the standout changes over time is the number of hours students spend online. In 2009, students report spending 6.5 hours online per week for study purposes (compared with 4.2 hours in 2004), and 9 hours per week

using the web for recreation (compared with four hours in 2004).

- Nearly two-thirds of students agree that their lecturers make good use of the internet, compared with 60 per cent in 2004. In addition, students report that they are learning with a range of online technologies, some more innovative than others. The vast majority report that they use and find their university's learning management system useful. Three out of four use podcasts of lectures and find them most helpful for learning. Meanwhile 60 per cent have used social networking software and the majority have used online discussion. In both cases students remain unconvinced of the utility of these technologies for supporting learning.

Student engagement in higher education has become an issue of interest to policy makers and practitioners alike. Academic staff are keen to understand how they engage diverse student cohorts in the first year and the Australian government has named student engagement as one of four key indicators of the quality of learning and teaching in universities. In this context, it is important to ensure that measures of student engagement are sufficiently sensitive and robust to provide a representative picture of the complex attitudinal and behavioural dimensions of student engagement in the first year. This chapter outlines several aspects of engagement, including time spent on a range of educationally purposeful



Table 4.1 Number of days per week usually spent on campus, 1994-2009 (% of students)
(1994, N=4028; 1999, N=2609; 2004, N=2344; 2009, N=2422)

	1 day	2 days	3 days	4 days	5 days	6 days	7 days
1994	1	4	12	31	47	2	4
1999	3	6	21	31	36	1	3
2004	3	4	16	34	39	2	2
2009	1**	6*	26**	32	31**	2	2

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

activities, time spent engaging with the university on campus and online. Also important is the monitoring of student attitudes to study and their sense of belonging which are so integral to shaping the way they engage with learning and the broader university community. Vehicles for engagement are an important element of the first year. Of particular interest is the way in which student engagement with and through information and communication technologies (ICTs) is changing students' expectations of and preferences for learning in the first year.

This chapter begins by examining how students spend their time during their first year of university study, including a range of noteworthy subgroup differences. The focus then moves to several indicators of engagement, including affective responses expressed by students and associated patterns of engagement with peers and academic staff. The chapter concludes by charting the changing nature of students' engagement with ICTs in their first year.

How students spend their time

Time on campus

In 1994, 78 per cent of the sample typically spent four or five days per week on campus during the average university week. Table 4.1 shows the gradual decline over time in full-time attendance on campus. In the last five years alone, there has been a 10 per cent drop in the proportion of students spending four to five days per week on campus. In turn, the proportion spending two to three days on their university campus has increased significantly and now represents approximately one-third of the first year population. In 2009, students spend less time on average on campus compared with their counterparts in previous studies. The mean number of days per week spent on campus in 2009 is four compared with 4.2 days per week in 2004 and 4.4 in 1994. There are several possible reasons for this trend, including the fact that students report

spending longer hours in paid work and significantly more hours on the web for study. On the whole, average course contact hours per week are also down compared with five years ago. Evidently, the picture of the "average" full-time student and his or her patterns of time commitment in the first year has changed significantly, reflecting changing student preferences in changing times.

There is considerable variation in time spent on campus across certain demographic subgroups. Those tending to spend significantly more days than the average on campus, compared with their peers, include:

- school-leavers 19 years and under;
- international students;
- students from language backgrounds other than English;
- students in the fields of Health, Science and Engineering;
- those who received grades lower than expected;
- students who report spending time in private study for more than 10 hours per week;
- first year students who work five or fewer hours each week during semester; and
- students who score higher than the average on the scale of academic orientation.

Those recording significantly less time on campus compared with their peers include:

- students from lower socioeconomic backgrounds;
- students who are first in their family to attend university;
- students in the fields of Education, Creative Arts, Management and Commerce and Society and Culture;



Table 4.2 Course contact hours per week, 1994-2009 (% of students)
(1994, N=4 028; 1999, N=2 609; 2004, N=2344; 2009, N=2422)

	1-5hrs	6-10hrs	11-15 hrs	16-20 hrs	21-25 hrs	26-30 hrs	31+hrs
1994	2	10	30	24	21	9	2
1999	2	10	36	24	20	7	2
2004	4	11	39	25	16	4	1
2009	4	14**	42*	21**	13*	4	2

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

- those who received grades higher than expected;
- students who live at home with their family;
- those who report studying five or fewer hours per week; and
- first year students in paid work for 11 or more hours per week during semester.

There is some evidence that students may be using online technologies as a proxy for attending class, since those who say you can miss classes because the notes are online spend significantly less time on campus than do their peers.

Despite the introduction of various communications technologies, there remains a strong argument in favour of the link between students' attendance on campus and their involvement with and integration into the learning community. Our findings support this argument, showing that students who spend fewer days on campus are also those least likely to ask questions in class and make class presentations. Conversely, those who typically spend four to five days on campus are significantly more likely to:

- report positively about the university orientation programs;
- study with peers;
- report that they feel as if they belong to the learning community;
- feel positive about their identity as a university student;
- make one or two close friends at university;
- be involved in extra-curricular activities; and
- feel excited about being at university.

Course contact hours

The mean number of course contact hours per week for full-time first year students has declined steadily over the past decade from 17.6 hours in

1994 to 15.3 in 2009. Table 4.2 provides evidence of this steady downward trend. Sixty per cent of students now devote 15 hours or less to class contact time. This may include time in lectures, tutorials, laboratory settings, online discussions and the like.

Some statistical differences in sub-group course-level engagement are present in the data, as follows. Those spending significantly more time on course contact tend to be:

- school-leavers 19 years and younger: 15.9 hours per week compared with mature students aged 25 years or more: 12.3 hours per week. Mature students are also more likely to be enrolled part-time, hence the notable difference here;
- males – 16.5 hours compared with females – 14.8 hours;
- students enrolled in the fields of Engineering (20.4 hours), Science (20.3 hours), Agriculture/ Environmental Sciences (19.8 hours) and Health (16.6 hours);
- students in paid work 15 or fewer hours per week: 15.5 hours compared with those working more than 15 hours: 13.9 hours;
- students planning to persist to second year: 15.5 hours compared with those who plan to defer university study: 14.6 hours;
- students from higher socioeconomic backgrounds: 15.5 hours compared with those in the lower socioeconomic demographic group: 14.3 hours; and
- urban students: 15.5 hours compared with rural students: 14.7 hours.

As one would expect, full-time students spend significantly more hours in course contact (15.6 hours per week) than their part-time counterparts (10.8 hours).



– notably this pattern is reversed when using the web for recreation with males socialising online for an average of 10.3 hours per week compared with females at 8.6 hours each week;

- mature students over 25 years: 9.3 hours per week compared with school leavers: 5.8 hours. As for the gender differences, this pattern inverts when it comes to using the web for recreational purposes - mature students: 5.9 hours per week compared with 19 year olds: 9.4 hours per week;
- students in the following fields report significantly higher than average use of the web for study purposes each week: Education (8.8 hours); IT (8.7 hours); Health (7.6 hours);
- students from low socioeconomic backgrounds: 7.1 hours per week compared with more advantaged peers: 6.3 hours;
- students from language backgrounds other than English: 7.7 hours compared with native English speaker: 6.1 hours per week. Students from language backgrounds other than English are also significantly higher users of the web for recreational purposes: 10.9 hours per week compared with 8.5 for peers who speak English at home;
- rural students: 7.6 hours per week studying online compared with urban students: 6 hours. This pattern is reversed when it comes to socialising online – rural students: 7.9 hours per week compared with urban students: 8.9 hours per week; and
- first year students planning to persist with studies into second year: 6.8 hours of web-based study per week compared with 5.7 hours for those considering dropping their study program.

These patterns clearly show that stereotypical views that may once have held true - for instance, older students or females being less inclined to use technology - are well and truly outdated. Rather, the figures point to a more discriminating approach to the use of online technologies for specific purposes by different demographic subgroups. It is unclear whether students from rural and lower socioeconomic backgrounds access the internet in their own homes or in community settings or on university campuses. Nevertheless, these findings are a reminder of the importance of using nuanced strategies for determining how different student

groups approach their study and implications of this for curriculum design as well as institutional infrastructure and communication mechanisms.

Measures of student engagement in the first year

There is compelling research to show that student engagement, in its broadest sense, is a predictor of student retention, persistence and the quality of their overall experience in higher education. Student engagement is a whole-of-institution responsibility. As such, it includes a complex and interrelated set of attitudinal, affective and behavioural dimensions. Factors that contribute to student engagement include:

- orientation and transition programs;
- the culture of the university and the associated sense of belonging that students feel;
- opportunities for students to engage in wider community-based activities and service learning;
- strategies in place to foster students' engagement with peers and staff; and
- learning designs and curricula that include innovative, technology-enhanced strategies for engaging students.

Each of these is discussed in turn in the section to follow.

Institutional factors and student engagement

Institutional cultures and values play a significant role in student engagement. Students' early connections with the university are known to either 'make or break' their likelihood of engaging and persisting with study. To this end, every Australian university has some form of student orientation program to assist with students' transition to university study. In many cases, these programs are custom-designed to meet different needs. For instance, targeted programs may be aimed at integrating international students into the Australian community. In many cases Indigenous student support centres offer tailored programs to support students from Aboriginal and Torres Strait Islander backgrounds. Similarly, for those travelling interstate or from rural destinations, particular information sessions may be available. In all cases, universities face the challenge of achieving a balance between specific support programs for subgroups and the



importance of integrating students into the broader first year cohort. These balances are not always easy to achieve but they go a long way towards helping students to feel that they belong in the university community.

Compared to 2004, slightly fewer first year students (44 per cent compared with 46 per cent) said that the orientation programs they had attended provided them with a good introduction to the university. Perhaps more disturbing is the fact that a quarter (24 per cent) of the students sampled registered a 'disagree or strongly disagree' response regarding the value of orientation programs in helping them to feel that they belonged at university. There has also been a small but noteworthy decline in the proportion of students saying that they feel they have a sense of belonging to their university community: 51 per cent in 2004 down to 50 per cent in 2009. Of particular concern is that more than one in five students (18 per cent) in 2009 disagreed with the 'sense of belonging' item. While these are non-significant changes, they should be interpreted along with the significant decline in the proportion of

students who have made one or two friends during their first year: 79 per cent in 2004 compared with 74 per cent in 2009. These indicators, taken together, point to the importance of continued vigilance on the part of the sector when it comes to reviewing and reinvigorating strategies for engaging new cohorts of students with their peers and with the university community from their earliest point of contact.

Over the past five years, several Australian universities have recognised the importance of student engagement in co- and extra-curricular activities that broaden the educational experience and connect students with issues in the broader community of which they are a part. These activities are not necessarily new, but they have received renewed impetus following recent government emphasis on the critical importance of reinforcing the economic and social value of higher education. Various models are in place to embed out-of-class activities such as volunteer and community-based work and service learning in the wider curriculum. Some of these activities are included for credit,

Table 4.3 Indicators of student engagement at the institutional level, 1994-2009 (% of students)
(1994, N=4 028; 1999, N=2 609; 2004, N=2344; 2009, N=2422)

		Disagree		Agree
I was given helpful advice when choosing my subjects/units	2004	34	33	33
	2009	31	32	37**
I am satisfied with the subject choices I made this year	2004	12	27	61
	2009	9	23	68**
I was satisfied with the range of subjects/units from which I could choose this year	2004	25	26	49
	2009	17	26	58**
I feel like I belong to the university community	2004	16	33	51
	2009	18	32	50
I really like being on my university campus	2004	12	28	60
	2009	11	26	63*
I really like being a university student	1994	8	18	74
	1999	7	19	74
	2004	8	17	75
	2009	7	19	74
I feel part of a group of students committed to learning	2004	14	31	55
	2009	14	33	53
It is exciting to be at university	2009	12	26	62
I think university life really suits me	2009	11	26	63
I am not particularly interested in the extra-curricular activities or facilities provided	1994	44	28	28
	1999	43	31	27
	2004	37	31	32**
	2009	34	31	34

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)



others are a required, not-for-credit component that are included on students' graduate statements at the end of their degree program. In 2009 we asked about the extent of students' community engagement activities for the first time. Given that this is a relatively new element of curriculum reform in Australian universities, it is not surprising that only 23 per cent of first year students report involvement in community engagement, with an average of 0.9 hours per week spent in these kinds of activities. This figure can be expected to increase over time as universities recognise the value of a holistic approach to higher education that encourages students to broaden their perspective and to engage with communities as they prepare to be responsible citizens themselves.

Universities play a key role in providing appropriate advice to students about program and subject choices. While it is pleasing that school-leavers are increasingly satisfied with the quality of advice they receive from their teachers, it is nevertheless critical that timely and correct advice be available to students at key milestones of their university career. This is particularly important in the first year.

Table 4.3 shows a significant increase in the proportion of students expressing satisfaction with their subject choices and the quality of course choice advice provided. However, almost two-thirds disagree or are uncertain about the quality of advice provided. This finding represents a timely reminder to universities regarding the room for improvement in the area of student advising.

Table 4.3 summarises several indicators of student engagement arising from institutional cultures and practices. Growing numbers of students are satisfied with the choice of units in the first year. This is a positive outcome, as is the increase in the proportion agreeing that they enjoy being on their university campus. By contrast, there have been minimal shifts in the extent to which students feel that they belong to the university community and to a group of students committed to learning. Taken together, this is an important suite of indicators. Even though first year students are spending less time on campus, the quality of the experience seems to be an increasingly positive one and universities should make the most of every opportunity to ensure that they are proactive in developing among students a sense of belonging and community from early in the first year. This is a goal to which universities and their various elements should aspire in order to capitalise on opportunities to engage students with the campus and the

institution as a whole.

One opportunity to engage students with campus life is through sports, clubs and societies. Unfortunately, there has been a significant increase in the proportion of students who say this is not for them. The decline of funding resulting from the introduction of Voluntary Student Unionism in 2006 may have contributed to this result. This is a serious issue for universities as these forms of activities provide an important avenue for social integration into university life, which is a key contributor to student engagement.

In order to capture a sense of the excitement of being at university that many students have communicated to the project team during the course of their research on the student experience, we asked two new questions in 2009, as shown in Table 4.3. It is gratifying to see that more than 60 per cent of students feel excited about being at university and think that university life suits them well. There may be merit, however, in noting the reasons why (12 and 11 per cent respectively) disagree with this statement. Like so many other factors in the student experience, it appears that negative responses on these items are closely linked to low performance, and thoughts of deferring or leaving university study.

There are cumulative sets of risk factors that should alert institutions and the sector as a whole to potential student groups at risk. A selection of these is summarised below.

Student groups significantly less likely to feel they belong to the university community:

- students planning to defer;
- low achievers;
- part-time students;
- mature students over 25 years of age;
- females; and
- full-time students in paid work 16 or more hours per week.

First years who are less likely to enjoy being on their university campus:

- students planning to defer;
- low achievers;
- rural students;
- students from low socioeconomic backgrounds;

- part-time students;
- mature students over 25 years of age; and
- full-time students in paid work 16 or more hours per week.

Students who are significantly more likely to say they keep to themselves at university and avoid social contact:

- students planning to defer;
- low achievers;
- students with a language background other than English;
- students from low socioeconomic backgrounds;
- mature students over 25 years of age;
- full-time students in paid work 16 or more hours per week; and
- international students.

First year students who are significantly less likely to feel part of a group of students committed to learning:

- students planning to defer;
- low achievers;
- rural students;
- part-time students; and
- full-time students in paid work 16 or more hours per week.

Students who are significantly less likely to say they enjoy being a university student:

- students planning to defer;
- low achievers;
- rural students;
- part-time students; and

- full-time students in paid work 16 or more hours per week.

Student groups significantly less likely to feel excited about being at university after almost a year of study:

- students planning to defer; and
- low achievers.

It is evident that several demographic subgroups experience compounded risk factors. There would be merit in considering strategic sector-wide and institutional policies and programs targeted at addressing these issues from early in the first year in order to enhance the sense of belonging and community experienced by students at risk. Timely advice should also be a priority for students planning to engage in excessive hours of paid work while studying full-time. Clearly this is a high risk factor in terms of student engagement with the institution and its community.

Engaging with academic staff

In addition to the broader institutional factors contributing to student engagement, there is strong evidence to show the importance of student contact with academic staff. The proportion of students seeking advice and help from academics has remained steady at 29 per cent (see Table 4.4). However there has been a significant decline in the proportion of students who feels that at least one of their teachers knows their name. We recognise that this is simply a proxy measure that is difficult to achieve in large groups of first year students, nevertheless, the importance of personal contact with first year students in small groups is key to enhancing students' engagement with learning and with the university community as a whole. Students with lower achievement levels and those in the younger age bracket are least likely to report that a teacher in their first year knows them by name.

Table 4.4 Indicators of student engagement with academic staff (% of students)
(1994, N=4028; 1999, N=2609; 2004, N=2344; 2009, N=2422)

		Disagree		Agree
I feel confident that at least one of my teachers knows my name	2004	23	11	66
	2009	28	14	58**
I regularly seek advice or help from academic staff	1994	49	30	20
	1999	50	31	19
	2004	36	35	29**
	2009	32	39	29

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)



Table 4.5 Frequency of selected classroom engagement/disengagement behaviours in the first year, 2009 (% of students)
(N=2422)

Selected classroom engagement/ disengagement behaviours	Never	Sometimes	Frequently
Ask questions in class or contribute to class discussion	11	58	31
Make class presentations	28	56	16
Come to class without completing readings or assignments	29	58	13
Skip classes	40	51	8

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

Engaging in the learning environment

Students' active contribution to their own learning has been recognised as an important enabler of engagement and a signal of their motivation to learn. Self-regulating behaviours such as preparation of readings ahead of class or the posing of questions in class provide some insights into students' engagement with learning and the learning environment. An indicative snapshot of the state of play in 2009 shows that the majority of students (89 per cent) report being engaged through the process of asking questions and contributing to class discussions. Around three out of every four first year students (72 per cent) made a class presentation of some kind during their first semester of first year. This figure is up from 69 per cent in 2004 which suggests a positive effort across the sector to engage students in active learning opportunities. It is important, though, to bear in mind that more than one quarter of first year students had not been involved in such activities. Students in part-time study were significantly less likely to be engaged in activities such as class presentations.

Taking responsibility for self-regulation in the learning process is a value that universities aim to encourage among their first year cohort. Table 4.5 includes two items that provide clues on the state of the sector in this regard. The majority of respondents report that they come to class unprepared at least some of the time. A small but notable minority do so frequently. This figure has declined slightly in the past five years but coming to class unprepared some of the time remains a pattern among the majority of students. Well over half of first year students say they missed classes during the first semester of their first year. This figure has remained relatively constant over the past five years, though it should be considered in

the context of more students acknowledging that they can miss classes because notes are available online.

Coming to class unprepared, skipping classes and accessing lecture notes on the web as a replacement for attendance together form the 'prepared and present' scale (see Appendix 1). These items summarise patterns of students' preparedness for class and their engagement in scheduled classes, whether online or in lecture halls. Since the previous study, there has been a decline in the mean score for this scale: from 3.5 in 2004 (SD: 0.87) down to 3.4 in 2009 (SD:0.89). Unsurprisingly, low achievers and those seriously considering deferring their studies score significantly lower mean scores on this scale, while international students and those enrolled part-time – who also tend to be in the mature-age group – report significantly higher mean scores on this scale than do their peers. While this scale is not all-encompassing, it provides another facet in the complex and multi-dimensional landscape of the first year experience. These items point to some areas that institutions may wish to monitor as they continue to explore strategies for engaging new generations of students.

Engaging with peers in the learning community

The quality of students' engagement with peers in the university learning environment is a strong predictor of student persistence and retention. Peers play an important role in both social and academic integration in the first year. The findings of the 2009 report demonstrate that, on average, students are spending fewer days on campus, fewer hours in class, and more hours in paid work. In this context, there is value in reviewing the role that peers might play in helping to connect students



to one another, to their study and to the university.

The peer engagement scale (see Table 4.6 and Appendix 1) comprises three items that give an indication of the extent to which students work with peers within and beyond formal class settings, whether online or on campus.

Compared with 2004 findings, there is little difference in the extent to which students report studying frequently with other students (17 per cent). However, there has been a significant increase in the proportion of students who say they:

- frequently work with classmates outside of class on group assignments (21 per cent in 2004 compared with 29 per cent in 2009); and
- frequently work with peers on projects in class (20 per cent in 2004 compared with 27 per cent in 2009).

These are very pleasing developments for several reasons. First, peer connections such as these may help to provide a kind of buffer against the possibilities of disengaging and dropping out, particularly in a cohort of students who are generally spending less time on campus and in class.

Second, these findings suggest that there are curriculum and assessment reforms that may be fostering more opportunities for group interaction both within and beyond the classroom. These are positive signals on several counts and should be encouraged.

Counterbalancing these findings are more problematic trends worthy of note. As mentioned earlier in this chapter, there has been a significant increase in the proportion of students who report to keeping to themselves when at university. This behaviour is more prevalent among some demographic subgroups than others, nevertheless, it needs to be monitored as universities seek to engage students across all demographic groups. There has been no change in the proportion of students reporting that they feel uncomfortable in group discussions: one in four find these kinds of

social situations difficult. This may partly counteract the increase in students' peer engagement overall and may also account for the fact that around one in five first year students never works with classmates either in or out of class (see Table 4.6). Finally, there has been a significant decline in the proportion of students reporting that they have made one or two friends at university in their first year: 79 per cent reported in the affirmative in 2004 compared with 74 per cent in 2009. Of even greater concern is the fact that close to one in seven first year students (15 per cent) reported not having made any friends at all towards the end of their first year of study. As always, the issues are complex and multifaceted and careful subgroup analyses are warranted if universities are to develop strategies to improve the level of students' engagement with their peers in formal and less formal learning environments.

Engaging through information and communications technologies (ICTs)

The use of and demand for information and communications technologies (ICTs) in all aspects of society has risen exponentially over the last decade. Mobile and social networking technologies have transformed the ways in which we communicate and access information in a global knowledge economy. These developments have had a powerful impact on higher education curricula and pedagogies, not to mention the infrastructure of institutions. The research on students' engagement with emerging technologies continues to expand (see for example Kennedy et al., 2009) as the sector recognises the importance of understanding the impact of existing and new technologies on student expectations, learning preferences and engagement practices. In this report we touch briefly on this broad and complex field as it relates to the changing experience of first year students, though we fully acknowledge that the issues warrant much deeper and more sophisticated treatment beyond this study. The aim here is to chart some of the main developments in students' use and

Table 4.6 Peer engagement scale (% of students)
(2009, N=2422)

	Never	Sometimes	Frequently
Work with classmates outside of class on group assignments	23	48	29
Work with other students on projects during class	19	54	27
Study with other students	24	59	17



Table 4.7 ICT access, extent of use and utility for learning in the first year (2009, n=2422)

Form of ICT	% reporting ICT availability	Extent of ICT use (%)	Utility for learning (expressed as % of those who had used)
Online learning management system	96	92	87
Internet-based resources designed for course	99	98	78
Podcasts of lectures	91	75	73
Social networking technologies	90	61	34
SMS alerts or reminders from my university	69	37	47
Online discussion with other students	95	64	52

experiences of ICTs and to draw implications for policy and practice in the sector.

As noted in the *Time spent on study* section earlier in this chapter, one of the most important trends is found in the number of hours per week first year students use the web for study and recreational purposes:

- use the web for study
2004 mean: 4.2 hours (SD: 3.74)
2009 mean: 6.5 hours (SD: 6.32)
- use the web for recreation
2004 mean: 4.0 hours (SD: 5.70)
2009 mean: 9.1 hours (SD: 9.14)

These mean scores reflect a significant increase in the number of hours students spend online each week both for study and recreational purposes. It is fair to say that these would be relatively conservative estimates and the standard deviation indicates sizeable variations across the sample. Those students using the web for recreation are more likely to be:

- international students (12.5 hours per week);
- students with a language background other than English (10.9 hours);
- males (10.3 hours);
- students in the 20-24 year age bracket (10 hours); and
- full-time students (9.3 hours).

Students' ratings of lecturers' use of the internet in their teaching have increased significantly, suggesting that academics' ICT integration skills have developed over time. In 2004, 59 per cent of students rated lecturers positively in relation to

their use of the internet in teaching; in 2009 this rose to 66 per cent. Many universities have made a concerted effort to support academic staff in developing their skills in this regard and these efforts seem to be paying off.

To expand our understanding of how first year students are using ICTs and, importantly, how useful they find them to support their learning, we asked a number of questions about some of the most prevalent technologies in Australian universities. The goal was not to be all-encompassing in our survey. Rather, we wanted to capture a sense of how much and how effectively students are engaging with and through technologies in their learning. Table 4.7 provides an outline of the areas we explored, including the proportion of students who were aware that the technologies were available in their university, the proportion who used the ICTs and the proportion who said they helped them to learn. Table 4.8 includes details of the extent to which students agreed on the utility of the respective technologies to help them learn.

Consistent with other national studies (see for example Kennedy et al., 2009), learning management systems (LMS) and internet-based learning resources are virtually ubiquitous in higher education now. There is also a very high level of availability of podcast lectures following significant developments in the use of lecture capture software across the sector. Almost all students surveyed (98 per cent) reported having used internet-based course resources of some kind, though only about three out of four found them useful for learning (see also Table 4.8). We did not explore reasons for this but there would be merit in exploring the reasons for such responses more closely at the institutional level. A relatively high proportion of

those who used the institutional LMS found it useful (87 per cent, see also Table 4.8), meanwhile close to three-quarters found the lecture podcasts helpful for their learning. While these figures appear healthy enough, there remains a strong imperative to monitor students' engagement with technologies in a range of ways, including the use of qualitative methodologies to find out more about why and how students are using ICTs with a view to continuous improvement of existing and emerging technologies to enhance learning.

While the vast majority (90 per cent) were aware that social networking technologies were available in their university, only 61 per cent had used them and just one-third found them useful. Table 4.8 reinforces the negative views of the majority of users of this technology (mean 2.9). These findings mirror those of other comparable studies both in Australia and in the United Kingdom where students are dubious about the utility of social networking software for learning purposes. They may use these technologies extensively in their personal lives but it appears that the jury is out on whether these can be successfully deployed on a large scale to support student learning. This is a fruitful area for further research and institutional investigation. It is a timely reminder that assumptions about the transfer of technologies from the personal to the formal learning and teaching domain should be tested and challenged. It is possible that staff, too, need support and skill development if they are to deploy such software purposefully and effectively to promote learning. A similar trend is evident in the use of online discussions with students. While the vast majority of universities provide this facility – usually through their LMS – fewer than two-thirds of students have used it and just over half have found it useful for learning.

We also asked students about their views on SMS alerts from their university. This form of 'push' technology can be a useful way to communicate with large numbers of students, but evidence suggests that not all students appreciate being contacted on their personal mobile phones. While just over two-thirds of students were aware of the technology being available in their university, only a minority (37 per cent) had used it. Of those, fewer than half (47 per cent) found the service useful. Table 4.8 reinforces the fact that they were largely equivocal about the value of the technology (mean: 3.3). Once again, these are important reminders not to make assumptions about the transferability of technology in educational settings. Comprehensive pilot-testing and ongoing monitoring of both student and staff experiences with these technologies is critical to successful implementation.

As expected, several demographic subgroup differences emerged as a result of analysing students' use of ICTs in the first year. Some of the main differences are outlined below:

- school-leavers are more likely to use lecture podcasts than their older peers, while mature-age students tend to use SMS alerts more often;
- females use lecture podcasts significantly more than males and are more likely to find SMS alerts useful;
- full-time students access lecture podcasts and social networking technologies significantly more than do their part-time peers. However, part-timers are much more likely to rate the podcasts as very useful for their learning and they tend to value SMS alerts more highly;
- students working longer hours are most likely

Table 4.8 Student mean ratings of ICT usefulness in the first year (2009, n=2422)

Form of ICT	Mean (1=strongly disagree; 5 = strongly agree)	SD
Online learning management system	4.4	0.86
Internet-based resources designed for course	4.1	0.89
Podcasts of lectures	4.1	1.09
Social networking technologies	2.9	1.36
SMS alerts or reminders from my university	3.3	1.37
Online discussion with other students	3.4	1.18



Table 4.9 Student subgroups showing above average engagement on two engagement scales

Subgroup category	Peer engagement scale	Prepared and present scale
Age	Aged 19	Aged 25+
LOTE	LOTE	--
Full-time/part-time	Full-time	Part-time
International/domestic student	International students	International
Achievement	--	High achievers
Persisters/deferrals	Persisters	Persisters

to find the LMS and internet-based learning resources helpful for their learning;

- students in rural areas use the LMS significantly more than their metropolitan peers, though they use podcast lectures and internet-based resources significantly less in their learning;
- Indigenous students are significantly more likely to find social networking technologies useful for their learning in the first year;
- students from low socioeconomic backgrounds are significantly less likely to use the university's LMS and podcast lectures than are their more advantaged peers. Use of internet-based course resources is relatively comparable;
- international students are significantly more inclined to use lecture podcasts and social networking technologies than are their domestic peers. Their use of LMS and internet-based course resources is also higher than for domestic students, though not significantly;
- students who speak a language other than English at home rate lecture podcasts more highly than their peers, they are also more likely to find internet-based course resources very useful for their learning;
- low achievers are more likely to find SMS alerts helpful, while high achievers are significantly more likely to find the LMS and internet-based course resources useful for their learning; and
- Science students tend to be the highest users of institutional LMS on average, followed by Health and Engineering students. Lecture podcasts tend to be used most among students in Health and Society/Culture fields of education. Health and Management/Commerce students are the ones who most use the SMS alerts in their universities, on average.

Patterns of subgroup engagement

Table 4.9 summarises some of the statistically different patterns of engagement among selected demographic subgroups using two of the engagement scales mentioned in this chapter. No statistical differences are evident on the basis of gender, socioeconomic background, rurality or indigeneity. Factors such as age, study mode, persistence and international background play a key role both in patterns of peer engagement and in students' preparedness and self-regulation in the first year.

These findings further reinforce the value of close monitoring of student engagement across different demographic groups in different contexts. The factors noted in Table 4.9 represent just some of the many facets of engagement that contribute to the quality of student learning and outcomes in the first year. Addressing these issues is a complex task requiring a strong evidence base and a whole-of-institution approach if a university is to succeed in monitoring student engagement and implementing strategies to enhance engagement across an array of dimensions.

Summary

Indicators of students' engagement with activities that promote learning are both behavioural and attitudinal in nature. This chapter has demonstrated that patterns of engagement in the first year continue to evolve as students express their preference for more flexible study patterns and ways to access their course material. Other manifestations of changing engagement trends include: fewer course contact hours and less time on campus; less time spent on private study – less than one hour of study for every course contact hour; more hours in paid work, and significantly more time on the web for study and communication



with friends. Despite sector-wide efforts to engage students in volunteer activities as part of their curricular and co-curricular activities, the average student still spends less than one hour per week in community engagement. Students also spend limited time on sporting and exercise activities – around a quarter of the time devoted to paid work.

Some attitudinal indicators of engagement should be a particular wake-up call to the sector. In particular, there has been an overall decline in the proportion of students sensing that they belong on their university campus and expressing confidence that they are known by name by at least one teacher in their course. There is evidence that students are studying more frequently with their peers and this may indeed be one of the factors contributing to their overall higher levels of satisfaction with their university experience. One of the most telling developments is the rapid rise in the time spent online for study and recreation purposes. Engagement with university studies using a range of technologies such as online learning management systems and social networking software has increased significantly, though students remain cautious about the utility of some of the technology for supporting their learning. First year students' patterns of engagement are closely connected to the strategies they use to manage their commitments, including time and finances. These issues are addressed in the next chapter.



5. Balancing Work and Study

- The proportion of students in paid work during semester continues to increase, with 61 per cent of the full-time students working, up from 55 per cent in 2004. The full-time students who are working average close to 13 hours per week of paid work, a similar figure to that of five years ago.
- Students' main motivations for work are affording extras and becoming financially independent. However, nearly two-thirds of students work to afford basic needs.
- International students now work to afford basic necessities; in 2004 the most common reason was to afford extras.
- Longer hours of work are associated with a lower grade average and an increased likelihood of students considering deferral in 2009.
- There has been a significant decrease in the proportion of full-time students with paid employment commitments who believe their work interferes with their study. This may be the result of greater acceptance of combining full-time study with paid work or better availability of ICTs that assist students to study outside of formal classes.
- Students with a higher mean score on the comprehending and coping scale are more likely to report a more satisfactory and successful university experience. International students are no longer lower on this scale, as they were in 2004, than domestic students.

Financing of study

As shown in Table 5.1, the majority of students opted to use HECS-HELP to finance their university study. Thirteen per cent of the students reported they were fee-paying domestic students.

Sources of income

Over the past 15 years, the proportion of students receiving Austudy or Youth Allowance has declined. In 2009, 18 per cent of students report that one of these allowances is their main source of income. Students' main sources of income are part-time work (40 per cent) and parents or family (32 per cent). There has been a noticeable increase in the proportion of students who report using savings to support their study (13 per cent, up from 9 per cent in 2004). Not surprisingly, the figures vary for different age groups (see Table 5.2).

Students' income sources also vary according to study load (see Table 5.3). Part-time work is the most common form of income, being nominated by two-fifths of full-time and part-time students. Full-time students are more likely to rely on their family or Youth Allowance, while a higher proportion of part-time students are engaged in full-time work, have a scholarship or are financially supported by their partner. These differences are likely to be attributable to the age difference of the two groups (nearly a third of all students over 25 are enrolled part-time).



Table 5.1 Students' fee status, 2009 (% of all students) (N=2422)

Fee status	Proportion of students sampled
Commonwealth Supported Place (CSP), paid upfront	14
CSP, deferred payments (HECS-HELP loan)	64
Australian fee-paying student, paid upfront	9
Australian fee-paying student with FEE-HELP loan	4
International fee paying student	9

Table 5.2 Most common income sources across age groups 2009
(N=2422)

Under 19 years	20-24 years	25 years and over
Part-time work (46%)	Part-time work (32%)	Scholarship (25%)
Parents or family (38%)	Parents or family (28%)	Partner (24%)
Youth Allowance (15%)	Youth Allowance (27%)	Part-time work (24%)

Table 5.3 Percentage of full-time and part-time enrolled students saying that source of income was their main or only source, 2009
(N=2422)

Main or only source of income	Enrolled full-time (%)	Enrolled part-time (%)
Youth Allowance/Austudy/Abstudy	19**	4
Part-time/casual work	41	40
Full-time work	3	29**
Parents/family	34**	14
Savings	13	12
Scholarship/Cadetship	3	11**
Loans	2	0
Spouse/partner	3	11**
Any form of unemployment benefit	0	2**
Pension or equivalent	1	2

* significant at .05 ** significant at .01

Key trends in the last five years:

- receipt of Youth Allowance has dropped, particularly for part-time students;
- involvement in part-time work has increased for both full-time and part-time students;
- reliance on savings has doubled for the part-time students since 2004; and
- more part-time students are engaged in full-time work.

Students more likely to be involved in full-time work:

- those receiving a mark higher than expected;
- international;
- rural; and
- enrolled in the fields of Marketing, Commerce or Society and Culture.

Students more likely to be in part-time work:

- females;
- non-Indigenous;
- international;

- non-LOTE background;
- urban; and
- enrolled in the fields of Education or Society and Culture.

Paid work as a source of income

Table 5.4 reports the extent to which students rely on income from either full-time or part-time work. Over the past 15 years there has been a relatively minimal change for those students in full-time work. After a slight drop in 2004, more students (33 per cent) are reporting that part-time work is a main source of income. There are fewer students who do not use part-time work as a source of income (from 40 per cent in 2004 to 37 per cent in 2009).

Reasons for doing paid work

A much larger proportion of students are working to improve their employability after finishing university (51 per cent compared to 34 per cent in 2004). More students also report working to save for future HECS debts (33 per cent, up from 22 per cent in 2004). The most common reasons for working remained unchanged; in 2009 84 per cent of students worked to afford extras, and 75 per cent



Table 5.4 Paid work as a source of income, 1994-2009 (% of all students)

		Only source	Main source	Minor source	Not a source
Full-time work	1994	3	2	0	94
	1999	2	2	1	95
	2004	2	3	2	94
	2009	2	3	1	94
Part-time/ Casual work	1994	4	22	22	52
	1999	9	27	23	40
	2004	7	25	28	40
	2009	7	33	23	37

wanted to be financially independent of their family. This pattern changes across different groups — as with previous First Year Experience surveys there are differences between international students and domestic students, across age groups and across socioeconomic groups.

The vast majority of students aged 19 years and under work in order to afford extras (90 per cent) and to be more financially independent of their family (82 per cent). More than half of the students (56 per cent) work to afford basic necessities (see Table 5.5). While students aged 20 to 24 are also more likely to work to afford extras (81 per cent), affording basic needs is the other most common motivating factor (74 per cent). Students aged over 25 years are more likely to work to afford basic needs (83 per cent), extras (55 per cent) and to pay off loans or debt (55 per cent). As with the national sample, a greater proportion of all age groups were

more likely to agree with the specified reasons than in 2004.

Compared with 2004, socioeconomic status had less of an influence on students' reasons for working. As shown in Table 5.6, low socioeconomic background students were far more likely than medium and higher socioeconomic background students to work to meet basic needs (76 per cent compared with 60 per cent). The low socioeconomic group were also more likely to be working to support families (19 per cent compared with 11 per cent).

Far fewer international students are involved in paid work than their domestic counterparts. While 67 per cent of domestic students were engaged in paid work, only 29 per cent of international students were working during semester. While the proportion of domestic students working has steadily increased

Table 5.5 Reasons why different age groups undertake paid work (% of different age groups responding to the question)

	Aged 19	Aged 20-24	Aged 25+
To be more financially independent of family	82	71	41
To meet basic needs (such as rent, food, transport)	56	74	83
To afford 'extras' (such as travel and entertainment)	90	81	55
To improve employability after university	54	50	39
To save for paying off future HECS-HELP or FEE-HELP debts	38	32	23
To pay off current loans or debts	14	31	55
To gain work experience relevant to the course	21	30	34
To support family	5	15	52

Table 5.6**Reasons for low socioeconomic background and medium/high socioeconomic background students undertaking paid work (% of socioeconomic groups responding to the question)**

	Low SES	Medium/high SES
To be more financially independent of family	74	76
To meet basic needs (such as rent, food, transport)	76	60**
To afford 'extras' (such as travel, entertainment)	82	85
To improve employability after university	54	51
To save for repaying future HECS-HELP or FEE-HELP debts	38	36
To pay off current loans or debts	28	22
To gain work experience relevant to the course	26	24
To support my family	19	11**

Asterisks denote a significant difference between subgroups (** = significant at 0.01)

since 1999 (53 per cent), the figures for international students remain stable after a decrease in 2004 (1999: 29 per cent; 2004: 23 per cent).

There are noteworthy contrasts between international and domestic students in their reasons for working. International students are more likely to work to support family and gain work experience relevant to the course, while domestic students are more likely to engage in paid employment to afford extras (86 per cent), to save to repay a HECS debt and to be financially independent.

For international students, the most common reason for working is to afford basic needs (66 per cent). Five years ago, international students reported working to afford extras (61 per cent) and to be financially independent (51 per cent). This finding points to a trend in the financial circumstances of international students that is a concern for international education in Australia. While the finding must be considered in the context of the low proportion of international students who work, as well as the under-representation of international students in the sample, it is concerning that a group that are likely to face additional challenges associated with moving overseas to study appear to have less financial support than in previous years.

Coping with study, employment and other commitments

One of the consistent trends over the last 15 years has been the increase in the proportion of full-time students who were undertaking paid work in addition to their studies. Research into this increase has not revealed any conclusive finding that working during study has a direct negative

impact on the student's academic performance, though many academics report that, in their opinion, it does so. The situation is likely to be quite complex and to vary greatly on an individual basis, with paid employment affording benefits as well as disadvantages for full-time first year students. For some students, working is simply essential, without this income they would not be able to study at all. While some paid work may have no adverse effects on students' study, the full-time students working more than 16 hours per week are a problematic group.

Research conducted into the state of student finances by the Centre for the Study of Higher Education for Universities Australia (James et al., 2007) revealed a relatively bleak picture of a high proportion of students in financial stress. Seventy per cent of full-time undergraduate students were working, and the average student worked 14.8 hours per week. Many of these students believed that their work commitments had a negative impact on their studies but continued to work in order to meet the cost of basic needs such as food, rent and petrol.

The rise in student commitment to paid work may result in part from students' confidence that they will be able to manage full-time study and work commitments. Crisp et al. (2009) found that 69 per cent of students surveyed during Orientation Week at a research intensive university in Australia believed that they would be able to combine employment and study commitments, with only eight per cent believing they could not. A study in the UK, where reported rates of undergraduate student employment are higher than those in Australia, argued that institutions can minimise potential academic problems if timetabling



Table 5.7

Hours spent in paid work in a typical university week, 1994-2009 (% of full-time enrolled students in paid employment for at least one hour per week)
 (1994 n=1 572; 1999 n=1 253; 2004 n=1341; 2009 n=1373)

	1-5 hrs	6-10 hrs	11-15 hrs	16-20 hrs	21-25 hrs	26-30 hrs	31 hrs or more
1994	22	38	20	12	4	2	2
1999	16	32	25	17	5	2	3
2004	19	32	22	17	5	2	3
2009	18	32	25	14	5	3	4

can accommodate students' part-time work commitments (Trotter & Roberts, 2006).

The proportion of students undertaking paid employment in addition to their study commitments has risen significantly since 2004. In 2009, 61 per cent of full-time students report being engaged in paid employment for at least one hour a week, up from 55 per cent in 2004. Eighty-four per cent of part-time students report being engaged in work. The average number of hours worked by all full-time students (including those not working) has also increased to 7.9 in 2009 (up from seven hours in 2004). The full-time students who are working average close to 13 hours per week of paid work, a similar figure to that of five years ago. Table 5.7 shows the number of hours worked per week by full-time students over the 15 year period.

While a decrease in the percentage of students working fewer hours was documented between 1994 and 1999, the average number of hours that students are engaged in work during the week has remained relatively stable since 1999. Therefore, while more students are engaged in paid work, it does not appear that students are working longer hours. For example, in 2004, 27 per cent of respondents reported they worked more than 15 hours per week. In 2009, that proportion dropped slightly to 26 per cent. The number of students working more than 20 hours has increased marginally, from 10 per cent to 12 per cent. It is somewhat concerning that the proportion of students in the latter group has increased, however slightly, given that academics interviewed for McInnis and Hartley's (2002) study, and more recently by Crisp et al. (2009) indicated that working for what they believed to be excessive hours per week was detrimental for students' academic success.

For their part, nearly half of the full-time students who are employed agree that their work interferes with their study moderately or severely, however, significantly fewer students agree with this

statement in 2009 as compared to 2004. This decrease may be partly attributable to greater acceptance from universities that combining study and work is now the norm, rather than the exception, and subsequently are offering more flexible learning options, such as posting lecture materials online, and offering out-of-hours tutorials and lectures. Almost 20 per cent more part-time students agree that work interfered with their study.

The students more likely to agree that paid work severely or moderately interferes with study have the following characteristics:

- they are enrolled part-time;
- they are domestic students;
- they are female;
- they come from low socioeconomic backgrounds; and
- they are gap year students who deferred in 2008.

Significantly, these students are lower academic achievers and are more highly represented among the students reporting average marks below 60 per cent. They are also more likely than other students to be receiving lower marks than they expected. Students who considered deferral and students who received an average mark of 60 per cent or less worked longer hours than their counterparts (10.3 hours compared with 8.2 hours).

While the cause-effect relationships are not clear from this study, students' self-reports of their academic performance show that longer hours of work is indeed associated with lower academic achievement — a greater likelihood of poorer marks and greater likelihood of deferral. The confidence of many students that they can successfully balance study and work commitments may be misplaced.

In 2009, two questions were added to the survey to enable better assessment of the impact of paid

work on students. These questions sought to understand whether work commitments resulted in students missing classes, and to what extent students were worried by their financial situations, if at all. Less than one-fifth (16 per cent) of full-time commencing students who worked said they missed class sometimes or often to go to work. Only two per cent of students reported that they often missed class in order to go to work. Thus, with 27 per cent of full-time students working 16 hours or more a week, the vast majority of students are still able to attend class. Part-time students were significantly more likely to report missing class either often or sometimes, with 23 per cent of students reporting doing so. Of these students, eight per cent report frequently missing classes. The reasons for this difference may result from the other commitments part-time students are more likely to have, such as longer working hours and childcare. As with full-time students, however, the majority of working part-time students report that they never or rarely miss a class to work.

The majority of students with work commitments were worried about their financial situations, regardless of whether they were full-time or part-time students. Over a quarter of students in both groups were frequently stressed about their financial situation. Approximately a third of full-time and part-time students said that they were not worried by their financial situation. Given that a large proportion of students in both groups said one of their main motives for working was to meet basic needs, perhaps this finding is not altogether surprising.

Full-time students working 16 hours or more per week

The full-time students working longer hours (16 or more per week) are a distinctive group. They are more likely to be:

- older;
- from a remote area;
- first in family to attend university; and
- living in rental accommodation or owning their home.

Affording extras was the most common reason for working offered by the students working 16 hours or more per week (83 per cent). They are significantly more likely to work to meet basic needs than other students (76 per cent compared with 55 per cent), to support family (18 per cent compared to seven per cent) and to repay current

loans or debts (33 per cent compared with 16 per cent). In previous years there have been indications that students working longer hours do so out of necessity, however, in 2009, students who work 16 hours or longer are no longer more likely to be from a low socioeconomic background or have dependents.

There is clear evidence that working 16 hours or more per week is related to negative experiences of university and poorer academic progress. These students are significantly more likely to frequently or sometimes miss class in order to work (29 per cent compared with 14 per cent). They are more likely to agree that their financial situation is frequently or sometimes a source of worry (71 per cent compared with 62 per cent). Students working 16 hours or more per week may be at greater risk of attrition. Overall, they are more likely to:

- have considered deferral (29 per cent compared with 23 per cent);
- have withdrawn from one or more subjects;
- have received an average mark between 51 per cent and 60 per cent; and
- have difficulty comprehending course material.

At the same time, they are less likely to:

- believe that university life suits them and are less interested in extra-curricular activities;
- feel that university has lived up to their expectations;
- like being a university student and to have made friends; and
- be enjoying their course and to be satisfied with their university experience.

Students who work 16 hours or more per week are also more likely to agree that their paid work moderately or severely interferes with their study (71 per cent compared with 47 per cent). Yet five years ago, 81 per cent of this group of students reported their work commitment at least moderately interfered with their study. The reasons for this decrease are not clear, although it may be the result of better access to learning materials online, with students working 16 hours or more per week spending significantly more time using the internet for private study (7.3 hours compared with 5.7 hours) and on private study (10.5 hours compared with 9.5 hours). Despite the time devoted to private study, students working longer hours were more likely to have an average grade between 51 and 60 per cent than students who worked shorter hours.



Other extra-curricula commitments

Students were asked to estimate the number of hours they spent in sporting activities or exercise and socialising with friends and family during an average week during semester. On average, students spend moderate levels of time exercising (3.7 hours) while much more time is devoted to socialising, with the average student spending 13.3 hours per week with friends and family. This amount of time does not appear to have a negative impact on grade average, with high achieving and low achieving students reporting similar levels of time on sport and social activities as the overall sample. Students who thought seriously about deferral during semester also report similar levels of engagement with social and sporting activities. This may indicate that there is no particular benefit or disadvantage associated with this level of time commitment to extra-curricula activities.

Differences exist in the academic transition and performance of students who report spending no time on social and sporting activities. Low achieving students are more likely to spend no time on social activities (seven per cent compared with four per cent) and are more likely to spend no time exercising (26 per cent compared with 17 per cent). Students who considered deferral in 2009 were also more likely to not spend time on either of these activities (socialising: six per cent compared with three per cent; sport: 27 per cent compared with 17 per cent). It appears that there are benefits to engaging in a balanced lifestyle while studying, although more extensive investigation of this possibility is necessary.

Comprehending and coping

The 'comprehending and coping' scale measures the extent to which students are successfully understanding and managing the demands of university study (see Appendix 1). It is comprised of the following five items, which are reverse-scored:

- 'I find it quite difficult to understand a lot of the material I am supposed to study';
- 'I frequently feel overwhelmed by all I have to do';
- 'I have had difficulty adjusting to the style of teaching at university';
- 'My course workload is too heavy', and
- 'I find it really hard to keep up with the volume of work in this course'.

The following demographic subgroups are higher

on the comprehending and coping scale than their counterpart subgroups:

- students aged 19 years and under;
- male students;
- non-Indigenous students;
- students from English-speaking backgrounds;
- urban students;
- students from medium and high socioeconomic backgrounds;
- students with no dependents; and
- students who went to private secondary schools.

Compared with 2004, the demographic subgroups that report above average means on the scale remain much the same. One exception is that domestic students no longer have a significantly higher 'comprehending and coping' score than international students, as was the case in 2004. This is a positive finding for the sector.

Not surprisingly, students with above average scores on this scale were faring better with their university experience. These students were more likely to achieve an overall grade of 71 per cent or above. They were also more likely to achieve a higher average grade (72 per cent compared with 67 per cent).

Students with above average scores on the scaler were more motivated to study because they were interested in their course and they wanted to develop their talents. These students were also more likely to agree with items such as 'I get satisfaction from studying' and 'I enjoy the intellectual challenge'. They also had better study habits. They were more likely to report they worked consistently throughout the semester (50 per cent compared with 35 per cent). They were also more likely to attend class, to ask questions frequently during class and to come to class having completed the required readings.

Students with below average comprehending and coping scores are more likely to have seriously thought of deferring (30 per cent compared with 15 per cent). They were also more likely to say that emotional health, fearing they might fail, disliking study, and university not being what they had expected played a part in their considerations.

Below average scale scores may be partly attributable to the different motivations for students



to enrol in university. As was the case five years ago, students with below average scores on the comprehending and coping scale were more likely to cite instrumental reasons: they want to improve their job prospects (88 per cent compared with 83 per cent). In 2009, the below average students on the comprehending and coping scale were also more likely to have gone to university to meet the expectations of their parents (40 per cent compared with 28 per cent).

Two of the most striking differences between above average and below average students on 'comprehending and coping' related to commitments outside of university. Students with below average scores find it stressful managing study with other commitments (75 per cent compared with 37 per cent). These students are also more likely to agree that money worries make study more difficult (43 per cent compared with 22 per cent). While there is no difference between the two groups in terms of the hours committed to paid work, the frequency of missed classes in order to work, or income source distribution, their concerns may be related to demographic variables (more likely to have dependants, more likely to be from a low socioeconomic background). Their reasons for working indicate that working is a necessity: these students are more likely than students with above average comprehending and coping scores to work for basic needs, to support family, to pay off loans and to save for a HECS debt.

The students with below average comprehending and coping scores are more critical of the teaching they experience, with almost all the questionnaire items related to courses and teaching revealing significant differences between the two groups. The negative viewpoints of teaching and the overall learning experience may be associated with the preparedness of these students for university study, with school-leavers in the below average group more likely to indicate:

- they were not ready to choose a university course and would have preferred starting with a general first year;
- they found the standard of university work higher than expected;
- they did not believe the final year was good preparation for university; and
- they did not believe their university subjects build on their study at school.

Summary

In a consistent trend across the First Year Experience studies, the proportion of first year students undertaking paid work in addition to their study commitments has increased. Sixty-three per cent of students are working at least one hour per week, although the distribution of hours has remained relatively stable since 1994. While many students are working in order to afford extras, almost two-thirds of working students work to meet the cost of basic needs such as rent. Reliance on Youth Allowance continues to decline. Students in 2009 were also more focussed on working to improve their employability after university, perhaps a result of a context of concern about the global economic environment and the perceived need to seek an edge in tight labour markets.

Students who consider deferring are more likely to work longer hours than students who do not consider deferring. These students also tend to do less well academically and engage less with university life. These students acknowledge that their level of work interferes with their study and causes them to miss classes, yet their concern for their overall financial situation, coupled with a desire to earn money for basic necessities and to support families, motivates them to work longer hours. Students at greater risk of attrition are also more likely to have a lower score on the 'comprehending and coping' scale.



6. Teaching, Learning and the Overall Course Experience

- Improvements reported in the 2004 study in student responses on key aspects of the quality of teaching have been mirrored in the 2009 study, suggesting genuine progress has been made in advancing the quality of first year teaching since the 1990s.
- Seventy-seven per cent of students believe ‘the quality of teaching is generally good’, ranging across participant institutions from a high of 85 per cent to a low of 65 per cent.
- There are high levels of overall satisfaction with the university experience. Fewer than ten per cent of students report they are not finding their course stimulating, are not enjoying their course, or are dissatisfied with their university experience overall. These students are unhappy or discontented with most aspects of their experience and are highly disengaged. Their responses suggest an absence of a clear sense of purpose, problems ‘settling in’ and some mismatches of expectations.
- Feedback continues to be an issue. Only one-third of students believe that staff usually give them helpful feedback on their progress. A slightly higher proportion indicate they do not receive such feedback.
- Forty-eight per cent of respondents agree that staff are usually available to discuss their work. Only 26 per cent of first year students believe staff take an interest in their progress.
- One half of first year students report their subjects give them an awareness of the latest research.
- The findings point to high levels of curriculum coherence and relevance. Seventy-eight per cent of students believe their subjects ‘fit together well’ and three-quarters consider their subjects are a good base for future studies and connect with their future career prospects.

The changing patterns of teaching and learning

This section reports some of the judgements students made on the quality of the teaching they experienced in first year. The questionnaire used a

range of items designed to explore widely accepted characteristics of effective teaching, including items drawn from the Course Experience Questionnaire (CEQ).

In the First Year Experience studies of the 1990s first year students had negative attitudes towards a number of aspects of the teaching they had experienced. The findings of the 2004 survey revealed a significant upturn in student views on key areas of teaching and learning, suggesting that efforts across the higher education sector to enhance teaching and learning and the student experience were having positive effects. At the time we were cautious about reporting findings that pointed to such a marked upward trend, concerned that this might have been a methodological aberration associated with, say, the survey sampling. However, the 2009 responses reveal the sector can be confident that genuine improvements in student perceptions of the quality of teaching have taken place— these advances have been maintained, by and large, though in some areas there have been small drops from the highs of 2004.

In the five-year period since the 2004 First Year Experience survey two notable policy initiatives occurred in the higher education sector to support and encourage institutions to examine ways in which university teaching and



Table 6.1 Perceptions of teaching, 1994-2009, 5-point scale collapsed to 3 points, (% of students)
(1994, N=4 028; 1999, N=2 609, 2004, N=2 334, 2009, N=2422)

		Disagree		Agree
The quality of teaching in my course is generally good	1994	9	25	66
	1999	9	24	67
	2004	5	17	78**
	2009	5	18	77
Staff are enthusiastic about the subjects they teach	1994	13	34	53
	1999	12	32	56*
	2004	5	23	72**
	2009	6	19	75*
Most of the academic staff are approachable	1994	12	26	62
	1999	12	26	62
	2004	8	20	72**
	2009	7	21	73
The teaching staff are good at explaining things	1994	16	38	47
	1999	17	35	48
	2004	9	28	63**
	2009	10	28	62
Staff try hard to make the subjects interesting	1994	17	34	50
	1999	17	34	50
	2004	11	28	61**
	2009	12	30	58
Staff are usually available to discuss my work	1994	21	34	45
	1999	25	37	38**
	2004	15	36	49**
	2009	15	37	48
Staff make a real effort to understand difficulties students may be having with their work	1994	28	36	36
	1999	28	35	37
	2004	17	36	47**
	2009	21	35	45
Teaching staff usually give helpful feedback on my progress	1994	40	32	28
	1999	40	34	25*
	2004	31	36	33**
	2009	30	36	35
Most academic staff take an interest in my progress	1994	44	32	24
	1999	47	32	21*
	2004	34	36	30**
	2009	39	35	26**

New items on teaching, learning and the curriculum in 2009

My subjects are giving me an awareness of the latest research	2009	16	34	50
In my studies, I am getting a chance to learn about the research being done in my university	2009	38	31	31
My subjects are providing a good base for my future studies	2009	7	18	75
I can see the connection between my subjects and future career prospects	2009	9	16	75
Overall the subjects I am studying fit together well	2009	5	17	78
Lecturers often capture my imagination through their teaching	2009	28	38	35

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)



learning can be enhanced. First, the Learning and Teaching Performance Fund (LTPF) provided incentive funding on an annual basis for four years. To participate, institutions were required to demonstrate certain policies and activities relating to teaching and learning were in place, following which funds were awarded on the basis of a set of seven indicators of the quality of teaching and learning. Though controversial, the LTPF focused attention on teaching and the funding provided valuable discretionary revenue for teaching and learning programs. Second, the Australian Learning and Teaching Council (ALTC) has built the range and extent of its awards and grants programs that support the advancement of the quality of teaching and learning. ALTC is now a prominent and valued contributor to the Australian higher education sector. In addition to these two policy initiatives, throughout the five-year period the Australian Universities Quality Agency (AUQA) continued its cycle of quality audits, focussing attention on issues and areas of concern and disseminating good practice in a range of areas, including learning and teaching.

Student views on teaching

Slightly over three-quarters of first year students report that the teaching is generally good (Table 6.1). Only five per cent do not believe the teaching is generally good. Similarly, around three-quarters of the students report that staff are enthusiastic about the subjects they teach and only slightly fewer report that academic staff are approachable. These high levels of overall satisfaction are consistent across the 2004 and 2009 studies. There are, however, significant differences between the nine institutions in the sample — student agreement with the item ‘the quality of teaching is generally good’, for which the overall figure was 77 per cent, ranges from a high of 85 per cent to a low of 65 per cent. These figures reveal marked differences in student perceptions and levels of satisfaction across institutions.

Student perceptions of specific aspects of teaching are less sanguine than their overall satisfaction with the quality of teaching. Only 62 per cent report that ‘staff are good at explaining things’ and 58 per cent believe ‘staff try hard to make the subjects interesting’. On both of these items the levels of explicit dissatisfaction are relatively low at 10 and 12 per cent respectively, however a large proportion of students (28 per cent and 30 per cent) appear ambivalent.

One of the troublesome and perennial teaching issues is that many students do not believe they receive feedback on their progress. Only one-third of students report that staff usually give them helpful feedback on their progress. A slightly higher proportion indicate they do not receive such feedback. The nature and extent of the actual feedback that students receive is not mapped by this study, however the persistence of student perceptions of lack of adequate feedback is an ongoing issue for the sector.

Students are somewhat negative about the availability of staff and the interest shown by staff, though most of the improvements reported in the 2004 study over the figures of the 1990s have been sustained. Only 48 per cent of respondents agree that staff are usually available to discuss their work. Only 26 per cent of first year students believe staff take an interest in their progress, a figure that is significantly lower than that of the previous study in 2004. Overall, three-quarters of students are not prepared to report with confidence that they believe staff take an interest in their progress.

Both staff and student workloads may be factors in students’ negative perceptions of the more ‘personal’ dimensions of teaching. Addressing these aspects of the educational climate in the first year is a major challenge for the sector, especially in the light of high student-staff ratios and the range of pressures on academic staff.

Table 6.1 also reports a number of new items that were incorporated in the 2009 questionnaire, including two items on the teaching-research nexus and items exploring the coherence of subjects and their relevance to students’ plans for future study and careers. Overall, the findings point to high levels of curriculum coherence and relevance in the views of first year students. Seventy-eight per cent believe their subjects ‘fit together well’ and three-quarters consider their subjects are a good base for future studies and connect with their future career prospects. Half of the first year students report their subjects give them an awareness of the latest research. A smaller proportion, 31 per cent, report they are learning about the specific research being done within their own universities. These figures might be viewed as reasonably high given the challenges in making the teaching-research nexus explicit in the first year.

Table 6.2 Satisfaction with course of study, 1994-2009 (% of students)
(1994, N=4028; 1999, N=2609; 2004, N=2334, 2009, N=2422)

		Disagree	Agree
I am finding my course intellectually stimulating	1994	12	63
	1999	10	63
	2004	6	75**
	2009	5	76
Overall, I am really enjoying my course	1994	15	61
	1999	13	64*
	2004	9	71**
	2009	7	72
Overall, I am very satisfied with my university experience so far	1994	15	61
	1999	14	63
	2004	10	70**
	2009	9	71

Asterisks denote a significant change from the finding five years earlier. (* = significant at 0.05, ** = significant at 0.01)

Perceptions of the course overall

Despite the apparent concerns of some students about specific aspects of teaching, the respondents overall are highly satisfied with their courses. Mirroring the 2004 findings, 76 per cent of students find their course intellectually stimulating, 72 per cent are 'really enjoying' their course and 71 per cent are very satisfied with their university experience so far (Table 6.2). These are strong, positive measures of student satisfaction that suggest criticisms or concerns about specific aspects of university life do not translate into overall dissatisfaction with the university experience for most students.

There are sizeable variations across the nine institutions on the broad satisfaction measures reported in Table 6.2. Student responses on the item 'I am finding my course intellectually stimulating' range from 68 per cent to 85 per cent agreement and on 'overall, I am very satisfied with my university experience so far' range from 64 per cent to 85 per cent agreement.

The levels of student dissatisfaction as measured by the three broad items in Table 6.2 are low, which is not to be dismissive of the concerns of students who are unhappy or not having a satisfying experience. We can conclude from the survey data that somewhere in the vicinity of five to ten per cent of first year students in 2009 do not find their course enjoyable and their university experience satisfying, a proportion that has been reduced somewhat since the 1990s.

First year students who are unambiguously dissatisfied or discontented are an obvious target for institutional quality assurance if the

underlying causes can be identified. Of course, student dissatisfaction may not be the result of shortcomings in institutional provision and may be associated with individual-course mismatches, mismatches in expectations, and the motives and personal circumstances of individuals. We analysed the survey data to prepare a profile of the characteristics of the students who explicitly express dissatisfaction with their course and their university experience overall. The analysis looked at the students who disagreed with the questionnaire items 'overall, I am really enjoying my course' and 'overall, I am very satisfied with my university experience so far'. This analysis reveals these students are unhappy or discontented about most aspects of their experience and no particular set of factors emerges that might be the target for institutional intervention. The unhappy students tend to be domestic students. These students tend to be younger and to be from rural backgrounds. There are no differences, however, between the satisfied and dissatisfied students in terms of their socioeconomic backgrounds.

The responses of the dissatisfied students suggest some problems with 'settling in' to university and some mismatches of expectations. Overall, they have the following characteristics.

- They are less clear why they have gone to university (67 per cent report being clear about their motives compared with 89 per cent of others). A higher proportion cite the expectations of parents as a reason for going to university, but at the same time fewer believe their parents understand their university life.
- Most have given serious thought to deferring. At the same time, they appear committed to



changing courses or institutions, suggesting they retain an interest in attaining a higher education qualification and that part of the problem for them may lie in the course/ institution match — 55 per cent of the dissatisfied school-leavers believe they were not ready to choose a university course, compared with only 23 per cent of the satisfied students.

- They are getting lower grades than other students (36 per cent compared with 14 per cent report grades below 60 per cent) and these grades are lower than they had expected. University is more challenging than they had expected.
- They are less engaged overall. Many of these students do see the relevance of their subjects and 68 per cent find it difficult to get motivated to study. They are less likely to study with other students, less likely to use IT for study in its various forms and more likely to skip classes for paid work — even though ‘dissatisfied’ and ‘satisfied students’ engage in paid work at the same rate and are working the same number of hours.
- Only 15 per cent feel they belong to the university community (compared with 52 per cent of others) and only 23 per cent say they ‘really like being university students’ (compared with 78 per cent).

The views of student subgroups

- Students from low socioeconomic backgrounds and those from high/medium socioeconomic backgrounds report near identical levels of satisfaction with the quality of teaching and express the same levels of enjoyment of their courses and satisfaction with their university experience.
- Indigenous students report slightly higher levels of overall enjoyment and satisfaction than non-Indigenous students, however the differences in responses are not statistically significant.
- Rural students tend to be more critical of the quality of teaching than urban students. The levels of satisfaction with the university experience and enjoyment of courses are comparable for both groups.
- Mature-age students have far more positive perceptions of the quality of teaching than school-leavers. These attitudes appear closely aligned with their stronger clarity of purpose.

They also have higher levels of satisfaction with their courses and the university experience overall. These positive sentiments towards the first year experience were noted in the 2004 study and exist despite the fact that mature-age students tend to study alone and experience more financial and family pressures than younger students.

- The attitudes towards teaching of males and females are broadly similar and have similar levels of satisfaction with the teaching they experience and with their courses.
- International students express high levels of satisfaction with teaching. They are more engaged in their studies than domestic students and their responses show they are prepared to seize the opportunities available to them. Overall, international students have equivalent levels of satisfaction with teaching, with their courses and with the university experience to those of domestic students.

Summary

The findings in this chapter show that improvements in students’ perceptions of important dimensions of the quality of teaching that were identified in the 2004 study have been sustained. In combination, the 2004 and 2009 findings indicate major advances in the quality of first year teaching since the 1990s. Overall, three-quarters of first year students confidently report that ‘the quality of teaching is generally good’. There are also high levels of overall satisfaction with the university experience, with fewer than ten per cent of students reporting they are not finding their course stimulating, are not enjoying their course, or are dissatisfied with their university experience overall.

First year students report high levels of curriculum coherence and relevance. Seventy-eight per cent of students believe their subjects ‘fit together well’ and three-quarters consider their subjects are a good base for future studies and connect with their future career prospects. One half of first year students report their subjects give them an awareness of the latest research.

Despite the overall positive reactions to the quality of teaching in the first year, feedback on progress is again an issue. Only one-third of students believe that staff usually provide helpful feedback on their progress. Feedback is a perennial problem for the sector, with very few improvements in students’ perceptions being evident. This study does not

reveal the extent to which the apparent lack of useful feedback concerns students, however timely feedback is one hallmark of an effective educational environment, especially when students make a transition to a new environment in which there are new norms and new expectations.

A challenge for the sector is to boost the degree of student-staff interaction in the first year. The teaching items on the questionnaire that receive the lowest scores relate to the more 'personal' aspects of teaching: only 26 per cent of first year students believe staff take an interest in their progress; less than half (forty-eight per cent) of respondents agree that staff are usually available to discuss their work. These findings are partially explained by large class sizes and the multiple demands on academic staff, nonetheless universities are under some obligation to ensure that first year students receive appropriate opportunities for interacting with staff.



7. Distinctive Student Subgroups

The effects of socioeconomic background

In 2009 the attention of the higher education sector became focused on a long-term agenda to improve access for people from low socioeconomic status (SES) backgrounds following the recommendations of the Review of Australian Higher Education (DEEWR 2008), later adopted by the federal government, for national targets for expansion and equity. The Review's recommendations were a response to the continuing social disparities in access to and participation in Australian higher education. Such imbalances have persisted despite a national equity policy framework and the efforts of universities in offering a variety of access programs.

The First Year Experience findings are a valuable dataset in this context for they help in identifying possible responses in the first year that will assist students once enrolled with success, retention and completion, noting that the available data show that low SES background students have had broadly comparable rates, albeit slightly lower, in all three areas. Of course, the people from low SES backgrounds who presently choose to go to university and who are successful in being admitted to universities are likely to differ in substantial ways from those who do not, thus the findings presented here may not reflect patterns that emerge once future recruitment and admissions patterns change.

Using postcode of home address to classify socioeconomic status

In the first instance, the 2009 First Year Experience data were analysed using the classification of SES based on the postcode of permanent home address currently employed by the



sector. International students were excluded from this analysis. Using this method, 15 per cent of the sample are defined as low SES, which is the comparable with the overall figure for the higher education population. In the analysis to follow, low SES students are compared with medium and higher SES students combined. The analysis reveals significant differences in the experiences and attitudes of the students as well as many demographic differences. Key demographic differences are listed below:

- a higher proportion of the low SES students are female compared with the high/medium SES students (73 per cent compared with 69 per cent);
- low SES students are significantly more likely to be rural (26 per cent compared with 13 per cent), a finding that is anticipated due to the postcode classification system;
- again as expected, parental education levels are higher for the high/medium SES group compared with the low SES group. The low SES students are more likely to be the first in the family to attend university (46 per cent compared with 29 per cent);
- low SES students are more likely to have attended government schools (59 per cent compared with 48 per cent);
- a higher proportion of low SES are from LOTE backgrounds (28 per cent compared with 24 per cent); and
- low SES students are concentrated in the fields of education and health, traditional 'first generation' pathways into higher education.

Low SES students are more likely to report that Youth Allowance or Austudy is their only or main source of income (33 per cent compared with 17 per cent). In contrast, the high/medium SES students tend to be more likely to report that part-time work is their main or only source of income (44 per cent compared with 40 per cent) though the differences here are not statistically significant. Overall, 68 per cent of high/medium SES students are undertaking paid work of some kind, compared with 58 per cent of low SES students. Of the students working, low SES students indicate they are motivated by affording extras, meeting

Table 7.1 Comparison of the attitudes and experiences of low SES and high/medium SES (as measured by home postcode)

Low SES more likely to:	High/Medium SES more likely to:
Be influenced by parental expectations	Really like being on campus
Be focused on training for a particular job	Be planning an international study experience
Know the type of occupation they want	Be studying or planning to study a language
Find the standard higher than they had expected (for school-leavers)	Have a quiet place to study
Report lower grades in semester 1	
Considering deferring due to fear of failure	
Have had difficulty adjusting to university teaching	
Have difficulty comprehending material	
Find the workload heavy	
Believe their parents have little understanding of their university life (for school-leavers)	
Keep to themselves at university	

basic needs and being financially independent from their families. The patterns for high/medium SES students are somewhat similar, though fewer indicate they work to meet basic needs (60 per cent of working high/medium SES students compared with 76 per cent of working low SES students).

Financial concerns are more prominent among low SES students. Low SES students are more likely to indicate their financial circumstances are a source of worry (33 per cent compared with 26 per cent) and that money worries make it difficult for them to study (39 per cent compared with 32 per cent). Low SES students are also more likely to report that work interferes with their study, even though a smaller proportion of these students are engaged in paid work of some kind.

Table 7.1 shows some important contrasts between low SES and high/medium SES students in relation to their motives, their transition to university and their academic experiences. Low SES students show strong clarity of purpose yet are more likely to find study difficult and to be anxious about their results and the possibility of failure.

The lower SES students are more likely to say that they have difficulty comprehending the material and have difficulty adjusting to the style of university teaching. There are no differences between the SES subgroups in the extent to which they had considered discontinuing or deferring, with 24 per cent of both groups reporting they had seriously considered doing so. A higher proportion of the low SES students who had considered discontinuing or deferring indicated that financial reasons and fear of failure were prominent in their thinking at the time.

The overall study patterns of the SES groups are quite similar as are their judgements on key aspects of the teaching as they have experienced it. Low SES students are more likely to report that social networking technologies and getting together with other students to discuss subjects are useful strategies for them, but otherwise the two SES groups are very similar in terms of the way they approach their study.

Significantly, as was reported in 2004, the SES subgroups report near identical levels of satisfaction with the quality of teaching and express the same levels of enjoyment of their course and satisfaction with their university experience.

Using 'first in family' to classify socioeconomic status

A second analysis was performed in which the sample was divided in two groups: those whose parents (one or both) were graduates and those for whom neither parent was a graduate. This simple method applies a two-category 'first-in-family' approach to identifying the likely educational, social and cultural resources surrounding a first year student, noting that there are potentially more fine-grained SES scales that might be developed using parental educational levels.

The patterns in the student experience analysed on the basis of a 'first-in-family' versus 'all other' basis reveal two groups of students for which the university experience in the first year differs in significant ways. Prior parental experience of higher education is closely related to the attitudes and experiences of first year students.

This approach divided the First Year Experience sample into two groups of roughly equal size in which the parental occupation types are markedly different. The high/medium SES group defined in this way has 65 per cent of mothers holding management or professional positions and 77 per cent of fathers, compared with 33 per cent and 42 per cent respectively for the low SES group.

There are significant differences in the ages of the two groups — the low SES group having fewer students aged less than 19 years and more students aged over 30 years — and these differences should be taken into account in interpreting the findings. Similar differences are also found when the previous SES classification based on home postcode is used, though they are less marked.

Using the 'first in family' classification, the differences between the low SES and high/medium SES groups follow similar patterns to that of the preceding postcode classification, however there are more statistically significant differences and the differences are more pronounced.

The low SES students classified by parental education show more clarity of purpose and occupational focus. They are more likely to have worked consistently during semester and are more strategic about managing their academic workload, though they are more likely to report they feel overwhelmed by all they have to do. Fewer have made friends and they are less likely to report they regularly work with other students and less likely to report they like being a university student. Ironically, though, they are also more likely to report greater satisfaction from studying than high/medium SES students, who are more likely to say they skip classes.

Some differences emerge on the questionnaire items to do with the quality of teaching. Low SES students are less likely to believe they have been encouraged to become independent learners (78 per cent compared with 85 per cent) and slightly less likely to believe their course is well organised (69 per cent compared with 72 per cent). Their levels of overall enjoyment and satisfaction are the same as those of high/medium SES students however.

Indigenous students

Since the 2004 First Year Experience study, the Indigenous Higher Education Advisory Council (IHEAC) has been an energetic and effective advocate for the advancement of Indigenous people

and Indigenous culture in Australian universities and has actively offered proposals for the ways in which the higher education sector can raise the access, retention and completion rates of Indigenous Australians.

The national dataset on people from designated equity groups shows that retention and completion rates continue to be lower for Indigenous students than for other students. This is major challenge for policy and practice, particular given that Indigenous people continue to be significantly disadvantaged in the school sector, making access to higher education particularly problematic.

The value of the First Year Experience survey data is that direct comparisons and contrasts can be made between the attitudes and experiences of Indigenous students entering higher education and other students. These are important findings to assist universities to respond to the particular needs of Indigenous commencers.

The 2009 sample has 52 students who identified as an Indigenous person. While this is a relatively small number, we note that at 2.1 per cent of the sample, this figure is above the proportional share of university places, estimated to be around 1.5 per cent for Indigenous people. The sample has students from all the participating universities and from origins in all states except Tasmania.

On average, the Indigenous students in the sample tend to be older and are more likely to be female and from rural or isolated areas (24 per cent compared with 15 per cent). Seventeen per cent are 25 years or over, compared with 11 per cent of the sample overall. The Indigenous students have lower levels of parental education, are more likely to be 'first-in-family' and are more likely to be classified as low SES on the postcode measure. They are mainly full-time students (88 per cent compared with 93 per cent). A high proportion completed a VET course prior to commencing higher education — 35 per cent, compared with 18 per cent of other students. A higher proportion receive student financial support of some kind.

The responses of Indigenous students reveal their distinctive attitudes and experiences, summarised in the points to follow:

- the Indigenous students emerge as highly motivated and optimistic in their outlook. Fewer Indigenous students agree with the statement 'university just hasn't lived up to my expectations' (four per cent compared with 17 per cent). They are very focussed on using a university education to develop their talents

(90 per cent compared with 76 per cent). They are also far more positive about the value of orientation programs in getting them off to a good start (59 per cent compared with 44 per cent);

- they have high expectations and are focused on the occupations they want. Eighty per cent of the Indigenous students report they know the career they want compared with 66 per cent of the other students;
- despite this focus and optimism, the findings show Indigenous students face particular challenges. More Indigenous students withdrew from subjects and more changed courses. A higher proportion appear to have considered deferring (28 per cent compared with 22 per cent, however this difference is not statistically significant) offering health, fear of failure and family commitments as the principal reasons;
- as reported in 2004, family commitments and responsibilities pre-occupy the thoughts and energies of many Indigenous students, in part because they are often older than other students, thus more likely to have dependents, but also because of the centrality of family in the lives of Indigenous people;
- the Indigenous students reported more initial problems in adjusting to university teaching styles and a higher proportion indicate feeling overwhelmed (46 per cent compared with 33 per cent) and having difficulty comprehending the material (33 per cent compared with 19 per cent). Despite this, the Indigenous students are more likely to report that their grades in semester one were higher than they had expected (27 per cent compared with 16 per cent);
- Indigenous students are significantly more likely to indicate they keep to themselves while on campus (44 per cent compared with 31 per cent). This apparent sign of isolation may be related to social exclusion or to the distinctive demographic characteristics of the Indigenous students; and
- money worries are widespread among Indigenous students. A higher proportion report that money is often a source of concern for them and a higher proportion report they often or frequently miss classes for paid work commitments (31 per cent compared with 16 per cent).

In regard to the quality of teaching, Indigenous students have very similar views to those of other students, with few, if any, items on which there are differences worthy of noting. The Indigenous students in the sample report apparently higher levels of overall enjoyment of their courses and satisfaction with their university experience than non-Indigenous students, however the differences are not statistically significant.

Overall, the study's findings show Indigenous students to be highly motivated and committed to their studies. However, they experience a range of interrelated pressures, which include doubts about their own capacity to do well, academic workload pressures and paid work and family commitments. These findings are consistent with the 2004 data.

Students from urban and rural backgrounds

Rural and isolated Australians are significantly under-represented in higher education. The participation of rural Australians in universities and the engagement of universities with rural and isolated Australia continue to be significant policy issues for the nation.

The project's student sample was divided into two groups, urban and rural, according to the postcodes of students' permanent home addresses. Students whose homes were in isolated or remote regions were classified as rural for the purposes of this analysis (see Appendix 2). International students were excluded. Using this method, students from rural backgrounds comprise 21 per cent of the sample. About half of these students attend two of the nine universities participating in the study.

Sizeable differences were found in the responses of students from urban and rural backgrounds. When compared with the urban students, the rural students are more likely to be older (which is partly related to students taking a gap year, which 26 per cent of the rural students had done), more likely to be female (corresponding to the national enrolment patterns), and more likely to be born in Australia. Parental education levels are higher for the urban students and fewer urban students are the first in their family to participate in higher education (29 per cent compared with 40 per cent). Far fewer rural students than urban students speak a language other than English (10 per cent compared with 26 per cent). As expected, the rural students were more likely to be living in colleges (32 per cent compared with three per cent) and less likely to be



living with families (32 per cent compared with 80 per cent).

The personal motives for attending university are similar for students from urban and rural backgrounds though rural students appear slightly more instrumental and to have a stronger clarity of purpose. However, the rural students in the 2009 study emerge as less contented than their urban background counterparts: they are less likely to say they 'really like being a university student' (69 per cent compared with 75 per cent) and that they 'really like being on campus' (56 per cent compared with 64 per cent).

The rural students report more difficulties adjusting to the style of university teaching (36 per cent compared with 28 per cent) and more difficulties comprehending material (23 per cent compared with 17 per cent). They are more likely to feel frequently overwhelmed by all they have to do (39 per cent compared with 33 per cent). These findings appear directly related to their financial circumstances. Compared with the urban background students, rural students reported greater financial stress and more money worries, which interfere with their study (46 per cent compared with 30 per cent). Finances are frequently a source of worry for 34 per cent of rural students (compared with 25 per cent for urban students).

Similar proportions of rural and urban students seriously considered deferring or discontinuing at some stage during first year. For the rural students, financial and family reasons were more prominent in their thinking at the time. Though fewer rural students are undertaking paid work while studying (42 per cent of rural students do not work during semester, compared with 31 per cent of urban students), those doing so are working longer hours overall (16.6 hours compared with 13 hours). Overall, rural students experience more stress from trying to manage their various commitments (64 per cent compared with 58 per cent).

The rural students in the 2004 study were generally more positive about the quality of teaching and showed greater signs of engagement and overall satisfaction than their urban peers. This is not the case with the 2009 students. The reasons for this change in attitude are not clear from the study. Some of the key contrasts between students from rural and urban backgrounds in their perceptions of aspects of the teaching they experience are presented in Table 7.2. Despite these differences, the overall levels of satisfaction with their university experience and enjoyment of their course are the same for both urban and rural students.

Females and males

Our attempts to prepare sound analyses of the first year experience are somewhat constrained by the significantly lower response rates of male students to surveys. While the national female:male ratio for first year students is around 4:3, for the 2009 First Year Experience sample it is 5:2. Similar patterns of lower male response rate are common in the higher education sector and are by no means limited to the present study.

There are also significant gender imbalances across the major fields of study that influence interpretation of the findings. As with the national patterns of enrolment by discipline, the females in the sample are concentrated in the broad fields of education Society and Culture, Education, Creative Arts and Health. The males are concentrated in Engineering, Information Technology and Architecture.

Though the age profiles of the males and females are similar, the males tend to be from higher socioeconomic backgrounds. A higher proportion of females are from rural areas (16 per cent compared with 13 per cent), corresponding to the overall national enrolment patterns. VET courses appear to have been a more prominent pathway for female first year students (20 per cent compared with 14 per cent), consistent with the overall lower SES

Table 7.2 Comparison of the attitudes of students from rural and urban backgrounds towards the quality of teaching

Questionnaire item on teaching	Rural students (% agreement)	Urban students (% agreement)
Generally my course is well organised	63	72
The teaching staff are good at explaining things	55	63
The teaching staff make it clear what they expect from students	56	63
Staff are enthusiastic about the subjects they teach	71	76
The quality of teaching in my course is generally good	71	78

All differences statistically significant at 0.01

profile of the female students. Receiving training for a specific job and improving job prospects are high on the agenda for females.

Female and male respondents have similar proportions of full-time and part-time enrolment. Overall, however, the females spend less time on campus. This may be a field of study effect, though equally it may reflect the additional pressures on female students. Female students tend to find their academic workloads heavier and are more likely to experience stress in managing their study alongside their other commitments, and markedly so (61 per cent compared with 49 per cent). Female students are also more likely to find their financial situation is frequently or sometimes a source of worry for them (68 per cent compared with 54 per cent) and that work severely or moderately interferes with their study (54 per cent compared with 44 per cent of the students undertaking paid work). Females are more likely to be paid part-time workers than males. The proportion of females undertaking paid part-time work is 66 per cent compared with 57 per cent of males — a pattern consistent with the 2004 study, though the proportions are higher in both cases.

The pressures on females and their study/work/life patterns are reflected in other findings. Females are less actively involved in extra-curricular life on campus (14 per cent compared with 24 per cent) and significantly less likely to feel they belong to the university community (48 per cent compared with 55 per cent).

Despite the pressures and the possibly lower level of engagement with university life, females get more satisfaction from studying (51 per cent compared with 46 per cent) and are more likely to believe they studied consistently throughout semester (45 per cent compared with 39 per cent). Females and males received similar grade distributions from first semester assessment. Females tend to get higher grades than they had expected; conversely, males receive lower grades than they expected.

On the items on the First Year Experience questionnaire relating to the quality of teaching, the responses of males and females are broadly similar. Female students are less likely to agree that 'lecturers often capture my imagination through their teaching' (33 per cent compared with 39 per cent) but otherwise males and females have similar levels of satisfaction with the teaching they experience and with their courses.

The influence of age

The project team examined the differences in student backgrounds and attitudes according to their ages. The students were divided into three groups – those students aged 19 years or younger (who we classify as direct school-leavers), those aged 20 to 24 years (29 per cent of whom are one-year post-school deferees) and those 25 years and over (who we classify as mature-age for the purposes of this analysis). This approach creates group sizes of 1627, 529 and 266 respectively, with mean ages of 18.6 years, 20.8 years and 35.1 years. The three-group division according to age allows the project to examine the experiences of school-leavers entering higher education directly from school, those entering only a few years post-schooling and the students who more fully fit the description 'mature-age'. Half of the mature-age students are from two of the universities in the sample.

There are noticeable demographic differences between the groups. The 19 year old students are more likely to be of higher socioeconomic background and are more likely to have attended independent schools (29 per cent compared with 12 per cent). The 25 years and over students are more likely to be the first in their family to have attended university. Predictably, the older students are more likely to be enrolled part-time (32 per cent compared with four per cent) and more likely to be enrolled by distance education. Half of the mature-age students have dependents.

Many of the differences in student attitudes and experiences of university appear to flow from these demographic and contextual factors. The differences across the age groups are substantial and in most ways correspond to common perceptions of the differences in motives, commitment and study patterns of mature-age people compared with younger people. The 2009 findings also mirror in all ways those of the 2004 study. Older students are very focused on their objectives, which are often associated with receiving training for a specific job. They have clear goals and express fewer concerns about getting motivated to study. They also express high levels of satisfaction with their study and indicate they enjoy the intellectual challenge of their courses. Table 7.3 summarises some of the main areas of contrast in the attitudes of school-leavers and mature-age students (25 years and over).

The responses of the older students indicate they are strategic students who often work



Table 7.3 Comparison of the attitudes of school-leavers and mature-age students (25 years and over)

School-leavers (age 19 years) more likely to:	Mature-age students (age 25 years and over) more likely to:
Be marking time while they decide their future	Have a strong clarity of purpose
Find it difficult to get motivated to study	Find lectures stimulating, find their course stimulating and get satisfaction from studying
Skip classes	Have withdrawn from subject
Wish to change courses	Seek assistance from staff and believe they are receiving helpful feedback
Have made close friends at university	Believe staff show an interest in their progress
Work collaboratively with other students and borrow notes from others	Study alone, keep to themselves at university and be uninterested in extracurricular activities
Like being on campus and be active in extracurricular activities	Believe their subjects are giving them an awareness of the latest research
Feel they belong to the university community	Experience money worries and find it stressful managing their study and other commitments

independently. They are less likely to engage in collaborative study and are more likely to report that they keep to themselves at university (41 per cent compared with 28 per cent). Mature-age students report high rates of usage of web-based learning resources, equivalent to those of school-leavers, and have similar perceptions of the usefulness of these resources for their learning.

Overall, the mature-age students aged 25 years and over emerge as a highly satisfied group, as they did in the 2004 study. They express high levels of satisfaction with their courses and react more positively to the teaching they have experienced: they strongly believe they are receiving helpful support and feedback from their teachers. The conclusion reached in the 2004 study can be reiterated:

Mature-age students are a highly engaged group. They have clear goals, they work consistently and they enjoy the teaching and learning process and the challenges associated with it. (Krause, Hartley, James & McInnis, 2005: 72)

International students

The well-being, academic success and satisfaction of international students are major priorities for the Australian tertiary education sector. The 2009 First Year Experience sample has 265 international students. These students are predominantly from China (29 per cent) and Malaysia (25 per cent) and are concentrated in two broad fields of study, Management and Commerce (26 per cent) and Health (22 per cent). Seventy-seven per cent come from backgrounds in which a language other than

English is spoken at home. A large proportion of these students, 60 per cent, completed their secondary schooling in Australia.

The international students have parental education patterns that are similar to those of domestic students. Thirty-four per cent are first-in-family, compared with 31 per cent of domestic students. The international students are largely studying full-time and a higher proportion have dependents than domestic students (19 per cent compared with 13 per cent). International students are heavily influenced by their parents' expectations (59 per cent compared with 32 per cent), and feel pressure due to the financial commitment made by their parents. These students are also very focussed on developing their talents (85 per cent compared with 76 per cent).

International students report far lower levels of paid work than domestic students (71 per cent and 33 per cent respectively report 'none') and they report fewer money worries. They are also less likely to experience stress managing their study and other commitments (45 per cent reported stress compared with 59 per cent). However, finding suitable accommodation is a significant issue for most international students. Half changed accommodation one or more times since they took up their university place; six per cent changed *three times or more*. Fifty-two per cent indicated they were renting with friends. Improving the accommodation opportunities for international students near to campus is a growing policy issue.

Table 7.4 Comparison of the attitudes of international and domestic students towards aspects of teaching and learning and the use of IT

Questionnaire item on teaching and learning	International students (% agreement)	Domestic students (% agreement)
I feel part of a group of students committed to learning	56	53
I feel I belong to the university community	48	50
One of my teachers know my name	58	58
Academic staff take an interest in my progress	32	25*
The teaching staff are good at explaining things	72	61**
Teaching staff usually give helpful feedback on my progress	47	33**
There is a positive attitude towards learning among my fellow students	65	56**
I was given helpful advice when choosing my subjects	43	34**
Lecturers often capture my imagination through their teaching	43	34**
	International students (% used)	Domestic students (% used)
Podcasts of lectures	90	73**
Online discussion with other students	83	61**
Subjects offered online	58	26**

Asterisks denote a statistically significant difference between the two subgroups. (* = significant at 0.05, ** = significant at 0.01)

In the 2004 study we made the following observations:

One of the worrying signs in the 2004 dataset is the apparently lower level of social integration of international students. Fewer international students report they feel part of a group committed to learning (46 per cent compared with 56 per cent) and fewer are experiencing a sense of belonging (35 per cent compared with 52 per cent). Fewer are confident that a staff member knows their name and fewer believe staff take an interest in their progress. Generally, the international students are more critical of the teaching ... (Krause, Hartley, James & McInnis, 2005: 76).

The 2009 findings point to a major improvement in the experiences of international students in this regard. The first four rows of Table 7.4 report the 2009 findings relating to the issues raised in the quote above. In each case, these show comparable if not more positive responses on the part of international students.

We can conclude that international students are committed students who actively participate in their studies and who are highly satisfied with the teaching they are receiving (Table 7.4). Far fewer international students consider deferring or

discontinuing than domestic students. International students are more engaged in their studies than domestic students and are prepared to seize the opportunities available to them. They make greater use of technology for learning in its various forms — especially podcasts, online units and online discussion — more frequently study with other students (though otherwise they tend to keep to themselves on campus compared with domestic students) and are more likely to seek the advice and assistance of staff. There is no difference between international and domestic students in their responses to the item 'I have had difficulty adjusting to the style of university teaching', with a little under one-third of both groups agreeing.

Nevertheless, university study in Australia does have its anxieties for international students. As with the 2004 study, the international students find they are receiving lower grades than they had expected (46 per cent compared with 31 per cent) and the majority believe the standard is higher than they had expected (55 per cent compared with 38 per cent). Overall, however, international students have equivalent levels of satisfaction with teaching, with their courses and with the overall university experience to those of domestic students.



8. Conclusions and Implications

The first year students in 2009 are more organised, pragmatic and focussed than their 2004 counterparts. More believe they were ready to choose a university course, fewer considered deferring and fewer plan to change course or institution after first year. Parental expectations figure more highly in their decision to go to university.

The school-leavers in the sample report an easier academic transition to university, reflecting, it seems, the efforts of both schools and universities. The 2009 students are more likely to believe the final year of school prepared them well for university and their university subjects are building on their schooling. They are also more satisfied with the advice they received on subject choices.

The study reveals important trends in students' study habits and patterns of engagement with university. Some of these are subtle, however they point to new dynamics in the student-university relationship that have implications for the quality of educational outcomes. First year students are spending fewer days and less time on campus. Fewer are involved in extra-curricular activities around campus. Fewer say they have made close friends. More indicate they keep to themselves at university. Yet, in apparent contradiction, the students of 2009 report more involvement in group work for study purposes, both in and out of class. These findings suggest students are instrumentally balancing their time commitments and are adept at regulating their academic experiences to achieve their goals.

The trend towards part-time work during semester continues. A growing proportion of first year students are undertaking paid work. In this sample, 61 per cent of the full-time students are working compared with 55 per cent five years ago. These students average close to 13 hours per week of paid work. Despite this, there has been no rise in students' belief that this work interferes significantly with their study. In fact, the 2009 first year students report significantly less interference than the students of 2004. This is consistent with the conclusion that most students appear skilled at managing their commitments.

The project's indicators of key staff-student interactions are down from the 2004 figures. Fewer students believe one of their teachers knows their name. Fewer believe academic staff show

an interest in their progress. ICTs may be a major factor in these responses. Predictably, there have been dramatic rises in the use of various forms of ICTs for study-related purposes and students are embracing these opportunities and are highly positive about the benefits. One consequence is the on-campus, face-to-face experience is taking on less significance and students are having less direct contact with academic staff. Here the signs are clear. Lectures are now less central to first year study. More students report that it is possible to skip classes because notes are on the web, though there is no evidence they are doing so.

What are the effects of these changing patterns of student engagement on the quality of their learning? This study's findings do not provide an answer to this question, however they point to trends that warrant monitoring. 'Time on task' dropped for the 2009 students compared with their 2004 peers. Students' self-reported course contact hours declined significantly, from 16 to 15 hours per week on average. At the same time, the hours spent in private study has decreased to 10.6 hours per week. The overall decline in 'time on task' should be watched closely by the sector, for this is a highly salient, albeit blunt, indicator of the quality of learning. Of course, students' broad estimates of weekly time allocation say nothing about the quality, intensity and efficiency of their study-related activities. Given that the 2009 students appear committed to their studies and are highly self-regulating, we suspect they manage their time effectively and use ICT and peer support strategically to supplement the apparent reduction in course contact time.



Implications for policy and practice

The findings of the 2009 First Year Experience study suggest that good progress has been made in improving the transition to university and the quality of the educational experience for first year students. The investment in high quality transition programs and in monitoring and responding to the needs and experiences of first year students is yielding dividends.

The emphasis of the higher education sector on the first year must intensify as the student population grows and diversifies. The Australian Government has established national targets that by 2025, 40 per cent of all 25-34 year-olds will have attained a qualification at bachelor level or above and that by 2020, 20 per cent of undergraduates will be people from low socioeconomic status backgrounds. During the next decade, the first year will be a critical time for retention and for establishing sound patterns of study and academic engagement, perhaps even more so than now.

Institutions are likely to respond in different ways to the challenges of achieving these national targets. Diversification is likely to take place in selection and recruitment strategies and in first year curricula. The school-university interface is likely to change dramatically. These changes are welcome, for they will usher in a more responsive and accessible tertiary education system.

In this context, this study points to a number of interrelated areas that might provide the focus for national and institutional policies and programs.

- *Resolving the problems of student income support and students undertaking paid work*
The amount of paid work undertaken by first year students during semester continues to be a concern. First year students need uninterrupted time to concentrate on their study and they need to study free from financial stress for maximum educational progress. The high number of hours worked each week by a large proportion of first year students, often to provide for basic necessities, suggests educational outcomes are at risk of being diminished. Some improvements have been made in the national income support measures, but a further policy response is needed. For their part, universities might explore the options for providing more work opportunities on-campus, for this is not yet commonplace in Australia. Of course, not all

of the paid work undertaken by students is for week-to-week financial survival, some is clearly discretionary and related to wider social trends and the goals and priorities students have for their lives. Neither is all of the work undesirable. Developing curriculum responses that continue to maintain high standards while acknowledging that the typical full-time student is also a working student who is sandwiching study and work remains a challenge for the sector.

- *Monitoring the 'time on task'*
A related issue to the issue of paid work is the need for universities to monitor course contact hours and time students spend in class, as discussed previously in this overview section of the report. We stress that we do not assume that reductions in course contact time will necessarily have detrimental educational effects or that time spent on study is related in a simple way to educational outcomes, especially as the study options available to students diversify as a result of the penetration of ICT. However, diminishing course contact hours and private study time may reflect reduced engagement and reduced opportunities for learning. The drift in this direction should be watched carefully.
- *Strengthening the interactions between students and academic staff*
In the 2009 First Year Experience study, the more 'personal' dimensions of teaching, such as the interest shown in student progress, are once again the aspects that students rate the lowest. The student-teaching interaction appears impersonal and distant for many students. There are many reasons for this, including class sizes, the rise in the use of ICT and the reduced time students spend on campus. We believe greater attention needs to be paid to ensuring all students have the opportunity for closer personal interactions with academic staff at least at some stage during the first year. This is not a cry for a return to an imagined halcyon era, rather our recommendation is based in the belief that teacher empathy, demonstrated interest in students as individuals and respect for students are important factors in students' academic and social engagement.
- *Responding to students at risk and students who are highly disengaged*
There is perhaps no greater challenge



facing the sector than that of identifying and monitoring the students who are 'at risk' of attrition or poor academic progress. Limited inroads have been made into this problem. However, the targets for expansion and equity are likely to lead to an enhanced focus on 'at risk' students. In some ways, first year retention is a proxy for the appropriateness of the matching of students to courses during recruitment and selection, for the relevance of courses, for the quality of teaching, for the quality of support, and so on. Among the 'at risk' students is a small but persistent proportion of first year students who are very disengaged and appear highly dissatisfied. The precise reasons for these attitudes are difficult to identify and probably quite varied. Whether there are opportunities to reduce the proportion of disaffected students we cannot be sure, however this group is an obvious target for intervention if they can be identified early. Overall, the problems of students at risk and students who are disengaged require institutions to have good data systems in place. This is an area in which much progress has been made we believe, with institutions conducting surveys and ensuring early opportunities for assessment and feedback are in place. Monitoring student subgroups is clearly essential, for this study shows that the student experience varies greatly according to students' backgrounds.

- *Matching students to courses and institutions*
We find once again with the 2009 findings that some students appear to have a poor alignment between their objectives and the courses in which they are enrolled. This may be due to students having vague goals or misunderstandings, equally it may be due to courses simply not meeting their expectations in terms of relevance and quality. Helping students to clarify their personal objectives for undertaking higher education and improving the matching of the interests and aptitude of students to particular fields of study would be helpful. It is a difficult task to convey in advance the character of the university and course experience in any detail — these really need to be lived to be fully understood — but there is much that can be done to better inform students of what is offered and to help them make informed decisions about what is best for them. The My University website proposed by the Australian Government can make a helpful

contribution, particularly if it is structured so that field of study and course information, the primary interest of students and ultimately the locus of the student experience, is the central organising principle.

- *Establishing academic standards for the first year*
As yet the quality of the first year experience has rarely been conceptualised or depicted in terms of academic standards. With the establishment of the Tertiary Education Quality and Standards Agency (TEQSA), attention has become centred on an interpretation of academic standards in terms of the learning and academic achievement of graduates. This emphasis on outcomes is appropriate and should be the major thrust of the sector's efforts to understand and gauge standards. However, an exclusive emphasis on outcomes may miss many important dimensions of higher education. Conceptions of standards might also usefully be applied to the quality of university provision in a range of areas and there may be merit in articulating a distinctive set of standards that pertain primarily to the provision of programs for first year students. At the least, an exploration of what might be possible would be worthwhile. Such standards might be interdisciplinary and might focus on standards of provision as well as standards of academic achievement in the first year. With institutional diversification and a likely intensification of competition to recruit students, a framework for academic standards in the first year might provide an important safeguard for the sector. Equally, a national framework for academic standards that is silent on standards for the programs and outcomes for first year students might sell the sector short.
- *Alerting students to the expectations of higher education study*
The observations and suggestions thus far have been focussed in the main part on ways for enhancing the quality of the provision by universities. Universities have primary responsibilities for quality, of course, however higher education is a jointly produced enterprise in which students actively contribute to the outcomes. Students have major responsibilities for their own engagement and academic progress. During the next few years attention might be given to ways in which students are informed of the kind of

engagement that effective higher education requires. In other words, universities will need to do more to spell out their expectations for student involvement in learning. To some extent, assessment requirements have been the traditional, indirect method for describing the study expectations for students, with possibly undesirable outcomes, and there are a plethora of 'how to study' guides offering practical hints and tips to students. What we are suggesting, however, is that the sector explores the opportunities for developing more sophisticated strategies for making student responsibilities in the higher education partnership more explicit. A 'first year charter' might be a simple starting point, even though documents and statements of this kind are not yet part of the culture of Australian higher education. Regardless of the precise nature of the strategies that might be put in place, any efforts in making expectations clearer are likely to be useful in assisting the increasing number of students who will be entering higher education unfamiliar with its character and with lower levels of achievement in the previous educational experiences.



References

- Bradley, D., Noonan, P., Nugent, H. & Scales, B. (2008). *Review of Australian higher education: Final report*. Canberra: Department of Education, Employment and Workplace Relations.
- Crisp, G., Palmer, E., Turnbull, D., Nettelbeck, T., Ward, L., LeCouteur, A., Sarris, A., Strelan, P. & Schneider, L. (2009). First year student expectations: Results from a university-wide student survey. *Journal of University Teaching and Learning Practice*, 6 (1), 13-26.
- DEEWR (2009). *Students 2008 (full year): Selected higher education statistics*. Canberra: Department of Education, Employment and Workplace Relations.
- James, R., Bexley, E., Devlin, M. & Marginson, S. (2007). *Australian university student finances*. Canberra: Australian Vice-Chancellor's Committee.
- Kennedy, G., Dalgarno, B., Bennett, S., Gray, K., Waycott, J., Judd, T., Bishop, A., Maton, K., Krause, K.-L. & Chang, R. (2009). *Educating the net generation: A handbook of findings for practice and policy*. Accessible at: <http://www.netgen.unimelb.edu.au/downloads/handbook/NetGenHandbookAll.pdf>.
- Krause, K.-L., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: Findings from a decade of national studies*. Canberra: AGPS.
- McInnis, C. & James, R. (1995). *First year on campus: Diversity in the initial experiences of Australian undergraduates*. Canberra: AGPS.
- McInnis, C. & Hartley, R. (2002). *Managing study and work: The impact of full-time study and paid work on the undergraduate experience in Australian universities*. Canberra: DEST.
- McInnis, C., James, R. & Hartley, R. (2000). *Trends in the first year experience in Australian universities*. Canberra: AGPS.
- Trotter, E., & Roberts, C.A. (2006). Enhancing the early student experience. *Higher Education Research & Development*, 25 (4), 371-386.





Appendix 1

A1.1 Survey method and data analysis

The Vice-Chancellors of all nine institutions that participated in 2004 were contacted in January 2009 to ascertain whether they were willing to be involved in the fourth First Year Experience study. All nine agreed to participate.

The project retained the same instructions for sample selection to previous surveys, however, three of the institutions were provided with sampling instructions, while the Australian Council of Educational Research (ACER) coordinated sample selection in the remaining universities. This was organised to minimise the extent of overlap between samples for the Australasian Survey of Student Engagement, which was also conducted in the first semester of 2009. ACER was provided with the same sampling specifications as those institutions that selected the sample internally.

In order to select a representative sample of first year students, we asked for the selected sample to meet the following specifications: internal, first year, first time students at bachelor and 'other undergraduate' level, stratified by the DEEWR Broad Fields of Education (BFOE). In 1994, we sought a 20 per cent sample from the population of first year students. In 1999 and 2004, we requested a 25 per cent sample in order to ensure a sample of

reasonable size. Due to concerns associated with decreasing response rates, the sample size in 2009 was increased to 30 per cent. Where the sample selected for a BFOE was less than 50 students, institutions were asked to increase the sample to 50, and if total enrolments for the BFOE were less than 50, to include all first year students within scope in that field.

The sampling instructions differed slightly for Indigenous students, where we asked for a population sample of Indigenous first year students at each institution, including those students enrolled in enabling or non-award courses. This protocol was started in 2004, to obtain enough responses from this small population to allow for a reasonable level of confidence in the statistical analyses.

Institutions had the choice of mailing out the surveys themselves or providing the CSHE with an electronic list of the sample to be mailed out by a Melbourne-based mailing-house. Two institutions elected to send out the survey for privacy reasons. The initial mailout of surveys was to 9923 students. Three to four weeks later an email reminder that contained a URL link to an online version of the survey was sent to non-responders. While we were concerned about departing from the standard paper based questionnaire methodology, changes in technology have made online surveying more common since the last survey. A second and

Table A.1 Response rates by institution, 1994-2009

	1994 Effective response rate (%)	1999 Effective response rate (%)	2004 Effective response rate (%)	2009 Effective response rate (%)
Established	65	42	31	26
Suburban	57	39	27	29
New	54	32	23	16
International	57	23	27	19
Regional	57	43	28	19
Applied	63	44	30	17
Consolidated	39	40	27	33
Evolving	N/A	N/A	23	16
Traditional	N/A	N/A	29	26
Total	57 (n=4028)	37 (n=2609)	28 (n=2344)	24 (n=2422)

Table A.2 Proportion of respondents by Broad Field of Education and institution, 2009

	Agri- cult	Archi- tect	Soc/ Cult	Man/ Com	Educ	Engi- neer	Health	Sci- ence	Creat. Arts	IT	Food/ Hosp	Comb Degree
Established	2	3	20	12	1	7	8	20	4	0	0	23
Suburban	1	0	19	7	8	1	32	5	3	2	0	17
New	0	0	8	20	19	1	22	2	2	0	1	19
International	0	5	11	15	1	18	3	5	4	1	0	34
Regional	10	0	13	8	23	3	3	8	10	0	0	18
Applied	0	8	11	8	9	6	16	2	11	2	0	26
Consolidated	1	4	8	12	12	4	30	1	7	1	1	15
Evolving	2	1	19	8	14	3	25	4	5	3	0	16
Traditional	1	3	14	7	0	12	12	13	3	1	0	33

final email reminder was sent to non-responding students at low-response universities two weeks after the first reminder.

Response rates varied across the institutions, from a low of 16 per cent at New and Evolving University to a high of 33 per cent at Consolidated University (see Table A.1). These responses have dropped considerably from the 2004 survey.

Table A.2 provides an overview of the proportion of students by Broad Field of Education classification across institutions. It also enumerates the relative proportion of students enrolled in combined degrees, illustrating that these students account for between a fifteen per cent and a third of the sample of respondents from institutions in this study.

A1.2 Survey respondents across institutions, 1994-2009

Table A.3 provides details of gender breakdown, the percentage of younger and older students, the proportion of international students and the percentage of part-time first years in the 1994 and 2009 samples.

The proportion of females in the surveys continues to remain higher than the national figures. The

proportion of females in Suburban, Consolidated and Applied Universities is particularly high (80 per cent, 75 per cent and 73 per cent respectively). For the majority of institutions, the proportion of students aged 19 years or younger has decreased compared to 1994, which is consistent with the national trend. Three institutions increased the proportion of these students since 1994: Regional, Applied and Consolidated. The proportion of international students has risen markedly since 1994 at Established and Consolidated Universities, although the other universities have remained fairly constant. International students have been underrepresented in all the surveys, compared to national statistics.



Table A.3 Selected respondent demographic characteristics by institution compared with previous samples, 1994 -2009 (%)

	Females		19 years and under		25 years and over		International [^]		Part-time study	
	1994	2009	1994	2009	1994	2009	1994	2009	1994	2009
Established	62	66	86	77	4	1	6	22	2	3
Suburban	68	80	74	62	13	14	3	4	8	8
New	66	69	70	52	12	21	1	3	8	13
International	60	55	77	72	7	6	11	12	4	4
Regional	66	65	64	73	12	5	3	5	2	3
Applied	61	73	66	85	13	6	5	2	9	3
Consolidated	61	75	43	59	34	16	2	17	27	10
Evolving	--	82	--	15	--	43	--	10	--	31
Traditional	--	60	--	86	--	2	--	9	--	4

[^]In 1994, the proportion of international students was based on the percentage of students who reported they were an international fee paying student. In 2009, students were asked directly if they were an international student.

A1.3 Statistical analyses

The data analysis and coding procedures used in 2009 were identical to those of the previous studies. SPSS software enabled the production of descriptive statistics and cross-tabulations. Independent t-tests were used to determine significance levels of relationships between nominated variables. Significance levels are reported at $p < 0.01$ and $p < 0.05$.

student engagement. With the exception of online engagement, these scales were also identified in the 2009 study. The statistical reliability of these scales in 2009 is reported in Table A.4.

A1.4 Reliability of scales

A number of scales (academic orientation, academic application, student identity, sense of purpose, teaching, course satisfaction) were identified in the 1994 First Year Experience study. These scales have continued to have statistical validity over the other First Year Experience studies, including the present study. These scales are complemented by other scales (peer engagement, online engagement, comprehending and coping and prepared and present), which emerged in 2004 after the addition of new questions related to



Table A.4 Reliability of existing and amended FYEQ scales, 2009

Scales	Reliability
<p>Academic orientation</p> <p>The lectures often stimulate my interest in the subjects I enjoy the intellectual challenge of the subjects I am studying I get a lot of satisfaction from studying <i>Items omitted in 2004</i> I really enjoy the theoretical content of my subjects So far I have found most of my subjects really interesting Lectures are a valuable source of learning for me</p>	Cronbach alpha: 0.7812
<p>Sense of purpose</p> <p>I know the type of occupation I want I am clear about the reasons I came to university Studying at university is just marking time while I decide my future <i>Items omitted in 2004</i> Being at university will really help me get what I want in life</p>	Cronbach alpha: 0.6524
<p>Student identity</p> <p>I really like being a university student University hasn't lived up to my expectations <i>Items omitted in 2004</i> I think university life really suits me I really like the atmosphere at this campus</p>	$r=-0.5059^1$ ($p<0.001$)
<p>Academic application</p> <p>I find it difficult to get myself motivated to study I regularly seek the advice and assistance of the teaching staff <i>Items omitted in 2004</i> I have a strong desire to do well in all my subjects I worked consistently throughout first semester</p>	$r=-0.2756^1$ ($p<0.001$)
<p>Teaching</p> <p>The staff make a real effort to understand the difficulties students may be having with their work Teaching staff here usually give helpful feedback on my progress The teaching staff are good at explaining things Most of the academic staff in my subjects take an interest in my progress Most of the academic staff are approachable The quality of teaching in my course is generally good Staff are usually available to discuss my work Staff are enthusiastic about the subjects they teach Staff try hard to make the subjects interesting</p>	Cronbach alpha: 0.8865

¹One item reverse coded

continued over page

Table A.4 *continued* **Reliability of existing and amended FYEQ scales, 2009**

Scales	Reliability
<p>Course satisfaction</p> <p>Overall I am really enjoying my course</p> <p>I am finding my course intellectually stimulating</p> <p>Overall I am very satisfied with my university experience so far</p>	Cronbach alpha: 0.8541
<p>Peer engagement</p> <p>I borrow course notes and materials from friends in the same subjects/units</p> <p>I study with other students</p> <p>I work with other students on projects during class</p> <p>I work with classmates outside of class on group assignments</p>	Cronbach alpha: 0.6972
<p>Comprehending and coping</p> <p>I find it really hard to keep up with the volume of work in this course</p> <p>I feel overwhelmed by all I had to do</p> <p>My course workload is too heavy</p> <p>I find it difficult to comprehend a lot of the material I am supposed to study</p> <p>I have had difficulty adjusting to the style of teaching at university</p>	Cronbach alpha: 0.7675
<p>Prepared and present</p> <p>I skip classes</p> <p>You can miss a lot of classes in this course because most notes and materials are on the web</p> <p>I come to class without completing readings or assignments</p>	Cronbach alpha: 0.4941



Appendix 2

Glossary of Terms

Aboriginal or Torres Strait Islander (ATSI)	A student self-identifying as being of Aboriginal or Torres Strait Islander origin. These students are referred to as Indigenous students in the report.
Broad Field of Education (BFOE) classification (known as Broad Field of Study prior to 2001)	A classification of courses based on similarity in terms of the vocational field or specialisation or the principal subject matter of the course.
Commencing student	A student who is enrolled after the census date and has enrolled for the first time in a given course at the institution since the last census date.
Domestic or local student	An Australian citizen, New Zealand citizen, Permanent resident or Humanitarian visa holder who is eligible for deferred or full fee payment options.
High and low achieving students	Based on self-reported average grades. High achievers are those with an overall average mark of 70% or higher in first semester, low achievers reported a grade of 60% or below.
International students	Students who do not fit the DEEWR classification for domestic student status and are required to be full fee-paying students.
Languages Other Than English (LOTE)	See NESB
Low socio-economic status (SES) classification	A designated equity group category – classified by applying the Australian Bureau of Statistics (ABS) Index of Education and Occupation to postcodes of students' home residence. Australian postcodes in the lowest quartile of the Index are defined as low SES.
Mature-age student	For the purposes of comparing the experience of school-leavers (aged 19 years and younger) with older students in the cohort, we define students aged 20 years and older as belonging to the non-traditional age category for first year undergraduate study. In some contexts, these students are known as 'mature-age' students, but typically the latter category refers to students 25 years and older.
Mode of attendance	Internal – all units of study for which the student is enrolled are undertaken through attendance at the institution on a regular basis. Other modes include external and mixed mode which are beyond the study scope.



Non-English Speaking Background students (NESB)	Students from non-English speaking backgrounds (NESB) are a designated equity group category. NESB students are those i) born in any country overseas; ii) who speak any language other than English at home; iii) who have been in Australia for less than ten years. In this study we asked students to identify whether they speak a language other than English (LOTE) at home. In most cases we use LOTE as a proxy for NESB in this report.
Regional and remote students Rural and isolated students	A designated equity group category - classified in this study according to the Rural, Remote and Metropolitan Areas (RRMA, 1996) classification of postcodes. Since 2002 the terminology regional and remote instead of rural and isolated has been used. We have retained the latter for the sake of comparison with earlier reports.
School-leavers	Those who completed secondary education in the year prior to the survey. Typically aged 19 years or younger.
Type of attendance	Full-time or part-time enrollees

