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Stay, play or give it away? Students continuing, changing or leaving university study in first year

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Executive Summary

Main findings

- Attrition from first year university undergraduate degree courses is lower than has been suggested by previous research if movement of students between universities and courses and potential re-entry are included as retention. First year attrition from university may be less than 10%, depending on the proportion of students who follow through their intention to re-enrol later.

- There are differences in both characteristics and drivers for students who drop out of university study altogether and those who change courses or universities. Students who change courses or universities have mostly entered university more or less directly from school and were less likely to have wanted to be in that course or university in the first place. Students who discontinue study tend to be older, studying part-time and were unlikely to nominate a clear reason for enrolling at university.

- Some of the movement between courses appears to be students constructing their own pathways to preferred university studies, while some is due to students changing their mind about their own interests, talents and longer-term career aspirations. A substantial element of movement between universities is associated with students moving to a university they perceive as more prestigious, offering better career prospects, or to the course and career they now want.

- Some students discontinuing their studies had simply found a pathway to employment other than through university study. Reasons cited by more than a fifth as having a large influence on their decision included wanting a change of direction, academic difficulties and wanting a break. Financial difficulties and social isolation were reported by less than 10%.

- The reasons students gave for withdrawing from their course are often linked to their stage of life. Students with full-time jobs were more likely to withdraw because of difficulty balancing the time demands of work and study and those with children because of conflict between study and their family commitments. Younger students were more likely to withdraw because they were changing direction or needed a break from study.

- Despite the importance of changing career goals as an influence on decisions to discontinue their first year study, receiving careers advice made little difference to attrition.

- Students' comments on their reasons for dropping out highlighted that it is often a combination of reasons that leads to the decision to discontinue. A student could have coped with family problems, or work problems or financial difficulties by themselves, but in combination they caused the student to drop out. Sometimes one problem, such as a marriage breakdown, would trigger a series of

consequences—financial, employment and health—that proved fatal to successful study.

- Many students who either discontinued or changed universities gain some benefits from their year of university study and are more likely to judge their first year experience positively than negatively. In addition, leaving university did not necessarily mean the end of study. A quarter of the students who were no longer studying at university in 2005 were studying elsewhere, mostly at TAFE.

- The majority of students who change to another university receive at least some credit for their previous study. Improving the credit transfer arrangements within the higher education sector would remove some of the costs inherent in students changing their courses and universities. The level of credit transfer is lower for students who enrolled at TAFE institutes or other educational providers—partly because fewer enrol in the same or similar courses.

- Only a small proportion of students who leave a university are interviewed. A more systematic approach to student exit procedures within universities might contribute to improved re-enrolment rates and to better knowledge for quality improvement.

Overview

This report describes the results of a 2005 survey of domestic students who enrolled in a Bachelor's Degree at an Australian university in first semester 2004. The survey describes:

a) The level of movement of students out of university altogether and between universities and courses by first semester 2005;

b) The characteristics of students who were more likely to change their university and course and to leave university altogether by first semester 2005;

c) The reasons students who left their university discontinued their study during first semester 2005;

d) Selected employment, study and other outcomes for students who left their university during first semester 2005.

This study extends previous research on university attrition and course completion by its focus on the reasons for attrition and tracking the subsequent enrolment and other outcomes of students who discontinue their university studies.

First year attrition

Attrition from studies at first year university study is part of the broader topic of course completion rates. Course completion is a concern because:

- of student and government-funded expenditure that does not produce any outcomes,
- of the personal disappointment of students who do not complete their courses;
- it may reflect on the quality of universities, including their instruction and support services;

- the waste of potential talent; and
- equity considerations.

The survey

In second semester 2005 a mail survey was undertaken of domestic students who had started a university Bachelor's Degree in first semester 2004. Thirty-four of Australia's 37 public universities agreed to participate in the study and 14 universities were selected. The universities are representative of all Australian universities in terms of several salient characteristics. Two samples of students were selected:

a) Students who re-enrolled at the same university in first semester 2005. Responses were received from 2,473 students with a response rate of 49.5%.

b) Students who did not re-enrol at the same university in first semester 2005. Responses were received from 1,917 students with a response rate of 22.6%.

The analyses weighted responses to correct for the initial disproportionate sampling of these two groups and to compensate for differential response rates by university, sex and students who had initially enrolled full- and part-time.

Movement between universities and courses

Compared with the university and course in which students enrolled in first semester 2004, by first semester 2005:

- 79.5% of students were still enrolled at the same university, of whom:
  - 71.3% were enrolled in the same course; and
  - 8.2% were enrolled in a different course.
- 6.9% of students were enrolled at a different university, of whom:
  - 3.1% were enrolled in the same course; and
  - 3.8% were enrolled in a different course.
- 13.7% of students were not enrolled at university, of whom:
  - 1.1% re-enrolled in their university and course by second semester 2005;
  - 5.2% intended to re-enrol later; and
  - 7.5% did not indicate they intended to re-enrol.

Subject to the number of students not enrolled but who re-enrol later, *first year attrition from university may be less than 10%,* substantially lower than indicated by studies that had little or no access to information about movement between courses, movement between universities and intentions to re-enrol.

Although students remain studying at university, *movement between universities and courses entails costs for students and government if their previous study is not credited towards the new course.* Of the 6.9% of students who changed universities, 24.6% received full credit, 39.2% received partial credit and 36.2% received no credit for their 2004 study.

Outcomes from study for students who were not enrolled at university in 2005

Some students who were no longer studying at university in 2005 received benefits from their 2004 study. Of the 13.7% of entrants who were not enrolled at university in 2005:

- Over a third (35.8%) assessed their 2004 study as *Mostly positive*, 45.9% as *Mixed* or *Didn't know* and 18.3% as *Mostly negative.*
- A quarter (24.9%) were studying—15.1% at a TAFE institute and 9.9% elsewhere. Of those studying, their 2004 study:
  - helped 9.8% gain entry to their new course;
  - was recognised for full credit for 10.0% and partial credit for 11.4%.

University exit procedures

Few (4.0%) students who did not re-enrol at the same university in first semester 2005 participated in an exit interview and 1.8% were asked but did not attend. Nearly one in three (31.9%), however, discussed their decision to withdraw with someone from the university—a course advisor (25.2%), a lecturer or tutor (16.8%) or another staff member (7.5%). The various university staff were less likely to be consulted than family (71.1%) or friends (54.2%). *Opportunities to conduct exit interviews may have been missed*—38.8% applied for intermission and 80.9% formally withdrew from the university.

Students more likely to withdraw from university

Students more likely to have left university study by first semester 2005:

- were older
- were *from lower socioeconomic status backgrounds*
- were *from an English-speaking background*
- already *had a post-school qualification*
- were in full-time work or the main care-giver for children or someone else while they were studying;
- had *not been living with their parents or at a university college* while studying
- had *needed more than 90 minutes to travel to university*
- were enrolled *part-time* and/or off-campus
- were enrolled at a rural, technology network or *innovative research* university
- were enrolled in an *engineering*, *information technology* or *creative arts* course and not in health (excluding nursing) course.
- had *wanted to enrol in some other course* than the course in which they had enrolled in 2004
- had *reservations or not wanted to enrol at the university* in which they enrolled in 2004 (but if they had really wanted to enrol in a different university, they were enrolled at a university in 2005.

Characteristics shown in italics were those that had an independent effect in one of the multivariate analyses. In contrast to previous research, the sex of the student had no effect on whether the student continued studying at university.

Reasons students withdraw from university

For students who did not enrol at a university in 2005, the more important reasons for discontinuing their study are captured by the percent of students who said that the following reasons had a *large* influence on their decision to discontinue:

- I needed a break from study (24.3%)
- I found it difficult to balance my study and work commitments (23.7%)
- I changed my career goals (21.6%)
- I felt stressed and anxious about my study (14.0%)
- I didn't like the way the course was taught (12.9%)
- I didn't feel adequately prepared (10.8%)
- I couldn't get government income support (10.6%)
- My study clashed with my family commitments (10.6%)
- Illness-my own (7.4%)
- I felt lonely, isolated or unwelcome (6.2%).

This selection of items covers the main dimensions of motivation and indicates their relative importance. The major themes in students' reasons for discontinuing were:

- a change of direction, mainly in regard to careers
- difficulty passing subjects
- conflict between paid work and study
- dissatisfaction with the teaching or other aspects of the course
- financial difficulties
- conflict between family and study
- personal illness
- social isolation or loneliness.

Individual students usually had more than one type of reason for discontinuing their studies.

Students more likely to change university

Students more likely to have enrolled in another university by first semester 2005:

- *were younger*
- were *from urban backgrounds*
- had *moved between states to attend university*
- had no prior university experience
- had been studying at school in 2003
- had needed more than 90 minutes to travel to university
- had been financially dependent on their parents or other relatives (excluding their spouse or partner)
- were enrolled at a rural, technology network or innovative research university
- had *wanted to enrol in some other course* than the course in which they had enrolled in 2004

- had *wanted to enrol in some other university* than the course in which they had enrolled in 2004

Characteristics shown in italics were those that had an independent effect in one of the multivariate analyses.

Reasons students enrolled at a different university

For students who changed universities, the more important reasons for discontinuing their 2004 study are captured by the percent of students who said that the following reasons had a *large* influence on their decision to discontinue:

- I found a better path to my career goals (34.7%)
- I always intended to move to another university (31.7%)
- I changed my career goals (27.1%)
- I didn't like the way the course was taught (13.8%)
- I felt lonely, isolated or unwelcome (7.0%)
- I felt stressed and anxious about my study (6.6%)
- I couldn't get government income support (5.2%)

There were only two major themes in the reasons for discontinuing:

- a change of direction, mainly in regard to careers
- a pre-existing desire or intention to change universities.

Students more likely to change course

Students more likely to have changed their course by first semester 2005:

- *were younger*
- had at least one Australian-born parent
- had a highest educational attainment of Year 12 or a vocational qualification
- had been studying at school in 2003
- had needed more than 90 minutes to travel to university
- had been financially dependent on their parents or *other relatives* (excluding their spouse or partner) or *commercial loans*
- were enrolled at a rural, technology network or *innovative research university*
- had *wanted to enrol in some other course* than the course in which they had enrolled in 2004
- had wanted to enrol in some other university than the course in which they had enrolled in 2004
- were enrolled in a *humanities* or *science* course. Students tend to shift from generalist to more directly vocational courses.

Characteristics shown in italics were those that had an independent effect in one of the multivariate analyses. The apparent effect of innovative research universities on change of course requires further investigation and may be the result of administrative arrangements rather than anything more substantial.

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1. Introduction

This report presents results from a survey of domestic students who began a Bachelor's Degree at an Australian university in first semester 2004. The focus of the survey and this report is on students who did not re-enrol in first semester 2005, the reasons they did not re-enrol, and the outcomes of their incomplete study. Measures of student attrition during the first year of their course are related to the broader area of course completion.

1.1 Concerns about Course Completion

Between six and seven out of every ten students who commence a university Bachelor's Degree course in Australia obtain a degree. There are sound reasons for thinking that the enrolments of those students who don't go on to complete their course involve waste of effort, resources and opportunities:

- Students who spend a year or perhaps longer studying without obtaining a qualification may gain little economic advantage from their study yet face the prospect of HECS re-payments or have already met the costs of university fees. Additionally these students or their families will have paid for the other costs of university study such as books, computers, childcare and so on. Opportunities foregone while studying may be at least as important as all the other costs a student bears. Students who don't complete their degree could instead have been enrolled in another course they could have completed, been working full-time or participating in some other productive activity. And of course there is also the sense of personal disappointment that may come from leaving university before finishing a degree.[1]

- Governments usually bear part of the costs of incomplete study. About two-thirds of the study costs of the vast majority of undergraduate students are met by the Australian Government through direct grants to universities. Students may also receive student income-support payments through Youth Allowance, Austudy, ABSTUDY or other arrangements. There are opportunity costs involved for government (and through government, the Australian public). These monies could instead have been used to reduce taxes or to increase spending in other areas.

Other less tangible costs can also be identified. Students who do not finish their degree are arguably a cost for applicants who missed out on a university place. In an economic environment where higher levels of education and skill are required, lower course completion rates may reduce demand for higher education by increasing the risk for commencing students. Lower completion rates may lower the morale of teaching staff, but the overall financial effects on universities are unclear.

[1] Estimates of the private returns to higher education are invariably calculated assuming that the student has already completed their course. Instead they should be calculated from the situation a potential student faces when deciding whether to enrol. The costs then include those associated with non-completion. Arguably these costs are sufficient to reduce the rate of return to below the cash rate.

The likelihood of a student finishing a degree after starting it is distributed unevenly among students from different backgrounds and in different courses. If students with lower likelihoods of completion are also those with a lower likelihood of enrolling in the first place, low completion rates may contribute to the uneven distribution of educational outcomes.

Some considerations mitigate the negative view of low completion rates:

- Part of non-completion can be viewed as students' (fairly expensive) course- and career-search behaviour—a search for matches between their interests and abilities; the requirements of courses and careers; and labour market opportunities (Altonji 1993; DeBrock, *et al.*, 1996; Tinto 1993).

- The skills of students with part-completed qualifications may have been enhanced by their studies and they may receive some labour market benefit, although if so, it would be difficult to identify. Any benefits from a part-completed qualification are unlikely to be pro-rata with the length of completed study given the importance attached to completed qualifications.

- Part of what is often measured as non-completion is little more than the movement of students between universities or courses. What appears as non-completion from an institutional perspective may not be non-completion from the student's perspective.

At the end of the day, however, lower rates of completion for degree courses generally mean fewer qualified doctors, lawyers, architects, accountants, nurses, teachers and other professionals for a given level of public and private expenditure on higher education.

1.2 Why Students Don't Continue their Study

Identifying the reasons why students discontinue their studies is a first step in trying to find ways to improve completion rates. There are at least two approaches to examining the reasons why students don't complete their degree:

- asking students why they left their course; and
- studying the differences between students who stay and students who leave.

These approaches are complimentary and this report uses both. Asking students why they discontinued their studies runs the risk that the answers will contain elements of post facto rationalisation—the reasons crystallise once the decision to discontinue is made. Simply observing differences in the rates of completion between categories of students, although allowing inferences about reasons for discontinuing, leaves open the issue of students' actual motivations.

The extensive literature on the reasons why students don't finish their degree provides many typologies or lists of reasons, with variations reflecting different emphases and different student populations. To anticipate some of the results presented later in this report, students withdraw from Bachelor's Degree courses because they:

- ***find it difficult to successfully complete the required assessment.***
  This may be because:
  (a) their academic background was not adequate
  (b) the teaching did not help them sufficiently
  (c) other commitments or circumstances interfered with their study e.g.:
    - paid work
    - family
    - illness

- ***don't intend to complete the course when they enrol.***
  Enrolment in one degree course can be a stepping stone to enrolment in another course or at another university. If a student does not meet the entry requirements for a particular course in which they wish to enrol, successful study in the first year of another tertiary course may allow them to transfer to that course after first year, with or without recognition of that study within the new course. The desire for transfer can be to a different course or a different university that is more prestigious or more convenient.

- ***find a poor match between the course and their goals***
  It may be difficult for students to know in advance what their course will involve and how it may mesh with their sometimes changing career and life goals. There may be positive or negative influences:
  - A student's expectations of their course may be disappointed and they find the course irrelevant, uninteresting or boring.
  - A student may find that the course doesn't lead to the career or goals they hoped it would.
  - A student's goals change and they find something else they would prefer to do.

- ***don't like the way in which the course was delivered.***
  Separately from the content of a course, students can dislike the teaching staff, the way the course is taught, the way their work is assessed, the scheduling of classes or the administrative arrangements of the course.

- ***feel socially isolated and alone at university.***
  Some students find university life acutely lonely and in the absence of other social support networks, this can by itself lead students to give up their course.

- ***can't afford financially to keep studying.***
  University study can be costly in terms of tuition fees, other course-related expenses and work opportunities foregone. Students and their families can find it too expensive to continue.

The list could be extended to broader reasons such as a kind of 'culture shock' in the transition to a university environment with possibly greater demands for student initiative and more specific reasons. The list already includes some redundancy. For instance,

arguably students who find that their paid work interferes with their study can't afford to give up their work to study. And while some of the distinctions are conceptually clear, in practice it might be difficult to distinguish between, for instance, discontent with the content of the course and the way in which it is taught. One reason is likely to lead to another. And poor initial motivation for enrolling and lack of clear career or life goals are likely to provide a fertile ground for problems to grow.

1.3 Improving Retention

Some of the reasons behind students' decisions not to finish their degree can be addressed only partly by universities. Nevertheless, the different reasons students have for not continuing their courses point to an array of university-level strategies to improve retention, many of which already exist to varying degrees in most Australian universities, often in the context of particular equity groups and embedded within university equity plans. The areas that universities can address include:

- **Information about their courses.** Providing students with information about courses *before* they enrol, including contact hours, assessment, placements, non-tuition costs and career prospects improves the likelihood that student expectations are realistic. Expanding the availability of student-friendly prospectuses and video packages was one of the recommendations of a recent review of undergraduate retention in Ireland (Morgan, et al 2001:87-93). While universities can provide the necessary information and publicise its availability, especially through school outreach programs, the application and enrolment process often means that it is not possible for universities to take the initiative and supply targeted information to students before they apply.
- **Financial support.** Most student financial support comes from outside the university. Universities can and do provide scholarships and supply emergency funds in the event of hardship. Universities also have a role in containing non-tuition costs such as books, internet access, printing costs, library fines and parking fees and fines. Timetabling and placement arrangements can make it more or less difficult for students to support themselves through paid employment.
- **Support services.** Specialist support services for students with disabilities or particular learning needs are often crucial to the success of certain categories of students. More general support such as personal and course counseling, chaplaincy, and careers advice, as well as discipline-specific support is important. Seminars on study techniques, time and stress management and essay writing seminars are opportunities for students to learn new skills, garner peer support and learn that the university cares about their success. Some students will invariably need additional help in mastering the content of particular subjects or units. Affordable, available and convenient childcare is a prerequisite for successful study for most mothers of pre-school children.
- **Good teaching.** Universities have access to system-wide surveys of graduates' assessments of the teaching of their courses and most run their own student-based assessments of teaching. Results from these surveys may be included in staff promotion procedures and university teaching and learning practices fall within the

ambit of the five-yearly cycle of audits conducted by the Australian Universities Quality Agency (AUQA). Even if generic minimum teaching standards— accuracy of content, coherence of delivery, clarity of assessment, availability of study materials and courteous behaviour—are met, students may have different expectations of lecturers and different learning styles. What is good teaching for one student may not be for another, which underlines the importance of alternative sources of academic support for students through peer-support, mentoring programs, designated tutor schemes and on-line chat groups.

- **The social environment.** The loneliness that some students experience at university can be partly addressed through academic support schemes and support services. Universities can also seek to improve the social environment through active orientation and transition programs and through the support of campus-based clubs and societies.
- **Monitoring withdrawal.** Universities can actively seek information from students who withdraw to help to develop strategies to improve retention rates. Formal withdrawal can be used as a time for exit interviews and those students who leave university informally can be followed up later. Regular reviews of patterns of attrition can be helpful in identifying courses with relatively high levels of attrition.

There is generally a lack of adequate evaluation of these types of strategies and their cost effectiveness. These strategies also largely address the issue of helping students who are already enrolled to complete their course and presume that universities are adequately funded to provide them.

Course completion may also be assisted by better preparation of students before they enrol and better selection procedures. Parties other than universities, and including the students themselves, have a role to play in improving the match between the ability, disposition and aspiration of students and the courses in which they enrol.

Course and careers information disseminated through schools can improve the match between students and courses. Several states have developed strategies to encourage school students to plan their futures earlier and more systematically. For instance, Victoria has introduced the *Managed Individual Pathways Scheme* and South Australia has introduced requirements for transition plans as part of its *Futures Connect* strategy.

Changes to system-wide enrolment procedures might permit more students to enrol in their course of first choice. Changing selection procedures to improve retention rates should be undertaken only with caution. Although particular types of students may overall have higher rates of attrition than other students, any attempt to improve efficiency by changing selection criteria may undermine equity. In the case of part-time students, costs per student associated with non-completion may be lower than for full-time students and hence involve less waste despite higher rates of non-completion.

2. The Survey

The report is based on a survey of domestic undergraduate students who enrolled in a Bachelor's pass degree course in first semester 2004. Although the survey was centrally administered in terms of design, preparation of materials and data entry, participating universities mailed survey materials to those students. The students were sent a questionnaire early in second semester 2005; a reminder card several weeks later, and a second questionnaire several weeks after that. Completed questionnaires were received until early December 2005.

Thirty-four of the 37 Australian public universities volunteered to participate in the survey. The 14 chosen universities reflect the 37 public universities across university type and state. The typology of universities was the Australian Technology Network; Group of 8 universities; Innovative Research Universities; Regional universities with high external enrolments; Other regional universities; and New Generation universities (see Lukic *et al.*, 2004). The participating universities were also broadly representative of all 37 public universities in terms of field of study; size of university (number of commencing Bachelor's pass degree students); and first year attrition rate.

Two samples of students were selected from each university:
1. A sample of students who had *not* re-enrolled in first semester 2005 (attriters); and
2. A sample of students who had re-enrolled in first semester 2005 (non-attriters).

Students were randomly selected within universities separately for each sample. The number of students selected from each university for each sample was directly proportionate to the number of students from that university for that sample.

For the 14 universities that participated in the study, Table 3.1 shows the population, selected sample, sampling fraction, achieved sample and response rate for the two strata. The focus of the study on attriters and the anticipated lower response rate led to the use of a high relative sampling fraction for that stratum.

All analyses presented in this report are weighted. Within strata, samples were weighted to correct for differential response rates for universities, males and females and part and full time students. Estimates for all commencers are weighted so that each sample is proportionate to its population fraction.

Table 2.1
Population and sample sizes and response rates for the study

Stratum	Population	Mailout	Sampling fraction (%)	Valid responses	Response rate (%)
Attriters	11,122	8,500	76.4	1,917	22.6
Non-attriters	42,961	5,000	11.6	2,473	49.5

3. Attrition and Course Completion

This chapter discusses measures of attrition and course completion and briefly reviews some earlier literature. There are three major problems in measuring course completion rates:

- The long tail of the distribution of years to completion creates practical difficulties for estimating completion rates. Although the average time spent completing a degree may be between three and four years (Shah & Burke, 1996), Martin *et al.* (2001) report that about 4% of students who enrolled in an undergraduate course in 1993 were still studying seven years later in 1999. Waiting for a cohort to completely exit the higher education system in order to estimate completion rates does not provide timely information on which to base policy decisions.

- Many of the estimates of completion rates are based on within-university analyses. The enrolment data make it difficult to track students between universities. A student who moves to another university is recorded as a non-completer at the university they leave and as a commencing student at their new university, even though they may be continuing their original course. Including between-university transfers produces higher estimates of completion rates for the higher education sector.

- Students sometimes transfer between courses at the same university. Treating these transfers as either new course commencements or as continuation of existing enrolments results in different estimates of completion.

3.1 Attrition Rates

Estimates of first year attrition provide an alternative approach to investigating factors that contribute to students not completing their course. The concept is simple—first year attrition is the proportion of students who re-enrolled in the same university (but not necessarily the same course) in the year after starting their degree course and excluding any students who graduated. The previous chapter describes the way in which it was operationalised for the survey on which this report is based.

The first year attrition rate for domestic students who began pass degree courses in 2004 in any of the 14 universities that participated in this study was 20.6%. This estimate is derived from the enrolment data provided by the participating universities, not from the survey itself. The corresponding value for 2003 commencers from DEST data was 19.7% for the 14 participating universities and 20% for the Australian higher education sector. The average first year attrition rate from 1994 to 2002 for domestic undergraduate (not just pass degree) commencers was 22.4% (Lukic *et al.*, 2004).

These estimates treat students who re-enrol at the same university as continuing, regardless of whether they continue in the same course. For students who enrolled in a degree course in 2004 at one of the 14 universities in this study, 8.2% had enrolled in a different course by first semester 2005.

Recent estimates from the *Longitudinal Surveys of Australian Youth* suggest that attrition rates for a cohort of young people who would have completed Year 12 in 1998 and subsequently entered university were only 14.3% by late 2001 (McMillan, 2005). Among several possible reasons, this estimate of attrition may be lower than that provided by Lukic *et al.* because it deals only with university entrants who have recently left school and because it excludes from attrition those students who leave one university and continued their studies at another university.

Although more convenient, attrition is not a perfect surrogate for course completion. First year attrition rates are substantially lower than non-completion rates. Students can and do leave their courses in second and subsequent years. Attrition also includes some students who subsequently return to complete their degree. In this report, attrition is measured from first semester 2004 to first semester 2005. In second semester, 1% of commencing students who had not re-enrolled in first semester 2005 (and were therefore included in attrition), re-enrolled in second semester 2004.

Nevertheless, the majority of students who do not complete their degree course discontinue in the first year of their course. Hence first year attrition captures a substantial proportion of those students who do not finish their course.

Estimates of attrition are useful for examining changes in retention from year to year and for examining the correlates of attrition. The correlates of attrition, however, may differ from the correlates of non-completion if they are time-dependent. For instance, the results presented later in this report show that some students enrol in a course hoping to transfer to a degree at another university the next year. These students are likely to be better captured by first year attrition measures than are students who discontinue for other reasons. To the extent that these students differ from other students who discontinue, the characteristics of students who do not re-enrol for their second year will differ to some extent from the characteristics of all students who do not complete their course.

3.2 Completion Rates

Comparison of the total numbers of higher education students who complete a degree with the total number who commenced provides an approximate initial indicator of completion rates. The problem with these comparisons is that it is difficult to match commencements in any given year with completions some years later. In Table 3.1, for instance, the completion rates compare commencements with the average of completions three and four years later (1994 and 1995 for commencements in 1992). Where commencements are increasing, this approach may underestimate completion rates, although from 1996 onwards commencements are stable. The relatively rapid increase in completions in 2001, 2002 and 2003 in the context of stable commencements from 1996 is an interesting feature of the table.

Table 3.1
Commencements, completions and apparent completion rates: Domestic Bachelor pass and honours degree students, 1992-2003

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Completions '000s	---	---	87.2	86.7	85.0	88.6	90.2	90.3	88.8	94.1	97.6	100.7
Commencements '000s	129.7	133.4	137.7	148.1	155.8	156.3	155.0	156.5	156.4	---	---	---
Retention %	67.0	64.4	63.0	60.4	57.9	57.3	59.0	61.3	63.4	---	---	---

Source: DEST, *Students 2003 Tables, Selected higher education statistics* and *Higher Education Students Time Series Tables, 2000: Selected Higher Education Statistics.*

The completion rates in Table 3.1 are more restricted than estimates of within-university completion. Whenever a student commences a new course, whether at the same or another university, they are counted as starting a new course. Martin *et al.* (2001) attempt to measure something slightly different. They ask, given an undergraduate who is new to the higher education sector (that is, does not have a university qualification or part qualification), what is that student's probability of ultimately obtaining a university qualification at that university or at another university?

Using institutional enrolment records, Martin *et al.* track undergraduates who commenced their course in 1992 and found that by 1999 64% of all commencers had completed an award at the same university and 3% were still studying. They then used information on the likelihood of students completing their course on their first and any subsequent course commencements and the likelihood of undergraduates returning to university to estimate a system-wide final completion rate of 71.6% for students new to university. A corresponding estimate for undergraduates who commenced in 1993 was 70.8%.

A feature of these estimates is the relatively small contribution to overall completions of between-university enrolments. For the 1992 cohort 67% is an approximate upper-limit to within-university completions—while not all of the 3% of students still studying in 1999 will complete, some other students may return. Given the estimate of a final completion rate of 71.6%, between-university movements contribute only four or five percentage points to completion.

Shah and Burke (1999) use an innovative approach to estimating undergraduate completion rates based on synthetic cohorts and markov chains, an approach which can provide timely results. Their estimate of the overall completion rate for undergraduate students who commenced in 1993 is 64.8%. Although the methodology differs, their estimate corresponds to Martin *et al.*'s approach with one important exception. The 64.8% includes between-university completions but excludes students who re-start courses in new fields of study. Hence their estimate is lower than the 71% or 72% estimated by Martin *et al.*

The most recently available OECD estimate of the survival rate in tertiary education (Tertiary Type A education for courses of three to four years) for Australia in 2000 is 77% (OECD, 2005). Survival rates are a variant of the approach used in Table 3.1 and might be expected to yield similar results. The Australian OECD estimate is close to the average of 76% for OECD countries.

3.3 The Cost

Concern about attrition or non-completion of university courses mainly focuses on waste or inefficiency. The various approaches to measuring attrition or non-completion capture different aspects of this concern.

At one upper end of the spectrum of measures, estimates of final (between-university and between-course) completion rates capture some of the possible waste of human talent—students who were considered capable of completing a university degree but did not. They do not, however, capture the costs associated with a student starting one course, not completing it, and then starting a second (or further) course which they then complete, receiving no or only partial credit for previous study.

At the other end of the spectrum of measures are raw estimates of within-university and within-course completion, which ignore transfers of students between courses (either within or between universities) that are fully or partially efficient because credit is granted for earlier study.

Completion rates for domestic undergraduates in Australian universities are somewhere between about 60% and 70%, depending on how they are measured. First year attrition rates capture much of the discontinuation of students and are about 20%. Typically they are within-university measures and do include as attriters students who re-enrol at another university or re-enrol at the same university later. Rates of attrition and non-completion vary between categories of student and this is discussed later in this report.

4. The Students

This report often presents results for individual student characteristics such as the student's age or full or part-time enrolment. This chapter describes student types that focus on the combination of characteristics rather than on characteristics as discrete elements. The classification is naturally somewhat arbitrary, but the seven student types presented in Table 4.1 are nevertheless readily recognisable:

1. ***School leavers***, who in mid 2005 were 21 years or younger and had attended school in 2003. They had therefore been 19 years or younger when completing Year 12. These students start their degree immediately after completing Year 12 and are about a half (50.9%) of all students commencing a degree.
2. ***Gap year entrants***, who were 23 years or younger and who had taken 2003 off after completing Year 12. This small group of entrants (4.5%) are school leavers one year on, although Table 3.2 shows that they differ in some ways from students who enter directly from school. They are, for instance, more likely to report receiving government financial support and support from paid work.
3. ***Young entrants***, who in mid 2005 were 23 years or younger and had generally not been at school or taking a gap year in 2003. This group (7.5% of all entrants) had not previously enrolled in any university course. It includes young people who took a pathway through TAFE (10.6% were studying in TAFE in 2003 and 58.4% have completed a diploma or VET qualification) or worked full-time (29.2% mostly worked full-time in 2003). They are less likely to enter university through a Year 12 completed at school and often enter two or three years after completing their Year 12.
4. ***Continuing students***, who were 29 years or younger and who had already completed or partially completed another university course before enrolling in 2004. The size of this group (17.8%) points to the level of churning and progression within undergraduate enrolments as young students transfer between courses and complete one degree and start a second.
5. ***Full-time workers*** are characterised by working 35 hours or more a week while studying and are 6.9 percent of the students who began a Bachelor's Degree in 2004. They are on average older than most other students (34.4 years), more likely to be enrolled part-time and less likely to be enrolled purely on-campus.
6. ***Carers*** are students who are responsible for looking after children, other vulnerable persons or persons with a disability. These are typically mature age students (the average age is 39.3 years) and are more likely to be female.
7. ***Other mature age students*** are the small group (4.8%) who do not fit neatly into any other group. They are older, more likely to be receiving government financial support or support from a spouse.

A majority of the three mature age groups (full-time workers, carers and other mature age students) have enrolled at a university previously and obtained a post-school qualification, although in each category a significant minority has not completed Year 12 or any post school qualification.

Table 4.1
Types of students by student characteristics: Students who enrolled in first semester 2004

%	Type of student	Characteristics
50.9	***1. School-leavers***	• 18-19 years old • Attending school in 2003 • Studying full-time and on-campus • Financial support from parents • Living with their parents
4.5	***2. Gap year entrants***	• 19-21 years old • On a gap year and/or holiday in 2003 • Studying full-time and on-campus • Financial support from parents and government • Living with their parents
7.5	***3. Young entrants***	• 20-23 years old • Studying full-time and on-campus • Studying at TAFE in 2003 • Financial support from government and employment • Living with their parents
17.8	***4. Continuing students***	• 20-29 years old • Studying full-time and on-campus • Studying at a university in 2003 • Financial support from paid work and government • Living with their parents • Previous university study and completed degree
6.9	***5. Full-time workers***	• 30-44 years old • Studying part-time and off-campus • Full-time work while studying in 2004 • Living with spouse or partner or by themselves • High levels of post-school attainment, but also higher (though small) proportion with incomplete secondary schooling).
7.5	***6. Carers***	• Female • 30-49 years old • Studying part-time and off-campus • Caring for a family member or friend in 2003 • Financial support from spouse or partner or government • The main carer for children or another vulnerable person • High levels of post-school attainment, but also higher (though small) proportion with incomplete secondary schooling).
4.8	***7. Other mature age students***	• 35-44 years old • Studying at TAFE or working full-time in 2003 • Financial support from government or spouse or partner • Living with spouse or partner • High levels of post-school attainment, but also higher (though small) proportion with incomplete secondary schooling).

Any classification of commencing students is bound to be somewhat arbitrary. The categories reported here arose from statistical analyses that grouped students on the basis of their sex and age; their main activity in the year before they enrolled; their living arrangements, sources of financial support, hours of paid work and caring responsibilities in first semester 2004; their previous educational attainments and whether they were enrolled full or part time and on or off campus. Although these analyses produced variable outcomes, the seven categories outlined in Table 3.1 appeared reasonably regularly.

The criteria used for classifying students here, however, are deterministic rather than statistical—hence some of the 100.0% and 0.0% entries in Table 3.2. Conceptually the groups overlap—a school leaver could be a full-time worker for instance. Any overlap was resolved by the order of selection. Gap student entrants were selected first, then school leavers, young entrants, full-time workers, continuing students and carers with other mature age students mopping up the remainder.

Table 4.1 summarises the characteristics of each of the seven groups. Its interpretation requires a little care. It tends to focus on characteristics that are relatively more frequent in a certain type than on characteristics that are important in a majority sense. For instance, all seven student types could be described as 'female' because each has a majority of female students. *Carers,* however, has an above average proportion of females.

Table 4.2 includes several student characteristics which were not used in the development of the typology but nevertheless differ across the seven student types:

- Students in the four younger types were more likely to have moved in order to attend university.
- *Gap year entrants* (7.0%) are less likely than average (18.4%) to have been born overseas and have both parents born overseas, while students in each of the mature age categories were more likely than average to have been born overseas and have both parents born overseas. The proportion from non-English-speaking families, however, was higher than average for *continuing students* and for *Carers*.
- Students in each of the three mature age categories were more likely than average to come from the families from the lowest socioeconomic quintile.
- Students in each of the three mature age categories were more likely than average to have definitely wanted to enrol in their course (rather than some other course). Among younger students, *School leavers* were the least likely student type to have definitely wanted to enrol in their course (rather than in some other course). This pattern might indicate the value of deferred entry from school in creating a better match between individual interests and the course.
- *Attrition* is higher among *Full-time workers* (34.7%) and *Other mature age* (28.7%) and lower among *Continuing students* (16.8%) and Gap year students (16.1%). These differences are discussed in later chapters.

Table 4.2
Selected student characteristics by student type: Students who enrolled in first semester 2004

Type of student . . .	*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*Total*
Mean age (years)	19.0	20.1	21.0	22.7	34.4	39.3	38.8	23.3
	%	*%*	*%*	*%*	*%*	*%*	*%*	*%*
Female	56.1	64.1	53.4	60.1	56.5	78.5	52.5	58.5
Full-time students	98.6	97.2	89.8	88.7	24.9	49.3	72.7	86.1
On-campus only	94.3	96.5	84.2	86.8	50.8	61.5	72.8	85.8
In 2003, mostly								
Studying at school	100.0	9.6	3.0	0.6	0.0	0.0	2.2	51.9
Taking a year off after Year 12	0.0	100.0	0.0	0.2	0.3	0.0	0.0	4.6
Studying at TAFE	0.5	6.2	40.6	10.4	14.0	14.0	13.7	8.1
Studying at university	0.7	2.6	0.0	56.5	15.2	16.9	17.5	13.7
Caring for family/friend	1.3	0.2	1.2	3.0	4.0	34.2	5.1	4.4
Working full-time	0.3	30.7	29.2	20.8	83.2	22.0	45.8	17.1
Looking for work	2.5	4.7	2.7	3.7	0.8	8.0	3.5	3.2
Main financial support in 2004								
Government	20.4	37.9	42.8	44.0	2.6	40.3	40.7	28.3
Paid employment	55.8	64.3	66.1	58.3	94.5	44.0	51.8	59.0
Spouse or partner	0.6	0.6	2.9	6.9	9.9	45.6	20.2	6.8
Parents or guardian	72.0	59.3	35.8	39.9	2.2	0.9	5.3	49.7
In 2004, mainly living:								
With parents or guardian	79.5	63.4	59.8	51.6	12.5	1.2	18.4	58.9
With spouse or partner	1.3	4.4	6.3	14.2	54.2	66.1	38.1	14.3
With my/partner's children	0.0	0.0	1.0	3.2	15.4	45.0	4.2	5.3
By myself	2.2	1.0	2.6	5.7	20.6	6.4	27.5	5.6
Highest educational attainment								
A univ. degree or higher	0.0	0.0	0.0	14.9	13.7	15.0	20.5	5.7
Diploma	1.6	4.5	36.0	18.7	40.1	33.6	27.4	13.6
A trade, voc. cert. or other qual.	4.4	10.6	22.4	13.0	30.2	30.9	31.7	12.6
Highest level of sec. school	94.3	94.1	75.7	72.2	45.0	43.8	50.9	79.7
Incomplete secondary school	0.9	0.2	1.1	2.6	7.8	12.0	8.0	2.9
Part or full univ. qual.	2.4	7.4	0.0	82.2	50.2	50.3	55.3	26.1
Working full-time in 2004	1.3	1.4	10.3	0.0	100.0	0.0	0.0	8.3
Main carer for								
Children under school age	0.1	0.4	1.2	4.5	13.2	34.1	0.0	4.4
Children at primary school	0.0	0.0	0.8	2.0	11.5	58.8	0.0	5.5
Older children	0.0	0.0	0.1	0.3	10.2	38.8	0.0	3.6
Vulnerable person (inc disabled)	0.6	1.3	0.8	1.8	4.6	9.0	0.0	1.7
Had to move to attend univ.	20.1	32.5	28.0	22.7	2.9	3.7	16.2	19.1
Student & parent born o'seas	15.5	7.0	17.5	19.6	24.3	33.7	25.6	18.4
English not the main language	13.1	3.2	11.6	17.5	10.4	18.4	9.8	13.4
Lowest SES quintiles	15.5	15.8	17.4	17.5	24.4	33.3	27.6	18.5
Definitely wanted this course	57.4	66.1	70.0	75.3	86.3	84.2	83.3	67.2
Attrition rate	19.9	16.1	21.7	15.8	34.7	20.0	28.7	20.6

Notes Percentages need not sum to 100 because answers are not always mutually exclusive and because some (usually smaller) categories are excluded.

5. Deciding to Enrol

The reasons students enrol in their course and influences on their decision to enrol may both affect later decisions not to discontinue their course. The extent and quality of career advice and information in particular can be influenced by government policy and if linked to decisions about enrolment and re-enrolment could provide a means through which attrition rates could be reduced.

5.1 Reasons for Enrolling

The literature on motivation in general and on student motivation in particular distinguishes broadly between intrinsic (an interest in study for its own sake) and extrinsic (an interest in study because of later outcomes) motivations, with intrinsic motivation generally having a greater effect on longer term outcomes.

Students were asked the extent to which each of a list of reasons matched their own reasons for enrolling in their course in first semester 2004. The ten reasons with the highest percent of students reporting an exact match were:

▪ Study will help me to get a job in a field I like	37.9%
▪ To help me to prepare for my chosen career	37.6%
▪ To get a better job later	33.7%
▪ Study will help me to make a better career choice	25.4%
▪ To get a better salary later	23.0%
▪ I want to live 'the good life' later	21.8%
▪ I feel good when I do well in my studies	21.2%
▪ I like broadening my knowledge	18.9%
▪ Studying lets me learn about things that interest me	17.4%
▪ I like learning new things	16.1%

The top six items in this list show the importance of vocational motivation for students—their course is a pathway to a job in which they would like to work. Intrinsic and personal reasons were not as frequently endorsed but also matched the reasons why many students enrolled in their course.

The items are derived from the *Academic Motivation Scale* (Vallerand *et al.*, 1992) which measures intrinsic and extrinsic motivation and amotivation with several sub-scales. A number of modifications were made by adapting the wording for Australian students and reducing the number of items. Table 5.1 shows the four summative scales (identified by factor and item analysis) and the items that correspond to each of the scales:

- *Love of learning* contains items that tap students' intrinsic interest in study. Students who scored high on this scale enrolled because they like learning.

Table 5.1
Scales of reasons for enrolling in first semester 2004: All students

Scales/items	% Match	Mean	Correlation
Scale 1 - Love of learning	***40.3***	***51.1***	***0.93***
I like broadening my knowledge	53.5	61.3	0.80
Studying lets me learn about things that interest me	51.3	58.9	0.80
I like learning new things	48.7	58.1	0.82
I like discovering things I didn't know about	43.4	54.3	0.84
I feel good when I'm learning about interesting things	44.1	54.0	0.81
I'm stimulated by ideas	38.0	50.0	0.80
I feel good when I can share ideas with others	25.5	40.5	0.66
I like becoming absorbed in books or topics	18.0	32.1	0.67
Scale 2 - Personal challenge	***34.4***	***45.4***	***0.91***
I feel good when I do well in my studies	56.3	61.2	0.71
To prove to myself what I'm capable of	35.2	46.9	0.72
I feel good when I can do difficult academic tasks	35.3	46.8	0.74
To show myself that I can succeed at uni	32.4	43.8	0.74
I like doing better than I've done before	31.6	43.2	0.63
I feel important when I succeed	29.6	42.9	0.70
Studying helps me in my quest for excellence	30.3	42.2	0.65
To show myself that I'm an intelligent person	24.3	36.5	0.69
Scale3 - To earn more	***50.0***	***56.2***	***0.68***
To get a better job later	67.8	69.4	0.70
To get a better salary later	53.7	59.4	0.74
I want to live 'the good life' later	45.4	52.2	0.71
I won't get a high-paying job without a degree	33.2	43.9	0.65
Scale 4 - To start a career	***69.1***	***70.4***	***0.58***
Study will help me to get a job in a field I like	74.6	74.0	0.55
To help me to prepare for my chosen career	70.1	71.8	0.53
Study will help me to make a better career choice	62.5	65.2	0.40

Notes Correlations in bold are Cronbach's alpha for the scale. Other correlations are for the item with the scale excluding item. *% Match* is the percentage indicating that the match between the item and their reason for enrolment is *A lot* or *Exact*. The mean is the weighted sum of (None)*0 + (A little) * 0.25 + (Moderate) * 0.5 + (A lot) * 0.75 + (Exact) *1.0. Based on the responses of 4,279 students who responded to the survey and did not tick the filter question *I can't remember why I enrolled* (112 respondents, weighted 3.2 percent of the 4,391 respondents). Values were imputed for missing responses.

- *Personal challenge* measures the extent to which students enrolled because they enjoyed the challenge of university study. It is partly intrinsic, but substantially egotistic.
- *To earn more* includes four items that all relate to extrinsic material benefits that are expected to flow from successful completion of a course.
- *To start a career* is also an extrinsic outcome from study, but its focus is on the type of job that results rather than the amount of money.

The items in the scale *To enter a job of choice* matches students' reasons for enrolling more closely than any of the other scales (on average, 69.1 percent of respondents reported that the items in this scale corresponded *A lot* or *Exactly* with their reasons for enrolling).

Table 5.2
Correlation matrix of scales of reasons for enrolment: All students

Scales	Scale 1	Scale 2	Scale 3	Scale 4
Scale 1 - Love of learning	1.00	0.68	0.19	0.30
Scale 2 - Personal challenge		1.00	0.47	0.44
Scale3 - To earn more			1.00	0.52
Scale 4 - To start a career				1.00

See *Notes to tables*

The items form reasonably reliable scales, especially for the first two scales, which have alpha coefficients of over 0.9 and the items generally correlate adequately with their scales. The scales *To earn more* and *To enter a career* are less satisfactorily, mainly because of the fewer items available for these scales.

Table 5.2 shows the relationships among the scales. The two intrinsic scales and the two extrinsic scales are most closely related to each other, but *Personal challenge* is also fairly closely related to *To earn more* and *To start a career*.

The Academic Motivation Scale also included items addressing *Amotivation*, or a lack of any clear reason for enrolling. A filter question, *I can't remember why I enrolled*, captures students who had no motivation. Students who scored low on all four scales can also be described as lacking in motivation.

Table 5.3
Reasons for enrolling by student type: Students who enrolled in first semester 2004

Type of student . . .		*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*Total*
		%	*%*	*%*	*%*	*%*	*%*	*%*	*%*
Why did you enrol?									
Love of learning	***	34.1	44.8	34.6	42.1	38.6	40.5	53.0	37.7
Personal challenge	**	27.1	28.2	28.4	32.2	23.6	27.1	36.3	28.3
To earn more	***	52.6	40.5	46.8	49.1	35.3	41.2	40.3	48.4
To enter a career of choice	***	69.0	75.1	62.9	70.5	51.2	61.4	62.9	67.0
Can't remember	*	3.8	0.1	4.7	2.8	2.8	3.2	0.6	3.3
No scale reasons	***	20.6	16.1	22.6	17.0	27.4	25.6	20.7	20.8
Three or more scale reasons	***	35.5	41.5	33.3	40.3	26.4	35.5	43.4	36.2

Notes % of students scoring 62.5 (averaging better than midpoint between *Moderate match* and *Matches a lot*) on the corresponding scale; % Can't remember why they enrolled; and % of students scoring three 62.5 or above on three or more scales. See *Notes to tables.*

Table 5.3 shows the percent of students who scored above 62.5 (midway between *Moderate match* and *Matches a lot* when the responses are scored 50 and 75 respectively) on each of the scales by student type. Although reasons for enrolling generally don't differ greatly among student types, there are some differences. Intrinsic reasons were least important among *School leavers* and *Other young entrants* while extrinsic reasons were more important among *School leavers:*

- *Love of learning* was more likely to have motivated *Other mature age* entrants (53.0%), *Gap year entrants* (44.8%) and *Continuing students* (42.1%) to enrol in their course than *School leavers* (31.1%) and *Other young entrants* (34.6%).
- *Personal challenge* motivated *Continuing students* (32.2%) and *Other mature age* entrants (36.3%) more than *Full-time workers* (23.6%).
- A university course as a pathway to increased earnings was more important for *School leavers* (52.6%) than for other entrant types, especially *Full-time workers* (35.3%)
- Entrance to a career was also more important for *Gap year entrants* (75.1%) and *Continuing students* (70.5%) than for *Full-time workers* (51.2%).
- Very few students (3.3%) could not remember why they enrolled in their course. Nevertheless a further one in five (20.8%) did not score 62.5 (the midpoint between Moderate match and Matches a lot) or more on any scale and could be classified as amotivated. Students who entered their course after a gap year were able to provide more reasons than other students—they were least likely to indicate *can't remember* or to not score on at least one scale. Students who were working full-time or carers, however, were more likely to have low scores on all four scales.
- Over a third (36.2%) of students scored relatively highly on at least three scales. *Other mature age students* (43.4%), *Gap year entrants* (41.5%) and *Continuing students* (40.3%) were more likely than other students to have at least three sets of reasons while *Full-time workers* were least likely (26.4%).

5.2 Influences on enrolment

The survey presented students with 12 possible influences on their decision to enrol in their course in first semester 2004 and asked them to indicate the extent to which their decision to enrol was influenced by each. The influences and the reasons are listed in Table 5.4.

Considering only whether reasons had a large influence, family (19.3%), Year 12 results (18.4%) and work experience (in its more generic sense) (16.5%) were the more important factors. A majority of students (53.6%) did not indicate that any of the reasons had a 'large influence' on their decision to enrol.

- Formal careers advice was not a large influence in any of its forms, at school, TAFE, university or elsewhere, nor was informal careers advice from managers or colleagues at work. The penetration of formal careers advice is somewhat stronger if 'moderate influence' is included.

Table 5.4
Influences on the decision to enrol: Students who enrolled in first semester 2004 (%)

Extent of influence on decision . . .	*Not applicable*	*No influence*	*A little influence*	*Moderate influence*	*Large influence*	*Total*	*n*
Source of influence							
A careers advisor at school	36.7	35.4	17.6	7.5	2.9	100.0	4,219
A careers advisor at university/TAFE	58.7	30.4	6.2	2.9	1.7	100.0	4,218
A careers advisor somewhere else	63.6	28.9	3.9	2.2	1.3	100.0	4,204
Your school or TAFE teachers	34.6	28.0	22.3	11.1	4.0	100.0	4,200
Your family	14.9	13.4	26.8	25.6	19.3	100.0	4,249
Your friends	17.6	31.6	28.2	17.2	5.5	100.0	4,230
Former or current students	24.4	37.5	20.8	13.0	4.3	100.0	4,215
Information from the university	13.7	21.1	29.3	25.1	10.7	100.0	4,205
Managers or colleagues at your work	39.3	43.2	9.8	4.6	3.0	100.0	4,199
Your Year 12 results	23.0	21.6	17.6	19.4	18.4	100.0	4,215
Availability of YA/Austudy/ABSTUDY	48.7	38.9	6.0	3.1	3.3	100.0	4,215
Work experience in a field of interest	29.4	26.0	14.0	14.1	16.5	100.0	4,257

See *Notes to tables*

- The information provided by universities had a large influence for one in every ten entrants (10.7%) and moderate influence on a larger proportion (25.1%).
- The availability of student income support through Youth Allowance, Austudy or ABSTUDY had a large influence on the decision to enrol for only a small percent (3.3%) of students and a moderate influence on a further 3.1% of students.

Table 5.5 shows the percent of students who indicated that a source of influence was a moderate or large influence for each of the seven student types identified in Chapter 4. While respondents could indicate that a source of influence was *not applicable* rather than had *no influence*, it is not clear how respondents distinguished between these two categories.

The importance of the sources of influence varies with the student's stage of life. School leavers are more likely than other students to report that they were influenced by a careers teacher at school or a school or TAFE teacher and most other sources except careers advice from TAFE or a university, managers or colleagues at work and work experience. Work experience and managers and colleagues at work, however, were relatively more important for full-time workers, carers and other mature age students.

Information provided by universities had a large or moderate influence on the enrolment of all types of students, although it was highest for school leavers (40.9%) and lowest for full-time workers (24.8%).

Table 5.5
Percent of 'moderate' or 'large' influence by source of influence and student type: Students who enrolled in first semester 2004

Type of student . . .	*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*Total*
	%	*%*	*%*	*%*	*%*	*%*	*%*	*%*
Source of influence								
A careers advisor at school	16.4	12.0	7.0	4.2	0.8	0.3	0.7	10.4
A careers advisor at univ./TAFE	4.1	1.2	7.8	5.9	2.9	5.9	5.2	4.7
A careers advisor somewhere else	3.2	1.2	5.3	3.6	5.2	2.9	4.4	3.5
Your school or TAFE teachers	20.4	15.4	16.4	9.5	3.2	5.9	7.5	15.1
Your family	55.7	48.9	44.4	40.7	19.1	17.1	17.9	44.9
Your friends	26.3	27.3	25.4	20.7	10.4	10.3	18.0	22.7
Former or current students	19.5	20.7	15.2	15.7	13.1	10.6	15.0	17.3
Information from the university	40.9	33.4	35.3	31.0	24.8	28.7	28.4	35.9
Managers/colleagues at your work	3.8	6.6	12.5	6.5	25.6	12.9	13.6	7.6
Your Year 12 results	58.4	38.3	24.0	19.2	5.1	2.2	5.4	37.8
Avail. of YA/Austudy/ABSTUDY	4.9	8.6	9.4	9.4	1.5	4.4	15.7	6.4
Work exp. in a field of interest	25.7	30.3	30.7	35.3	37.3	41.6	39.3	30.6

Notes All relationships significant at 0.001 except *Careers advisor at university or TAFE* (p=0.01) and *Careers advisor somewhere else* (ns).

The availability of student income support through Youth Allowance, Austudy or ABSTUDY was least important for full-time workers (1.5%), presumably because income support targets full-time students. It was more important for students entering their course after a gap year (8.6%), other young entrants who had not been attending school in 2003 (9.4%) and continuing university students (9.4%), possibly because more students in these categories could qualify for Youth Allowance through the independence criterion. It is the 'other mature age students', however, for whom the availability of student income support is most important (15.7%).

6. Deciding to Discontinue

The survey identified three enrolment outcomes in first semester 2005 for students who began their course in first semester 2004:

- *They re-enrolled in the same course at the same university (71.3%)*
- *They re-enrolled in a different course at the same university (8.2%)*
- *They did not re-enrol at the same university (20.6%)*

The broad division between re-enrolled (79.5%) and did not re-enrol (20.6%) is derived from university administration records and is reproduced by the survey because of the weighting schema applied to the data.

This chapter focuses on the 20.6% of students who did not re-enrol at the same university in first semester 2005. A small proportion (1.1% of all commencing students and 5.9% of students who did not re-enrol in first semester 2005) re-enrolled at the same university in second semester 2005 after not re-enrolling in first semester.

The decision to not to continue studying was made at different times by different students. Academic success reflects the persistence of students. Eight in ten (80.7%) of those students who did not re-enrol in second semester 2005 passed at least one subject in first semester and six in ten passed all their subjects (59.7%). But over a third (35.8%) did not re-enrol in their course in second semester. One in five (19.0%) passed at least one unit in second semester (6.2% passed all their units) but by March 2005 none had re-enrolled.

Table 6.1
Intermission and intentions to re-enrol by sex: All students and students who did not re-enrol in the same university in first semester 2005

	Commencers			***Attriters***		
	Males %	*Females* %	*Persons* %	*Males* %	*Females* %	*Persons* %
Re-enrolled in second semester 2005	1.6	1.2	1.4	7.7	5.9	6.7
Intermission	7.5	8.2	7.9	36.5	40.2	38.8
Intend to re-enrol later	3.6	3.6	3.6	17.6	17.7	17.8
Do not intend to re-enrol	3.9	4.6	4.3	18.9	22.5	21.0
No intermission	11.5	10.9	11.2	55.7	54.9	54.6
Hope to re-enrol later	2.2	1.9	2.1	10.6	9.6	10.1
Do not intend to re-enrol	9.3	9.0	9.1	45.1	44.3	44.5
Total	20.6	20.2	20.6	100.0	100.0	100.0
(n)	1331	3038	4390	565	1296	1880

Notes *Persons* includes some students for whom information about their sex was not available.

Table 6.2
The withdrawal process: Students who did not re-enrol in first semester 2005

	Males		Females		Persons	
	%	%	%	%	%	%
Processes for withdrawal						
Formally withdrew from the university	78.7	(100.0)	82.4	(100.0)	80.9	(100.0)
Attended a withdrawal interview	5.3	(6.8)	3.2	(3.8)	4.0	(5.0)
Did not attend a withdrawal interview	73.4	(93.2)	79.2	(96.2)	76.9	(95.0)
- was asked, but did not attend	1.6	(2.0)	1.8	(2.3)	1.8	(2.2)
- was not asked	71.8	(91.2)	77.3	(93.8)	75.1	(92.8)
Did not formally withdraw	21.3	---	17.6	---	19.1	---
Total	100.0		100.0		100.0	

Notes Values in parentheses are percentages of students who formally withdrew from the university. *Persons* includes some students for whom information about their sex was not available and hence in some instances the value is not between males and females.

Some students (15.4%) received better offers of study, some chose not to re-enrol when they got their first semester results (6.5%) and others when they got their end of year results (7.1%). The majority (71.0%), however, decided not to re-enrol at some other time during their course. Although the rate at which students discontinue peaks near the assessment periods for first and second semester, students make their decisions throughout the year.

Apart from the 6.7% of students who had already re-enrolled in second semester 2005, another quarter (27.8%) intended or hoped to re-enrol later (Table 6.1). Almost two-thirds (65.5%) did not intend to re-enrol again, which is 13.4% of all students who enrolled in first semester 2004.

The institutional arrangements around the process of leaving study varied. The majority (54.6%) were not granted (or did not seek) intermission. Although the majority of students granted intermission did not intend to re-enrol, those who were granted intermission were more likely than those not granted intermission to intend or hope to return.

It is possible for students to just stop attending classes and allow university bureaucratic processes to run their natural course and record failures and ultimately exclusion. One in every five (19.1%) followed this path and did not formally withdraw from the university (Table 6.2). At many stages of the year most students have a financial (avoiding a HECS debt) or an academic (avoiding recorded fails) incentive to formally withdraw from their university and the majority (80.9%) do so (Table 6.2). Only a small proportion (4.0%), however, were interviewed as part of the process of withdrawing from their studies or declined to participate in an interview (1.8%).

Table 6.3
Influences on the decision to discontinue: Students who enrolled in first semester 2004

Discussed decision to discontinue with:	*Yes, discussed with*	*No influence*	*A little influence*	*Moderate influence*	*Large influence*
A university course advisor %	25.2	6.3	9.4	6.7	3.1
Family members %	71.1	8.6	21.5	22.0	19.1
University lecturers, teachers or tutors %	16.8	4.4	6.1	4.6	1.8
Other university staff %	7.5	2.6	2.3	1.8	0.8
A careers advisor %	7.2	2.1	2.0	2.0	1.1
A counsellor %	9.5	2.3	2.7	2.6	1.9
Friends %	54.2	9.7	22.4	15.8	6.4
Other students %	26.9	25.3	40.9	22.0	8.1
Secondary school teachers %	5.1	1.8	1.7	1.0	0.6
Other	6.0	0.2	1.3	1.5	3.0
No one %	22.4	---	---	---	---

See *Notes to tables*

Although only a small proportion of students withdrawing from their studies participated in a formal interview, nearly one in three (31.9%) discussed their decision to withdraw with at least someone from the university—a course advisor (25.2%), a lecturer or tutor (16.8%) or another staff member (7.5%) (Table 6.3). Nearly one in ten (9.1%) also consulted a counsellor who was more than likely a university counsellor. Nevertheless, collectively the various university staff were less likely to be consulted than family (71.1%) or friends (54.2%). Other students (26.9%) ranked only slightly behind university staff.

Although it might be expected that students thinking about withdrawing would discuss their decision with family and friends, the proportion of students who discussed their decision with any university staff is relatively low and those discussions had less influence than discussions with family and no more influence than discussions with friends.

7. Enrolment Outcomes

This brief chapter provides an overview of the main enrolment outcomes of students in first semester 2005, one year after they first enrolled. It also provides the context for some of the following chapters.

Table 7.1 shows the major university enrolment statuses of the students in first semester 2005:

- 79.5% were enrolled at the same university;
- 6.9% were enrolled at a different university; and
- 13.7% were not enrolled at university.

and breaking enrolments down from the perspective of courses:

- 74.4% were enrolled in the same or a similar course;
- 11.0% were enrolled in a different university course; and
- 13.7% were not enrolled in any university course.

These measures correspond to the outcomes examined in subsequent chapters and define their scope:

- Chapter 8 addresses *first year attrition from university*. It investigates the variation of the 13.7% of students who were not enrolled at university in first semester 2005 as a proportion of all students who enrolled in 2004.
- Chapter 9 looks at the *reasons* given by the 13.7% of students who were not enrolled at university for discontinuing their 2005 study.
- Chapter 10 examines *changes of courses*. It discusses the variation of the 11.0% of students who were in a different course in first semester 2005 as a proportion of students who were still enrolled.
- Chapter 11 presents the written comments on why they discontinued their 2004 study of the 20.6% of students who did enrol at the same university in 2005.
- Chapter 12 explores *changes of university.* It describes the variation of the 6.9% of students who were in a different university in first semester 2005 as a proportion of students who were still enrolled.
- Chapter 13 looks at the situation in April 2005 of the 13.7% of students who were not enrolled at university and in particular at any outcomes from their study in 2004.

The university enrolment outcomes in Table 7.1 are also provided for students who are *New to university*, *Continuing university* students and students with *Previous university experience*. Students new to university are the majority (71.9%) and are those who said that they had not studied at university prior to their 2004 enrolment or were studying at school or taking a gap year in 2004. Some *School leavers* and *Gap year* students studied at university as part of Year 11 or Year 12 extension programs. These students are

Table 7.1
University enrolment status in first semester 2005 by prior university experience: All students who enrolled in first semester 2004

	New to university	*Continuing university students*	*Previous university experience*	*All entrants*
	%	%	%	%
Same university	*79.1*	*84.2*	*73.8*	*79.5*
Same course	70.8	75.9	68.9	71.3
Different course	8.3	8.3	4.9	8.2
Different university	*7.7*	*4.2*	*3.8*	*6.9*
Same or similar course	3.3	2.1	2.6	3.1
Different course	4.4	2.1	1.3	3.8
Not at university	*13.1*	*11.6*	*22.2*	*13.7*
Re-enrolled 2nd semester 2005	1.1	0.9	1.4	1.1
Deferred, intend to return	3.2	2.6	5.2	3.3
Deferred, do not intend to return	2.8	2.8	3.9	2.8
Not deferred, intend to return	1.8	1.5	3.9	1.9
Not deferred, do not intend to return	4.1	3.6	6.8	4.4
Missing	0.2	0.2	0.8	0.3
Total	*100.0*	*100.0*	*100.0*	*100.0*
University experience	*71.9*	*17.8*	*10.3*	*100.0*

See *Notes to tables*

included in the *New to university* category, as are many mature age students entering university for the first time. *Continuing university students* (17.8% of all entrants) correspond to the student type described in Chapter 4 and are younger students who were studying at university in 2003. They may or may not have completed that study before enrolling in their Bachelor's Degree in 2004. Students with *Previous university experience* are predominantly older students with a completed or part-completed university qualification, not necessarily a degree.

The enrolment statuses of students in 2005 of students who were new to university differs little from the overall mean—79.1% were at the same university compared with 79.5% overall; 7.7% were at a different university compared with 6.9% overall; and 13.1% were not at university compared with 13.7% overall. *Continuing university students,* however, were more likely to be still at the same university (84.2%), slightly less likely to be at a different university (6.9%) and slightly less likely not to be enrolled at all (11.6%). These are students who are at least one step further down the university and course change and matching process than students who are new to university. Students with previous university experience, however, are less likely to be at the same university (73.8%) or at a different university (3.8%) and more likely not be enrolled in first semester 2005 (22.2%).

Measures of first year attrition ignore the extent to which students are likely to return to study later. Table 7.1 shows whether students had returned to study at the same university in 2005—1.1% had. It also shows whether students had formally deferred from their course and whether they intend to return to their course. Intentions to later enrol at a different university or in a different course were not collected. If the intentions to re-enrol are realised in the near future, first year retention of students in the higher education sector, both of students overall and of those new to university, is over 90%. This is a substantially higher value than reported by studies that do not include inter-university movement, movement between courses and deferred re-entry.

8. Attrition from University

This chapter describes how students who did not re-enrol at university in 2005 differ from students who did re-enrol. It addresses the question '*Which students were more likely not to re-enrol in university in first semester 2005?*' The major groups identified in the survey were:

- Students who re-enrolled at the same university in first semester 2005 (79.5%);
- Students who in April 2005 were enrolled at a university other than the university in which they were enrolled in first semester 2004 (6.9%); and
- Students who were not enrolled at university (13.7%).

This chapter focuses on the 13.7% of students who did not re-enrol in first semester compared with the 86.3% who did. Students were asked if they were enrolled in a different university in April 2005. Some may have enrolled at another university, discontinued fairly quickly, and hence not been recorded.

The discussion in this chapter draws on the attrition rates presented in tables in the appendix. Table A.2 shows attrition rates for students' background, their enrolment characteristics, their circumstances while studying, their financial circumstances and characteristics of their course. Tables A.3 and A.4 show these same characteristics separately for male and female students. The tables of attrition rates of male and female students separately are each based on fewer students than Table A.2. While a relationship may be statistically significant overall, it need not be significant for either male or female students considered separately.

The appendix also contains results from multivariate analyses predicting attrition rates by selected variables (Tables 6 and 7). Only a subset of the available variables is incorporated in the analyses because of the large number of variables that could have been considered, the substantial overlap of many variables and concerns about the direction of causality. Two analyses are reported—the first that incorporates many variables and a second that is restricted to selected personal and family background characteristics. The latter is included because the real effect of student personal characteristics (their age, for example) can be lost in multivariate analyses that partial their effects through other consequent variables (whether they enrol full or part-time, for instance). Although the discussion in this chapter on occasion draws on the values in these tables, caution is required because of the many variables involved and their inter-relationships.

8.1 Types of Students

Attrition rates differ among types of students (see Chapter 4). The overall attrition rate is 13.7% (Table 8.1). Two groups have attrition rates well above this average: *Full-time workers* (30.7%) and, to a lesser extent, *Other mature age students* (24.2%). Students who had taken a gap year (9.2%), students who entered directly from school (10.6%) and *Continuing students* (11.6%) all had low rates of attrition.

The difference between male (13.9%) and female (13.2%) students is relatively small and is not statistically significant (Table A.2). Although there are some differences within some types of student, these are not significant either. The apparent large differences for *Gap year* students and *Carers,* for instance, are based on small numbers of respondents.

Table 8.1
Percent still enrolled at university in first semester 2005 by type of student: All students who enrolled in first semester 2004

Type of student . . .	*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*Total*
	%	%	%	%	%	%	%	%
Not enrolled at university in first semester 2005								
All students	10.6	9.2	15.9	11.6	30.7	17.6	24.2	13.7
Male students	11.0	12.8	14.0	12.3	31.7	9.6	26.5	13.9
Female students	10.2	6.8	16.4	10.7	29.0	19.6	21.7	13.2

See *Notes to tables*

8.2 Student Characteristics

The survey provided information on many characteristics of students, their background and the courses in which they are enrolled. The various student and course characteristics are discussed in this chapter under five headings:

- Personal characteristics (e.g. their age, sex, language background).
- Enrolment characteristics (e.g. Why they enrolled, who or what influenced their decision to enrol).
- Personal circumstances while they were enrolled (e.g. their paid work, where they were living).
- Their financial circumstances (e.g. their main sources of financial support)
- The characteristics of their study (e.g. whether their study was full or part time).

The stronger effects are generally to be found in the type of course and study undertaken, particularly in full- and part-time study, on-campus and off-campus study, the type of university attended, the field of study and the extent to which students had wanted to enrol in their course.

8.3 Personal Background

Box 8.1 summarises the relationships between the personal characteristics of students and attrition rates. The following provides a more detailed discussion:

Sex

There is no meaningful difference between the first year attrition rates of male and female students commencing a Bachelor's Degree. This finding is consistent with the results of Lukic, *et al.* (2004) who, among other results, reported first year attrition for 2002 commencing undergraduate students using administrative records from DEST's higher education student collection, which is in turn derived from enrolment records supplied by the universities.

Studies of course completion, however, frequently show that female students have a higher completion rate than male students and the difference is frequently large. Martin *et al.* (2001), for instance, report that for the 1992 cohort, women (67.8%) were more likely to complete an award than were men (59.9%) and for the 1993 cohort the corresponding completion rates were 66.5% and 57.9% respectively. Shah and Burke (1999) also report that overall females have a higher chance of completing a course than males and the difference is similarly large—68.3% for females and 60.3% for males. Long *et al.* (1995) show apparent retention rates increasing for females during the 1980s and nearly 20 percentage points higher for females by the end of that decade.

Further analyses of two longitudinal cohorts at age 23 showed little difference in the completion rates of males and females in 1984 and about six percentage points in favour of females in 1988 (Long, *et al.*, 1995). Several other studies suggest that for young entrants to higher education, there is little difference in completion between males and females (Lamb *et al.*, 2001; Vickers *et al.*, 2003; Walstab *et al.*, 2001). Setting aside those studies that focus only on younger entrants, the discrepancy might be due to:

- changes over time. The difference seems to have appeared and increased during the 1980s. The studies by Martin *et al.* and Shah and Burke were based on cohorts starting their course in the early 1990s when the difference between males and females was relatively high. It may have declined during the 1990s.
- time-dependency. There may be little difference in the attrition of males and females in the first year and a greater attrition of male students in later years.

Age

Older students have higher rates of attrition than younger students. The attrition rate of students 25 years or older is about twice that of younger students—a difference of about 10 percentage points. The pattern is similar for males and females considered separately. Lukic *et al.* also found that young domestic undergraduate students who commenced their course in 2002 had lower first year attrition rates and that this result held for both males and females considered separately. Similarly Martin *et al.* and Shah and Burke both report that completion rates were highest for younger students and decline with age.

The multivariate analyses, however, show a different pattern (Tables 5 and 6). Age has no effect on attrition when controlling for other variables. Much of the influence of age is possibly captured by characteristics such as living arrangements (living with parents) and sources of financial support (from parents or guardians), among others.

Socioeconomic background

The measure of socioeconomic background used in this study divides entrants into quintiles. Attrition among students from the bottom two quintiles (16.8%) is about twice as high as attrition in the top quintile (8.4%).

The multivariate analyses show that the effect of socioeconomic status on attrition is carried through other student and course characteristics, but not students' personal and family background characteristics. The effect of socioeconomic status holding most other variables constant is not statistically significant, despite the significant difference between the highest and the fourth quartiles. The more restricted multivariate analyses, however, show that the socioeconomic status of the student is related to attrition holding other personal and family background characteristics constant. Students from the highest socioeconomic status quintile have lower rates of attrition than other students.

Martin *et al.,* using a postcode-based measure of socioeconomic status, also found that students from higher socioeconomic background were more likely to complete their course. Similarly for younger students Vickers *et al.* (2003) report that higher socioeconomic background is associated with higher rates of retention in university. Evidence from an early study of young people entering higher education in the 1980s is more mixed (Long, et al., 1995).

Box 8.1
First year attrition rates and personal and family background: Students who enrolled in first semester 2004

Personal characteristics *Overall attrition rate (13.7%)*

- *Males* (13.9%) have an attrition rate similar to that of *females* (13.2%)
- Students *25 years and older* have a higher rate of attrition
- Students from the *lowest two quintiles of socioeconomic status* have higher attrition (16.8%)
- *Indigenous students* have an attrition rate (20.2%) that is not statistically different from that of non-Indigenous students (13.4%)
- Attrition was higher for students with at least one parent born in Australia (15.1%)
- Attrition was higher among students from families in which English was the only language spoken (14.7%)
- Students with a *disability* (16.2%) have an attrition rate that is not significantly different from that of students without a disability (13.3%)
- Students who lived in less accessible areas (18.4%) or accessible areas (16.5%) when they were 15 years old had higher attrition rates than students who lived in very accessible areas (12.7%).
- Student who lived overseas when they were 15 years old have lower attrition rates (10.9%)
- Students who did not move to attend university had higher attrition rates (14.4%)
- Students from non-selective government schools (16.6%) and who completed their schooling overseas (22.6%) had higher rates of attrition.
- Attrition rates were slightly higher among students who had already completed (15.5%) or partially completed (14.2%) a university qualification.
- Attrition was higher if a student's highest educational attainment was an apprenticeship, trade qualification, vocational certificate or other qualification (24.4%)

See Table A2.

Indigenous

The higher level of attrition among Indigenous students (20.2%) is not statistically different from the attrition rate for non-Indigenous students (13.4%). A sample-based study such as the present study, however, is not well suited to examining the experiences of Indigenous students statistically because they are a small proportion of the university student population and therefore of the sample (1.0%). The small numbers of Indigenous students in the sample mean that only the very largest of differences between Indigenous and non-Indigenous students would be detected as statistically significant. Studies based on population data are better suited to the investigation of attrition and course completion among Indigenous university students.

Martin *et al.* (2001) report large differences in completion rates between Indigenous (39.0%) and non-Indigenous (65.6%) students who commenced their course in 1992 and between Indigenous (41.6%) and non-Indigenous (64.6%) students who commenced their course in 1993. DEST (2001) notes that 'while access to higher education by Indigenous students has increased substantially, their success and retention rates relative to non-Indigenous students have been lower than for the student body as a whole' (p. 9) referring to the period 1991 to 2000.

Country of birth

Attrition rates also vary according to whether students were born in Australia and whether they are first or second generation migrants. Students with at least one parent born in Australia have higher rates of attrition (15.1%) than second generation migrants (student born in Australia and both parents born overseas—9.5%) and first generation migrants (student and both parents born overseas—11.3%). The pattern is similar for males and females, although possibly more pronounced for males.

English spoken at home

Whether English was the main language spoken in their home when they were 15 years old also captures part of the cultural background of students. Although it might be expected that students from homes in which English was the only language spoken should have an advantage at university, this is not the case for attrition.

Students from homes in which English was the only language spoken had higher attrition rates (14.7%) than others students. Attrition generally declined as English was less frequently spoken. The attrition rate was 11.1% for students from a home in which English was the main, but not the only language spoken and was 6.7% and 8.5% respectively if English was not the main language spoken but was nevertheless spoken frequently or English was rarely or never spoken (Table A.2).

These results are broadly consistent with Martin *et al.* who report that students with a non-English speaking background had slightly higher completion rates than students with an English speaking background (67.2% compared to 64.0%). McMillan also found that for young higher education entrants, students with language backgrounds other than English had lower attrition rates than other students.

The extent to which English was spoken at home is not significantly related to attrition holding a broad array of student and study characteristics constant. This may be partly because the effect of 'overseas background' is picked up in the measures of accessibility, which includes a category for students who were not living in Australia at age 15 and in the measure of whether students moved from overseas to attend university. In the multivariate analyses with the more restricted set of variables, however, the extent to which English was spoken at home remains statistically significant and the categories have a similar pattern of relationship with attrition.

Disability

In this survey students were asked whether they had a *disability, impairment or long-term medical condition* that might affect their study. Several possibilities were listed: hearing, learning, mobility, vision, medical, mental health or other condition. These are treated collectively in Table A.2 because the number of responses to each of the separate categories was fairly small. Overall 7.3% of respondents reported a disability.

There is no statistically significant relationship between this aggregated measure of disability and attrition, although the point estimates suggest that students with a disability may have higher levels of attrition (16.2%) than other students (13.3%). The multivariate analyses also show that there is no relationship between disability and attrition.

Remoteness/Accessibility

Typically students from rural backgrounds have higher attrition rates than students from urban backgrounds (Martin, McMillan). The possible reasons include social dislocation and additional cost as students are more likely to have to leave home to attend university and those attending universities located in rural and regional areas may find it more difficult to find part-time work to support their studies.

Identifying rural and regional students is often problematic as students may move during their studies and leave rural areas for the cities. This study uses the ARIA measure of accessibility to resources and is based on the postcodes of students when they were 15 years old. For older students, in particular, this measure does not capture any movement from rural family life to urban life. The measure also includes a category for students who were not living in Australia when they were 15 years old. The low attrition rate for this group (10.9%) contributes to the statistical significance of the relationship between accessibility and attrition.

Table A2 shows that the attrition rate of students from very accessible areas (12.7%) is lower than for students from accessible (16.5%) or less accessible areas (18.4%). These results are not particularly consistent with Martin *et al.* who found little difference between the completion rates of urban (65.3%) and rural (63.2%) students, but a major difference for the small proportion of students from isolated areas (54.1%) who had a markedly lower completion rate. In the present study these students have been grouped with other students from rural but less isolated areas and hence any difference may not be as evident.

Martin *et al.* measured location by the postcode of a student's permanent home when they first enrolled and it might be expected that the measure used in this study (location at age 15) would attenuate any effects. Nevertheless, the difference in attrition between students from *Very accessible* and *Accessible* locations is more marked here than that between urban and rural locations reported in Martin *et al.*

The results from the multivariate analyses suggest that any effect of geographic location at age 15 is mediated by other variables. The inclusion of both accessibility and whether a student had to move in order to attend their university may cloud the interpretation of results for the location measure.

Highest educational attainment

The educational background of students is associated with their likelihood of attrition. Students who entered having completed Year 12 and without any post school qualification had the lowest level of attrition (10.4%) than other students. The difference in attrition among the other groups is not always very large. Students entering with vocational qualifications (other than diplomas) had relatively high levels of attrition (24.4%). The small group of students who had not completed Year 12 or any other qualification also had higher rates of attrition (19.3%), but were not markedly different from students who already had degrees (18.8%) or diplomas (19.5%). This pattern is repeated separately for male and female students (Table A.3 and A.4) and is broadly consistent with the results of the multivariate analyses.

8.5 Enrolment Characteristics

The relationships between the characteristics associated with enrolling in the course and attrition rates are summarised in Box 8.2.

Moving to attend university

Having to move to attend university is usually considered problematic for students—their support networks are disrupted and they face additional costs in moving out of the parental home or in just moving house per se. Yet the results from this survey about the effect on attrition are mixed. The survey distinguishes between the relatively few who choose to move and those who had to move. Among the latter, those who move within the same city or within the same State had lower attrition rates. Only students moving from a different state had the expected higher attrition rates. Overall there is a relationship between moving to attend university, but it is not consistent or easily explicable. When other characteristics are held constant, the relationship is no longer statistically significant.

Influences on enrolment

Several forms of career advice are related to attrition. Overall the greater the number of influences, the lower the likelihood of attrition. However, there is a positive relationship between advice from managers and work colleagues and attrition rates that flags a problem—not necessarily that students are receiving poor advice at work, but rather that

Box 8.2
First year attrition rates by enrolment characteristics: Students who enrolled in first semester 2004

Enrolment characteristics *Overall attrition rate (13.7%)*

- Students who did not move to attend university had higher attrition rates (14.4%)
- Entrants had a lower rate of attrition if their decision to enrol was influenced by:
  - their family (10.7%)
  - former or current students (9.8%)
  - information from the university (11.5%)
  - Year 12 results (10.0%)
- Entrants had a higher rate of attrition if their decision to enrol was influenced by manager or colleagues at work (18.5%)
- Entrants who reported no influences (17.8%) or only one influence (16.2%) had higher attrition rates than other students.
- Entrants had lower rates of attrition if they enrolled:
  - because of a love of learning (11.4%)
  - to meet a personal challenge (10.3%)
  - for financial gain (10.6%)
  - to enter a chosen career (10.2%)
- The more reasons for enrolling, the lower the attrition rate. For four reasons, the attrition rate was 10.2%.
- The attrition rate was 24.3% for respondents with no reason for enrolling.
- Students who received credit for prior study or experience had a higher attrition rate (15.8%) than students who did not (12.9%).

See Table A2.

the types and sources of advice students report are strongly related to their life stage and that this is related to attrition. For instance, students who are influenced by advice from work colleagues are more likely (among other things) to be full-time workers, to enrol part-time and therefore to not re-enrol. Similarly, students who are influenced by their parents or former or current students are likely to be in circumstances leading to lower attrition.

In the case of all four influences mention in Box 8.2—family; former or current students; information from the university; and managers or work colleagues—the relationship with attrition is no longer statistically significant when other student characteristics are held constant. Of the three influences on the decision to enrol that approach statistical significance—a school or TAFE teacher; friends; and managers or colleagues at work—only one (managers or colleagues at work) is (almost) associated with lower attrition. The source of influences on enrolment advice has little or no effect on attrition.

Reasons for enrolling

Having (any) reasons to enrol is associated with lower rates of attrition and the more reasons, the lower the attrition rate. Each of the four reasons for enrolling—love of

learning; personal challenge; financial gain; and entry to a chosen career—is associated with lower attrition. Conversely having no reasons is associated with high levels of attrition (24.3%). The relationships are similar for male and female students. Holding other student and study characteristics constant, only one reason remains statistically significant. Students who enrolled in order to enter a chosen career had lower attrition rates.

Box 8.3
First year attrition rates and characteristics while studying in first semester 2004: Students who enrolled in first semester 2004

Enrolment characteristics *Overall attrition rate (13.7%)*

- Students who were living with a spouse with no children (24.4%), with a spouse and children (22.7%), with children and no spouse (20.2%) or in some other situation not with their parents or at a university college (17.1%) had a higher rate of attrition.
- The more hours of paid work per week, the greater the attrition rate:
  - not employed (11.4%)
  - 1 to 19 hours (10.8%)
  - 20 to 34 hours (10.5%)
  - 35 to 40 hours (17.6%)
  - 35 to 40 hours (27.6%)
  - more than 40 hours (30.8%)
- Working arrangements and study leave influence attrition:
  - Fixed hours without study leave (27.1%)
  - Study leave available, but difficult to use (18.6%)
- Students who took more than 90 minutes to get to university had high levels of attrition (16.7%)
- Students who were the main carer for someone dependent on them had higher rates of attrition:
  - Pre-school age children (23.9%)
  - Primary school age children (19.4%)
  - Older (secondary school age or older) children (24.8%)
  - Other vulnerable or disabled people (26.6%)

See Table A2.

8.6 Circumstances While Studying

Box 8.3 describes the effects on attrition rates of the circumstances of students while they were studying—whether they were employed and if so for how long and their use of study leave, the time they took to get to work, whether they were caring for children and who they were living with. Three of these variables—the time required to get to university from home or work; living with a spouse and living with some other relative (neither children nor parents)—have statistically significant relationships with attrition after controlling for other student characteristics.

Living arrangements

Students who were living at a university college or other residence (7.1%) or with their parents (10.7%) had lower rates of attrition than students in other living arrangements.

The differences were stronger for female than male students. Much of the relationship of living arrangements with attrition is associated with life stage characteristics, although even when these other characteristics are held constant, the effect on attrition of living with a spouse and no children or in some arrangement without a spouse or children (mainly living by themselves) is statistically significant.

Paid employment

The number of hours that students spend in paid work is clearly related to attrition—the more hours of work, the higher the attrition rate. The effect of paid work on attrition is negligible up to about 19 hours. Beyond that attrition rates increase gradually to 30.8% for students working more than 40 hours a week. McMillan (2005) in a study restricted to young entrants reports that attrition rates were unaffected by employment up to about nine hours per week and increase progressively beyond that.

Respondents were asked several other questions about their employment—the availability of study leave, missing classes and interference with study. If a student worked fixed hours and had no study leave or found it difficult to use their study leave, then attrition was higher. Similarly if they reported that their work interfered with their study, then attrition was higher. Some of these measures have an element of tautology—'difficulty in studying' may not be too far removed from attrition.

Because of the close relationships among these measures only the number of hours of paid employment was included in the multivariate analyses. Even so, paid employment is no longer statistically significantly related to attrition after controlling for other student and course characteristics, despite the statistically significant difference between no work and 20 to 34 hours of work.

Travel to university

Travel to university can be a significant cost for students in both time and money. It is reasonable to expect that, all else equal, students who experience greater costs will be less likely to enrol. The measure of time taken to travel to university shows a seemingly unusual effect—students who did not have to travel to university at all had high attrition rates (25.7%) and so did students who had to travel more than an hour and a half to get to university (16.7%). There was little difference in the range up to an hour and a half of travel.

The group who did not travel to university includes mainly students enrolled in off-campus study who were enrolled part-time and tended to have higher attrition rates. When these other variables are held constant, the attrition rate for this group is similar to that of most other students. The effect of travelling more than 90 minutes, however, remains statistically significant, although the proportion of students involved (4.5%) is relatively small. The multivariate relationship, however, is not consistent. Students who had to travel between half an hour and an hour to university also had higher attrition rates.

Caring for others

As with paid work, caring for children or other dependents may conflict with study. Any role in which the student was the main care-giver was associated with markedly higher attrition. The relationships were stronger for female than male students, except for the small group of male students involved in caring for a sick or vulnerable friend or relative, a person with a disability or some other adult. The multivariate analysis, however, shows that the only statistically significant difference is associated with caring for another adult dependent or a dependent with a disability. The absence of other relationships in the multivariate analysis may reflect the difference of the effect on attrition for male and female students.

Box 8.4
First year attrition rates and sources of financial support in first semester 2004: Students who enrolled in first semester 2004

Financial support while studying in 2004 *Overall attrition rate (13.7%)*

- Students who did not receive the Youth Allowance had a higher rate of attrition (15.0%)
- Student who did not receive any income support (Youth Allowance, Austudy or ABSTUDY) had a higher rate of attrition (15.0%)
- Students had a *higher* rate of attrition if their main source of financial support was:
  - their spouse or partner (21.7%)
  - paid employment (15.5%)
- Students had a *lower* rate of attrition if their main source of financial support was:
  - relatives other than their parents (4.4%)
  - a government or other scholarship (4.9%)
  - their parents or guardian (9.0%)
  - their own savings or sale of assets (10.8%)
  - government income support (11.2%)

See Table A2.

8.7 Student Finances

Studying at university can be expensive either directly through payment of course fees and non-fee costs or indirectly through the inability to engage in full-time employment or study-related costs such as child care. Programs have been in place for many years to minimise any effect of financial constraint on access to university courses or the ability to complete courses. For most students, the cost of fees can be deferred through the Higher Education Contributions Scheme (HECS) or the more recently introduced Higher Education Loan Program (HELP) and income support is available on a means tested basis through the Youth Allowance and Austudy as well as to Indigenous students through ABSTUDY. Nevertheless, some students, particularly those in full-time work, begin repayment of course fees immediately and the limits full-time study imposes on working hours can create financial constraints that impede a student's ability to complete their degree. The extent to which students rely on financial support from others and from different sources may assist or hinder their completion of their degree.

Student income support

Youth Allowance is the largest government student income support program and the survey distinguished four categories of support—full independent, partial independent, full dependent and partial dependent. There are significant differences in attrition between students receiving Youth Allowance and those not receiving Youth Allowance, but much of this effect is due to the fact that the program mainly targets students under the age of 25 studying full-time.

Table 8.2
Attrition rates by receipt of Youth Allowance: Various populations

	All students		Under 25 years		Full time & under 25 years	
Youth Allowance	***Distribution*** *%*	***Attrition*** *%*	***Distribution*** *%*	***Attrition*** *%*	***Distribution*** *%*	***Attrition*** *%*
Full independent	9.4	9.2	11.4	9.1	11.4	9.5
Reduced independent	3.8	8.0	4.4	8.8	4.6	8.3
Full dependent	5.4	9.8	7.0	9.4	7.3	9.3
Reduced dependent	3.6	8.6	4.6	7.4	4.7	6.9
None	77.8	15.0	72.5	11.7	72.1	10.3
Total	100.0	13.7	100.0	10.9	100.0	9.9

See *Notes to tables*

Youth Allowance recipients should therefore be compared with other students who are under 25 years and studying full-time. Table 8.2 shows the effect of restricting the sample to 15 to 24 year-olds studying full-time on relative attrition rates for recipients of Youth Allowance. The difference in attrition rates between Youth Allowance recipients and non-recipients declines and is no longer significant.

Austudy targets mainly full-time students 25 years or older. There is no relationship between receipt of Austudy and attrition for the sample as a whole (Table A.2) and even if the sample is restricted to full-time students 25 years or older and studying full-time the relationship is still not significant.

The absence of any significant relationship between attrition and Youth Allowance or Austudy cannot be interpreted as a failure of the program. Given the means testing of these programs and that they target students judged to have access to less financial support from their family or others, the fact that attrition is no lower for income support recipients than for other students possibly signals that equity in terms of attrition has been achieved for recipients. Whether this is because of the income-support program is another issue. The multivariate analysis combines the three income support programs into a single measure of income-support which also has no effect on attrition. Although this result holds an array of student characteristics constant, these may not be the equivalent of the family circumstances that students need to demonstrate in order to establish their eligibility. The inclusion of an array of measures under ‘main sources of financial support’, including government income support, may have eroded the estimated effect of student income programs on attrition.

ABSTUDY provides income support for Indigenous students. There are too few Indigenous students who responded to the survey to say anything meaningful about the attrition of Indigenous students or its relationship with ABSTUDY.

Sources of financial support

Several sources of financial support were associated with lower levels of attrition:

Receipt of government income support. The attrition rate of students who received government income support (11.2%) was lower than that for other students. This measure would include student income support as well as various pensions and family tax benefits.

Support from a parent or guardian. Students whose main sources of financial benefit included their parents or a guardian had lower attrition rates (9.0%).

Support from other relatives. The relatively small proportion (1.5%) of students who received support from other relatives had lower attrition rates (4.4%).

Support through savings and sale of assets. Attrition was lower for students who supported themselves by using their savings or selling their assets (10.8%).

Support by scholarships. Students were asked about both government and non-government (mainly university) scholarships. The written comments indicated that students had difficulty distinguishing the sources of their scholarship and hence their answers are combined. Other students may also have confused commercial and friendly society educational trusts with scholarships. Collectively their attrition rate was a low 4.9%. To the extent that this measure actually picks up scholarship holders, it is identifying a group some of whom have received an award on the basis of academic merit. It is not possible to separate the effect of the financial benefits of a scholarship from the academic ability that may have led to its being granted.

Two other sources of financial support are associated with higher levels of attrition—from a spouse or partner (18.7%) and paid employment (15.5%). The relationship with support by a spouse or partner was markedly different for male and female students. There was little association for male students but a significant effect for female students.

Many of the sources of financial support are clearly related to the life-stage of the student. When these are held constant, only financial support from a parent or guardian is associated with lower levels of attrition.

8.8 The Course

The strongest predictors of attrition are the attitudes students have to enrolment in their university and course, their type of enrolment and the type of university in which they enrol. Box 8.5 contains two further measures: Whether the student was enrolled in a double degree or not and whether the student was enrolled on-campus or off-campus.

Part-time study

Part-time study is associated with higher levels of attrition. Table A.2 shows that the attrition rate for the 13.9% of students who study part-time (32.1%) is nearly three times the level for full-time students (10.6%), although the difference is possibly slightly less for male than for female students. The higher attrition rate for part-time study is consistent with most research on university attrition or completion (Martin, *et al.*, 2001; and see Long, *et al.* 1995 for a summary of earlier studies).

The study provides the opportunity to investigate the extent to which this difference in attrition rates between full and part time students is because of other student and course characteristics. Full-time study has a lower attrition rate than part-time study holding other variables constant.

Off-campus study

Students studying mainly off-campus have higher attrition rates (30.3%). This is consistent with previous research (Long, 1994). Off-campus study is mainly part-time and the students are older with full-time jobs or responsibilities for caring for children or other people. When these and other student and study characteristics are held constant, there is little difference between the attrition rates of on-campus and off-campus students. The measure of time taken to get to university includes a proxy for off-campus study—students who reported that they did not have to travel to university. Even if this variable is excluded from the set of characteristics held constant, the relationship between mode of study and attrition is still negligible. There is little indication that off-campus study contributes inherently to higher attrition.

Preference for enrolment in their course

Respondents were asked whether they had wanted to enrol in their course (rather than some other course). Attrition increased progressively as students reported that they had not wanted to enrol in their course and was 19.3% for students who had really wanted to enrol in a different course. McMillan (2005) examined a variable that measured whether the course a student entered was their first preference in the university course selection process and apparently found no relationship with attrition because it was not included in the final model.

Table 4.1, which presented the characteristics of the seven different types of students, showed that *Full-time students* and *Other mature age students*, who have relatively high levels of attrition, had high levels of students who had definitely wanted to enrol in their course. If anything, wanting to have enrolled in a different course is associated with other course and student characteristics that lead to lower attrition. When other variables are held constant in the multivariate analyses, the effect on attrition remains statistically significant.

Double degrees

Students enrolled in double degrees have lower attrition rates (8.8%). They are younger and more likely to be studying full-time. When these other student and study

Box 8.5
First year attrition rates and characteristics of the course and study: Students who enrolled in first semester 2004

Characteristics of the course and study	*Overall attrition rate (13.7%)*

The rate of attrition was higher for:

- Part-time students (32.1%)
- Students studying solely off-campus (30.3%)
- Students who had really wanted to enrol in another course had higher attrition rates (19.3%)
- Students who received credit for prior study had a higher rate of attrition (15.8%)

The rate of attrition was lower for:

- Students enrolled for a double degree had lower rates of attrition (8.8%)
- Students who passed all their subjects had a lower rate of attrition (8.9%)
- Students who definitely wanted to enrol at their university (12.2%) or at another university (11.7%) had lower rates of attrition compared with students who were ambivalent about the university in which they enrolled
- Attrition varied with the type of university:
  - Group of 8 universities have lower attrition rates (6.3%)
  - Technology network universities have higher attrition rates (16.4%)
  - Regional universities have higher attrition rates (19.6%)
- Attrition varied across fields of study. It was higher for:
  - Education (excluding Teacher education) (19.8%)
  - Engineering (18.5%)
  - Information Technology (17.2%)

  and lower for:
  - Health, excluding Nursing (5.3%)
  - Science (9.8%)
  - Law (10.0%)

See Table A2.

characteristics are held constant the relationship is reduced and is no longer statistically significant.

University

Substantial differences exist in attrition rates among universities. The classification of universities into five types provides a convenient summary of the 14 universities that participated in the study. The main difference is between the Group of 8 universities, which have low attrition rates (6.3%) and other universities. Among the remaining universities, the regional universities have a slightly higher attrition rate (19.6%).

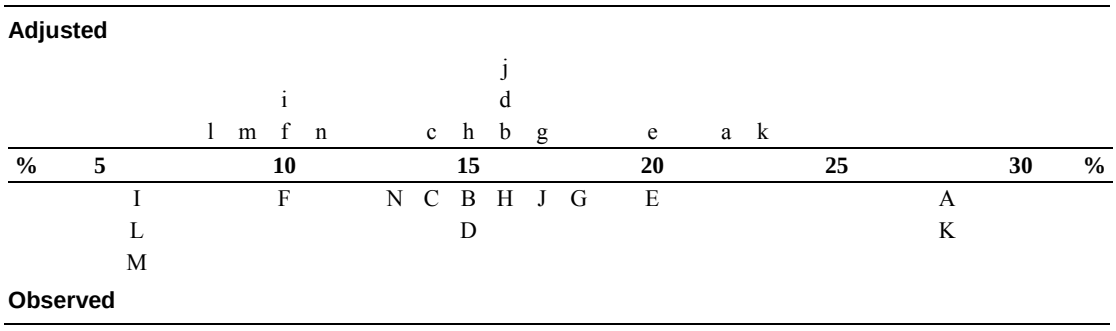
The various universities participating in this study have different enrolment profiles and cater to different students. When these are taken into account statistically, the differences among the types of universities are reduced but remain statistically significant.

The broad classification of universities into five types, however, does not fully capture the differences among the individual universities. When the 14 universities are treated separately in the statistical analysis, attrition rates still vary between universities in a statistically significant manner. Figure 8.1 shows the mean attrition rates for the 14 universities before and after statistical adjustment. The adjusted values can be thought of as the attrition rates that universities would have if they all had the same student profile (and that profile was the average of all students in the sample).

In Figure 8.1 each university is represented by a letter—lower case for the adjusted values and upper case for the observed values. The attrition rates are shown in the centre row of the figure, so that for instance university E has an observed and an adjusted attrition rate of 20%. The adjusted values are shown above the axis and the observed values are shown below the axis.

The adjustment reduces the differences in attrition rates among the universities. The adjusted values for the outliers with high observed attrition rates (universities A and K) are closer to the mean attrition of 13.7% after adjustment and similarly universities I, L and M, which have the lowest observed attrition rates, all have higher attrition rates after adjusting for their student profiles. While the adjusted attrition rates are generally closer to the overall mean for most universities, some are unchanged and the adjusted value of at least one (university N) moves away from the mean.

Figure 8.1
Observed and adjusted attrition rates for individual universities



In general it appears that universities with higher than average attrition rates have student profiles that contribute to that higher attrition and that universities with lower than average attrition rates have student profiles that contribute to that lower attrition rate. Nevertheless, even after adjusting for student characteristics, significant differences among universities remain. Although the list of student and course characteristics that have been held constant is lengthy, it is not exhaustive—information on Year 12 entry scores, for instance, is a significant omission—and the measurement of most control variables is not perfect. Further adjustment might reduce the between universities even more than is achieved in Figure 8.1.

Preference for enrolment in their university

Respondents were asked whether they had wanted to enrol at their university (rather than some other university). The pattern of responses is curvilinear—students who had really wanted to enrol at their university had lower attrition (12.2%) as did students who had really wanted to enrol at another university (11.7%). Unsurprisingly, the latter group has a higher tendency to move to a new university. It was the students who were less committed to any university who had the higher attrition—17.2% for those who had wanted to enrol at their university but had some reservations and 18.6% for those who had not wanted to enrol at their university but didn't mind. This pattern remains even when other variables are held constant.

Fields of study

Differences in attrition between fields of study are statistically significant. Attrition is higher for the fields of Education (excluding Teacher Education) (19.8%), Engineering (18.5), Information Technology (17.2%) and Teacher Education (16.7%) and lower for Health (excluding Nursing) (5.3%), Science (9.8%), Law (10.0%) and Architecture and Building (11.4%). The differences among fields of study remain statistically significant after holding other student and course characteristics constant, although the relative positions of some fields of study change. Engineering, Education and Teacher Education remain among the fields of study with higher attrition, but they are joined by Agriculture or Environmental Science and Creative Arts. At the other end of the scale, Health, Law and Science are still among the fields with low attrition but are joined by Management or Commerce, the Social Sciences and the Humanities.

It is difficult to reconcile these results with those of other research because of the different classifications of fields of study (or fields of education), partly due to the introduction of a revised ABS classification; the populations of students covered by the studies; whether other studies are reporting observed or adjusted values (and if adjusted, the different sets of variables controlled); and because of the different measures of attrition or completion used. Nevertheless, all studies appear agreed that the field of study of the course in which a student is enrolled is important for their likelihood of attrition or completion.

Table 8.3 lists the fields of study in order of estimates of their attrition or completion rates for three other studies as well as the results for the present study. There are some common patterns. Courses in Law and Health (in various combinations) have low attrition (or high completion) rates. The position of Nursing in the middle of the distribution in the present study seems an exception. Courses in Science also have reasonably low attrition (high completion) rates in all studies apart from Martin, *et al*. where it has the lowest completion rate—although the content of the category varies markedly between studies. The relative position of Education, which includes Teacher Education in all but the present study, varies widely but is generally towards the middle of the distribution. Teacher Education in this study is closer to the Education category reported in the other studies.

Table 8.3
Fields of study ordered by attrition and completion rates in various studies

McMillan, 2005	McMillan, 2005	Martin et al., 2001	Shah & Burke, 1993	The present study	The present study
Young students	Young students	Full population	Full population	Full population	Full population
Attrition	Attrition	Completion	Completion	Attrition	Attrition
Observed	Adjusted	Adjusted	Observed	Observed	Adjusted
Medicine, Law, Dentistry, Vet. Science	Other Health	Veterinary Science	Law	Health	Health
Other Health	Medicine, Law, Dentistry, Vet. Science	Health	Health	Science	Law
Engineering	Education	Nursing	Architecture	Law	Management or commerce
Science	Management & Commerce	Education	Science	Architecture & Building	Social sciences
Management & Commerce	Science	Law	Arts	Management & Commerce	Science
Education	Agriculture & Envir. Studies	Architecture & Building	Business	Humanities	Humanities
Information Technology	Creative Arts	Business Admin. & Eco.	Education	Social Science	Architecture or building
Society & Culture	Engineering	Agriculture	Engineering	Nursing	Nursing
Creative Arts	Society & Culture	Engineering		Agriculture & Envir. Studies	Information technology
Agriculture & Envir. Studies	Information Technology	Art, Humanities & Soc. Science		Creative Arts	Teacher education
Architecture & Building	Architecture & Building	Science		Teacher Education	Creative arts
Other	Other			Information Technology	Education
				Engineering	Agriculture & Envir. Studies
				Education	Engineering

Notes Fields of study are listed in ascending order of attrition and descending order of completion. The estimates for Shah & Burke are based on simple averages for students 21 years and younger in Table 4.2 and are approximations.

The fields of study with high attrition (or low completion) are possibly less clearly identifiable. Engineering (apart from the McMillan study) and Agriculture and Information Technology (where separately identified) generally have high attrition or low completion.

Studies based on samples of students such as the survey reported here or the study by McMillan are not well suited to producing lists of many fields of study ordered by attrition rates. Estimate are necessarily often based on small fractions of the sample and are therefore inherently unstable. The order of any list of fields of study can vary widely because of sampling variability, even though the overall effect may be statistically significant.

First semester results

Not surprisingly, the level of attrition of students is strongly related to their first semester results. Attrition was lowest among students who passed all their subjects (8.9%) and progressively higher, reaching 34.5% for students who passed no subjects and 60.1% for students who received no assessment in their first semester. Despite this strong relationship, the majority of students who did not re-enrol at university in first semester 2005 passed all their subjects (51.5%) because the vast majority of students overall (77.2%) pass all their subjects.

The results of students in their first semester of study were not included in the multivariate analyses because the direction of causality is not necessarily clear. A student can fail because they have decided to withdraw rather than withdrawing because they have failed.

9. Reasons for Discontinuing

Students discontinue their university studies for a variety of reasons. The previous chapter partially addressed this by investigating the correlates of attrition—it identified the characteristics of students who were more likely not to enrol in university in the year after first enrolling. This chapter takes another approach to the same issue and examines the reasons students gave for discontinuing their 2004 university studies.

Students who did not re-enrol at the same university in first semester 2005 were asked to indicate how much their decision to discontinue their study was influenced by each of 64 reasons. The responses available for answering each item were *No influence, A little influence, Moderate influence* and *Large influence.* This chapter presents results of analyses of the responses to these multiple choice items by the subset of students who were asked the questions—the 13.7% of 2004 entrants who did not enrol at any university in first semester 2005. A later chapter discusses students' written responses to prompts about their reasons for withdrawing.

The chapter analyses the reasons students gave for discontinuing their study in 2004 in the context of two populations:

- As the proportion of students who did not enrol at university in first semester 2005. For instance, 7.4% of the students who did not enrol in university in first semester 2005 indicated that their own illness was a *large* influence on their decision to discontinue their study in 2004.
- As the proportion of students who began their Bachelor's Degree in first semester 2004. For instance, 1.0% of the students who began their Bachelor's Degree in first semester 2004 both did not enrol at university in first semester 2005 and indicated that their own illness was a large influence on their decision to discontinue their study.

The chapter draws on results from several tables presented in the Appendices. Table A.7 shows, *for students who did not enrol at a university in 2005,* how responses vary among students with different personal and family background and study and enrolment characteristics, while Tables A.8 and A.9 contain some corresponding multivariate analyses. *For all 2004 course commencers,* Table A.10 shows the way in which responses to the scales vary among students with different personal and family background and study and enrolment characteristics, while Tables A.11 and A.12 contain some corresponding multivariate analyses. Appendix B describes how responses were combined into the scales that form part of this chapter.

9.1 Reasons for Discontinuing

The 64 reasons to which students were asked to respond and the distribution of the responses across the categories *None*, *A little*, *Moderate* and *Large* are displayed in Table 9.1. The items are ordered by the percent of respondents who indicated that the reason had had a *Large influence* on their decision to discontinue.

The items with the strongest influence and that cover the main motivations for discontinuing are:

Table 9.1
Reasons for discontinuing 2004 study: Students who did not enrol at any university in first semester 2005 (%)

Influence . . .	None	A little	Mod-erate	Large	Total	n	Mean
How much was your decision to discontinue the study you were doing in first semester 2004 influenced by each of the reasons below?							
I needed a break from study	48.6	13.3	13.8	24.3	100.0	1192	37.9
Difficult to balance study & work commitments	48.7	14.8	12.9	23.7	100.0	1189	37.2
I changed my career goals	54.4	13.7	10.3	21.6	100.0	1174	33.1
I found something I'd like to do better	55.6	10.4	14.7	19.3	100.0	1176	32.6
I found a better path to my career goals	66.3	8.8	9.4	15.5	100.0	1178	24.7
The course wasn't what I expected	50.8	19.8	14.3	15.1	100.0	1194	31.2
I felt stressed and anxious about my study	55.7	15.5	14.8	14.0	100.0	1187	29.0
Course would not help me achieve my career goals	65.1	12.4	9.1	13.3	100.0	1189	23.6
I didn't like the way the course was taught	54.9	18.1	14.1	12.9	100.0	1189	28.4
The subjects weren't as interesting as I expected	53.8	17.9	15.8	12.6	100.0	1189	29.1
Study clashed with full-time work commitments	78.7	3.9	5.2	12.1	100.0	1172	16.9
I didn't feel adequately prepared	54.9	21.3	13.0	10.8	100.0	1199	26.6
I couldn't get government income support (eg Youth Allowance, Austudy, ABSTUDY)	74.3	7.6	7.4	10.6	100.0	1180	18.1
I didn't get enough help from academic staff	59.0	18.6	11.8	10.6	100.0	1188	24.6
My study clashed with my family commitments	74.6	8.2	6.6	10.6	100.0	1183	17.7
The course or program was too theoretical	63.7	15.8	10.2	10.3	100.0	1189	22.3
I was offered a good job	80.5	5.4	5.0	9.2	100.0	1172	14.3
I couldn't study the subjects I wanted	71.5	12.7	6.7	9.1	100.0	1189	17.8
Couldn't cope with the work as well as other students	59.5	16.8	14.6	9.1	100.0	1196	24.4
I had trouble finding out things I needed to know	57.7	19.7	14.4	8.3	100.0	1192	24.4
My family could not afford to support me	77.4	8.1	6.4	8.1	100.0	1182	15.0
The course timetable didn't suit me	64.2	17.4	10.6	7.8	100.0	1190	20.7
I couldn't afford the fees I had to pay up-front	72.7	11.9	8.0	7.5	100.0	1183	16.8
Illness - my own	85.0	3.4	4.2	7.4	100.0	1182	11.4
There was too much work	56.9	20.2	15.6	7.3	100.0	1195	24.4
The work was harder than I expected	59.0	20.1	13.6	7.3	100.0	1189	23.1
I needed help and didn't know who to ask	69.0	15.0	8.8	7.2	100.0	1184	18.1
I felt that I didn't fit in at university	69.7	15.4	7.9	7.0	100.0	1199	17.4
I wanted to study somewhere else	79.8	7.4	5.9	6.9	100.0	1193	13.3
Couldn't afford study materials I needed (eg books)	67.2	15.8	10.1	6.8	100.0	1184	18.8
I felt lonely, isolated or unwelcome	74.0	12.3	7.6	6.2	100.0	1195	15.3
Study clashed with part-time work commitments	79.5	8.4	6.3	5.8	100.0	1171	12.8
I had trouble getting the study resources I needed	64.1	21.0	9.2	5.7	100.0	1182	18.8

Cont /-

Table 9.1—*continued*
Reasons for discontinuing 2004 study: Students who did not enrol at any university in first semester 2005 (%)

Influence . . .	None	A little	Mod-erate	Large	Total	n	Mean
How much was your decision to discontinue the study you were doing in first semester 2004 influenced by each of the reasons below?							
My employer offered me more hours of work	79.1	8.9	6.6	5.3	100.0	1172	12.7
The assessment methods were too inflexible	73.1	15.5	6.4	5.0	100.0	1189	14.4
I couldn't afford accommodation near the university	88.1	3.9	3.1	4.9	100.0	1181	8.3
I couldn't get or use study leave from my employer	84.6	5.7	4.8	4.9	100.0	1179	10.0
I couldn't afford the travel costs to university	76.4	12.6	6.4	4.6	100.0	1179	13.1
Illness or death—family member or friend	90.1	2.7	2.7	4.5	100.0	1179	7.2
I felt different from other students	78.0	10.5	7.1	4.4	100.0	1173	12.6
I felt I was not treated fairly at university	86.8	6.0	3.3	3.9	100.0	1188	8.1
I had trouble making friends	82.4	8.5	5.3	3.8	100.0	1176	10.2
I was offered a place in a course I preferred	91.9	1.8	2.4	3.8	100.0	1173	6.0
No one in my family had studied at university	88.4	5.6	3.0	3.1	100.0	1183	6.9
I did not have a computer at home	89.8	4.0	3.4	2.8	100.0	1179	6.4
The course didn't challenge me enough	84.2	8.8	4.4	2.5	100.0	1187	8.4
I moved with my family to another location	96.7	0.5	0.5	2.3	100.0	1181	2.8
My computer couldn't support the course software	88.5	6.4	2.9	2.1	100.0	1173	6.2
I always intended to move to another university	90.3	4.2	3.3	2.1	100.0	1188	5.7
I couldn't get access to computers at university	87.4	7.6	3.0	2.0	100.0	1173	6.6
I felt unsafe or insecure in the univ. environment	88.2	6.3	3.5	2.0	100.0	1173	6.4
My friends are not studying at university	90.0	5.8	2.5	1.8	100.0	1176	5.3
The childcare I needed wasn't available	94.8	2.1	1.4	1.7	100.0	1178	3.3
The university was not prestigious enough	91.9	3.9	2.6	1.6	100.0	1192	4.6
My job was transferred to a new location	96.6	1.0	0.8	1.6	100.0	1174	2.5
I couldn't find suitable accommodation	94.6	2.3	1.5	1.6	100.0	1179	3.4
My family wanted me to do something else	93.9	3.1	1.6	1.4	100.0	1178	3.5
I couldn't afford the childcare I needed	96.2	1.2	1.2	1.3	100.0	1178	2.6
My friends were at another university	92.9	4.2	1.7	1.2	100.0	1177	3.8
I had difficulties with physical access	97.0	1.2	1.0	0.7	100.0	1178	1.8
Family members study/studied at a different univ.	97.0	1.7	0.8	0.6	100.0	1178	1.7
The course or program was too practical	91.0	6.3	2.2	0.6	100.0	1185	4.1
I couldn't get the disability support I needed	97.4	1.3	0.8	0.5	100.0	1176	1.5
My friends wanted me to do something else	97.8	1.5	0.6	0.1	100.0	1176	1.0

Notes The wording of some items has been abbreviated - refer to Question 36 in the questionnaire in Appendix E for the full wording. The mean is the weighted sum of (None)*0 + (A little) * 33.33 + (Moderate) * 66.67 + (Large) * 100. Items are presented in descending order of the Large influence response which is highlighted. Based on the responses of 1,226 students who did not re-enrol at any university in first semester 2005 and who responded to at least one reason for withdrawing.

- I needed a break from study (24.3%)
- I found it difficult to balance my study and work commitments (23.7%)
- I changed my career goals (21.6%)
- I felt stressed and anxious about my study (14.0%)
- I didn't like the way the course was taught (12.9%)
- I didn't feel adequately prepared (10.8%)
- I couldn't get government income support (10.6%)
- My study clashed with my family commitments (10.6%)
- Illness-my own (7.4%)
- I felt lonely, isolated or unwelcome (6.2%).

Table 9.1 shows that many of the possible reasons for discontinuing study had small or negligible influences on students' decisions. In some cases this is not because the reason itself is unimportant, but because it is relevant to only a small proportion of the student population. For instance, the proportion who answered that *I couldn't get the disability support I needed* was a large influence on their decision to discontinue was only 0.5%, but this reason could only be endorsed by a student with a disability. Among these students the reason might be important, but the number of students in the group is small.

9.2 Groups of Reasons

Discussing the many reasons in Table 9.1 separately is a challenging task. Many of the reasons, however, are related. For instance, a student who indicated that *I discovered that the course would not help me achieve my career goals* was a large influence on their decision to discontinue is also likely to report that *I found a better path to my career goals* was a large influence. Reasons that are empirically and meaningfully related can be combined into a single scale. Apart from the practical advantage of focusing the analysis, such scales often have higher reliability and clearer meaning than individual items—they capture the common elements across the items of which they are composed.

Table 9.2 shows six scales and the items on which they are based. The details of the scales and the scaling procedure are contained in Appendix B. The scaling was based on the responses of all students who did not re-enrol at the *same* university. In all, seven scales were identified by the scaling procedures, but one of those scales, *University choice,* is more relevant for students who changed university. It is analysed in a later chapter that focuses on students who *changed* universities.

The six scales do not include several items that were reported frequently as *Large influences* on students' decisions to discontinue their course. These four items are shown separately in Table 9.2 and their distribution is also discussed in this chapter. One of the items, *I couldn't get government income support,* is included in the *Financial difficulties* scale, but is analysed separately because of its potential policy importance.

The nature of the concerns that underlie a student's response is suggested by the comments shown in Box 9.1. The comments are taken from students responses' to open-ended questions that asked them about their reasons for withdrawing. They were selected on the basis that they were provided by students who scored high on the corresponding

Box 9.1
Comments by reasons for discontinuing course: Students who did not enrol at any university in first semester 2005

Change of direction

- Through career counseling I found that I'd like to work in the tourism industry as a tour guide, then later as a tourism manager.
- I have decided to change my course due to my work. My degree was related to my work but I have changed my career.
- Education is a negative career which I didn't want to continue. I didn't enjoy the uni life. Not what I wanted to do.
- I feel university is a waste of time and money for me. To get the degree I wanted it would have taken nearly 10 years. Doing my apprenticeship I will probably own my own business in 10 years instead of being fresh out of uni and not guaranteed a job and having accumulated a large amount of debt!

Academic difficulties

I would have remained in the course and the university if . . .

- I'd got the results I wanted but I did not get any sort of support from anybody and I was disappointed and left uni.
- I had more time to study and more help.
- I had more help with the work; If I could have understood the work better; If it was more in writing; and If people were more friendly.

Conflict with employment

I would have remained in the course and the university if . . .

- I didn't have to earn money to support my wife and children!
- I could have got more time to work and study. I found it hard to study, attend classes and tests and work.
- I could have successfully balanced my work commitments with my study load.

Dissatisfaction with course

I would have remained in the course and the university if . . .

- My university was more organised, education-oriented and centred around students, rather than lectures & their wages.
- 1) I received books on time; 2) took weeks to get assignments back & not enough time to re-submit when failed; 3) lecturers retuned phone calls, not available to help, unable to get any assistance.
- There was even the slightest bit of actual assistance from the so called 'tutors' and 'lecturers'.
- Did not feel the university had set out the program for the course I did fairly and tried to fit too much assessment for one unit.
- We were given more meaningful assignments. Smaller lecture classes. More help in basic things such as enrolling, handling in of assignments, basic uni stuff.

Financial difficulties

I would have remained in the course and the university if . . .

- I was more financially stable. I found it difficult juggling work, study, living away from home and my social life.
- I could have had financial support.
- University weren't so expensive--there's not enough one-on-one help. There are too many hidden costs such as parking, books, fuel (to get to uni), etc.
- I could have afforded the bi annual trips to uni for the residential week.
- I received financial support from the government. I left because I literally could not afford a decent life.
- I could have afforded it; If I had some financial support from the government; If university was closer than 1 1/4 hours away; If I could afford to move closer; If the university was willing to discuss options I had with me.

c/-

Box 9.1—*continued*

Comments by reasons for discontinuing course: Students who did not enrol at any university in first semester 2005

Social isolation

I would have remained in the course and the university if . . .

- The materials for my subjects were not so expensive; If my classmate and lecturers weren't so sexist and homophobic; If my uni wasn't so far away; if my classes didn't clash with work.
- I would have remained in the course and the university if . . . I had known more people & felt encouraged to complete my course by lectures & teachers.
- I felt that I did not fit in at uni and had no direction in my life in which to keep me motivated to stay studying.
- It hadn't been so far from home and if I had given more consideration to the course. Also, if I had made more friends.

Break from study

I would have remained in the course and the university if . . .

- I did not have a promotion at work that required my attention I will re enrol in 2006
- I was happy with the standard and teaching at the university I attended. I decided to research courses, similar to the one I was doing, at other universities and then reapply through VUAC
- I did not have other interest at the time I wanted to take 1 year off from study to go overseas and the remainder of the year I would work.

Family commitments

I would have remained in the course and the university if . . .

- My children were older & independent
- It was feasible to attend uni while caring for a baby (I had my first child in November 2004). It is simply too hard to undertake study with a baby, although I would have liked to do the course. It is hard enough finding parking, a free computer at the library or a seat in the lectures without other difficulties (such as no childcare and no online lectures) as well.
- There were not the emotional pressures from my spouse arising from two recent deaths in her family and also from financial pressures arising from me being a low learning full time student for the previous three years.

Access to student income support

I would have remained in the course and the university if . . .

- I could have received Austudy. Although according to govt 'paperwork' I am in a 'defacto' relationship, my partner and I have always been self supporting eg no joint bank accounts etc.
- I could have qualified for Youth Allowance or lived with my parents (required them to move off the farm)
- The government didn't cut off Youth Allowance. Parents lived in different city (Gold Coast) and were supposed to support me at uni 3 hours away. It's sad really! I suffer because the government is incompetent.
- I wanted a break from studying & a chance to earn more money to study in 2006 and also have earned enough to be entitled to Youth Allowance.

Illness

I would have remained in the course and the university if . . .

- They have provided me with disability support and some co-operation in the course.
- I had been healthy; my family members had all been healthy & not relying on me to care for them, if I had not felt great financial strain while studying.
- Combining study, work and family commitments were possible, without causing major panic, anxiety attacks to occur.
- I had not unexpectedly become pregnant - this changed my priorities

scale or item and that they directly related to the scale or item. Students' comments often ranged over a number of reasons and sometimes did not explicitly reflect particular items or scales.

The measures used in the analyses in this chapter differ for the scales and items. For the scales, respondents are classified as either scoring high on the scale or low and the analysis is of the proportion who responded high. A high response is a score of more than 50 on the scale, which is an average response midway between *A little influence* and *Moderate influence*. The four items listed in Table 9.2, however, are analysed simply on the basis of whether a respondent indicated that it was a *Large* influence or not in their decision to discontinue their study.

The criterion for a high score on a scale might appear a little low, but because the scale score is an average of the responses to a number of items, the chance of a student responding strongly to even a majority of items is low despite the inter-relationships among the items. Almost all students classified as *High* on a scale indicated a *Large influence* for one or more of the items included in that scale.

It is not necessarily straightforward to determine the *main* reasons students discontinue their studies—whether it is because of say *illness, unhappiness with the course,* or *financial difficulties.* It is possible as in Table 9.1, to list items in descending order by the percentage of students who responded that the item had a *Large* effect on their decision to enrol. Such a list conveys some meaning about the relative importance of the reasons students discontinue, but some caution is required.

The percentage of students willing to say that a particular reason had a large effect on their decision to discontinue their study depends partly on the wording of the question. For instance, the items listed under the *Academic difficulties* scale in Table 9.2 range from 14.0% for *I felt stressed and anxious about my study* to 7.3% for *The work was harder than I expected* and *There was too much work.* While these items all tap the issue of academic difficulties, the value for the scale (20.7%) could be increased or decreased through the exclusion of one or other of the items.

Table 9.2
Scales of reasons for discontinuing 2004 study: Students who did not enrol at any university in first semester 2005

Scales/items	*Not enrolled in 2005* %	*All students* %
Change of direction	***22.32***	***2.97***
The subjects weren't as interesting as I expected		
The course wasn't what I expected		
I discovered that the course would not help me achieve my career goals		
I found something I'd like to do better		
I found a better path to my career goals		
I changed my career goals		
Academic difficulties	***20.66***	***2.75***
I didn't feel adequately prepared		
I felt that I couldn't cope with the work as well as the other students could		
The work was harder than I expected		
There was too much work		
I felt stressed and anxious about my study		
Conflict with employment	***13.87***	***1.85***
I couldn't get/use study leave from my employer		
Difficult to balance study and work commitments		
My employer offered me more hours of work		
My study clashed with my part-time/full-time work		
Dissatisfaction with courses	***12.11***	***1.61***
I felt I was not treated fairly at university		
I didn't like the way the course was taught		
The assessment methods were too inflexible		
The course was too theoretical		
I had trouble finding out things I needed to know		
I didn't get enough help from academic staff		
I had trouble getting the study resources I needed		
Financial difficulties)	***8.38***	***1.12***
I couldn't afford the study materials I needed		
I couldn't afford the travel costs to university		
I couldn't afford the fees I had to pay up-front		
I couldn't get government income support		
I couldn't afford accommodation near the university		
My family could not afford to support me		
Social isolation	***8.49***	***1.13***
I felt that I didn't fit in at university		
I felt lonely, isolated or unwelcome		
I had trouble making friends		
I felt different from the other students		
I felt unsafe or insecure in the university environment		
Break from study I needed a break from study	***24.26***	***3.14***
Family commitments My study clashed with my family commitments	***10.55***	***1.35***
Access to income support I couldn't get government income support (eg Youth Allowance, Austudy, ABSTUDY)	***10.59***	***1.35***
Ill health Illness—my own	***7.39***	***0.95***

See *Notes to Tables.*

Table 9.3
Correlation matrix of scales and selected reasons for discontinuing 2004 study: Students who did not re-enrol at any university in first semester 2005

Scales/items	S1	S2	S3	S4	S5	S6	I1	I2	I3	I4
S1-Change of direction	1.00	0.05	-0.07	0.17	0.05	0.15	0.06	-0.13	0.07	-0.04
S2-Academic difficulties	o	1.00	0.07	0.27	0.10	0.23	0.17	0.02	0.07	0.11
S3-Conflict with employment	*	*	1.00	0.10	0.21	0.00	-0.08	0.09	0.12	-0.06
S4-Dissatisfaction with course	**	**	**	1.00	0.19	0.30	0.07	0.04	0.16	0.04
S5-Financial difficulties	o	**	**	**	1.00	0.12	0.02	0.04	0.51	0.06
S6-Social isolation	**	**	o	**	**	1.00	0.06	0.00	0.08	0.10
I1-Break from study	o	**	*	*	o	*	1.00	-0.09	0.04	0.06
I2-Family commitments	**	o	*	o	o	o	*	1.00	0.04	-0.01
I3-Access to income support	*	*	**	**	**	*	o	o	1.00	0.02
I4-Illness	o	**	*	o	*	**	*	o	o	1.00

Notes Based on the responses of 1,226 students who did not re-enrol at the same university in first semester 2005 and who gave at least one reason. Values have been imputed for missing responses. Correlations are shown in the upper right triangle. In the lower left triangle, ** indicates statistically significant at 0.01, * indicates statistically significant at 0.05 and o indicates not statistically significant at 0.05.

The difficulty in drawing inferences about the relative strength of reasons means that any desire to make direct comparisons across columns in say Table A.7 should be tempered. The measures allow us to say something about the *patterns* of responses by students with different characteristics—for instance that younger students are more likely than older students to have left study because of a *Change of direction* and that older students are more likely than younger students to have left study because of a *Conflict with employment.* On the basis of these responses we cannot really be *certain* that older students were more likely to have discontinued their study because of *Conflict with employment* than because of a *Change of direction*, even though the corresponding values are 22.1% and 5.9% (Table A.7). The problem is that the two values are not in the same metric.

Interpreting the reasons students give for withdrawing from a course may also be confounded by a 'crowding out' phenomenon. Students who cannot 'call on' conflicts of study with employment or with family obligations may be channelled into providing other reasons while those who can 'call on' conflicts of study with employment or family need not seek other reasons (even though the 64 reasons are not mutually exclusive). All that can be done is to note the possible problems.

9.3 Related Reasons

Students could score *High* on more than one of the five scales in Table 9.2 and could have answered *Large* to more than one of the four items in Table 9.2. The inter-relationships among reasons are reflected in some of the comments included in Box 9.1.

For instance, the comment, *I'd got the results I wanted but I did not get any sort of support from anybody and I was disappointed and left uni* which is included under the 'academic difficulties' heading also suggests dissatisfaction with the course.

Table 9.3 shows a matrix of correlations among the scales and items listed in Table 9.2. Some of the relationships among these reasons are not statistically significant and even among those that are the relationships are frequently small. Two reasons—*Break from study* and *Illness*—are not related to any meaningful extent to any of the other reasons. There are, however, a few larger relationships among the other reasons:

- The scale *Financial difficulties* is strongly related to *Access to income support* (0.51) because this item forms part of the scale.
- *Social isolation* and *Dissatisfaction with the course* are related (0.30).
- *Academic difficulties* and *Dissatisfaction with the course* are related (0.27).
- *Academic difficulties* and *Social isolation* are related (0.23).
- *Financial difficulties* and *Conflict with employment* are related (0.21).

These relationships are generally intuitively understandable, although it is difficult to tell whether, say, *Social isolation* causes or results from *Academic difficulties*, or whether their apparent relationship is just an artefact of mutual relationships with other student, study or course characteristics.

9.4 Different Views

The values in Tables 9.1, 9.2 and 9.3 are based on the 1,226 students who did not enrol at a university in first semester 2005 and who responded to at least one of the 64 reasons listed in the questionnaire. The distribution of these responses across student, study and enrolment characteristics forms the basis of much of the rest of this chapter. However, the reasons for not re-enrolling can also be expressed as a percent of all students who commenced a Bachelor's Degree in first semester 2004.

These two approaches can yield different results because simply examining the reasons for withdrawing from university for those who do withdraw confounds the reasons for withdrawal with attrition rates. For instance, Table A.7 shows that *among those who did not enrol at university in first semester 2005,* part-time students (18.7%) are no more likely to discontinue from university because of academic difficulties than are full-time students (21.7%). Yet among all students who commenced in first semester 2004 (Table A.10), part-time students (5.9%) were more likely to discontinue than full-time students (2.2%). The reason for this difference is that part-time students have a higher attrition rate than full-time students. Including all students in the estimates removes any differences among categories of students that might be due to differences in their attrition rates.

This chapter thus discusses reasons for withdrawal calculated in two ways:

- as a percent of students who did not continue at university; and
- as a percent of students who began a university course.

Each tells a different part of the story of attrition. From one perspective, we would like to know what proportions of students who discontinue their study do so for different reasons and which of those who discontinue are more likely to do so for which reasons. These are the students whose requirements may need to be addressed by any interventions designed to reduce attrition and improve completion rates. It is, however, a mistake to transfer results from these analyses to questions about whether a part-time student commencing their course is more or less likely than a full-time student commencing their course to discontinue because of say, financial difficulties.

An unfortunate consequence of the methods used is that in considering reasons for all entrants, the percentages being analysed for all entrants are usually quite small. These apparently small values are no more than the percentages observed for those students who discontinued multiplied by 0.137, the proportion who did not re-enrol at any university in 2005 (allowing for a little slippage because of some missing values). The resulting values in Table 9.2 are all only 3% or less. Logistic regression and log-likelihood chi-squares are used throughout to address the technical issues.

9.5 Student Types and Reasons for Discontinuing

The reasons students gave for not re-enrolling in first semester 2005 differ among types of students. Table 9.4 shows the percent of students with a high score on each of the scales and the proportion who reported that selected individual items had been a large influence on their decision to discontinue. It also shows these results separately for male and female students.

Among students who discontinued, the major results are:

- School leavers and other categories of mainly younger students were more likely to have discontinued their course because of a change of direction. The differences between types of students are large and are consistent with the interpretation that school leavers and other younger entrants are still less settled about their goals than older students.
- The absence of a relationship can be as interesting as its presence and Table 9.4 shows that academic difficulties are not more likely to be a reason for discontinuing a course for one type of student than another.
- As might be expected, conflict between study and work was far more likely to influence the decision to discontinue study for students who were classified as *Full-*

Table 9.4
Reasons for discontinuing 2004 study by type of student: Students who did not re-enrol at any university in first semester 2005

Type of student . . .		*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*All*
		%	%	%	%	%	%	%	%
Persons									
Change of direction	***	34.9	24.6	26.1	18.1	6.4	3.1	17.2	22.3
Academic difficulties		22.5	10.4	18.7	15.0	23.2	23.4	20.0	20.7
Conflict with employment	***	5.5	13.3	7.4	16.7	33.9	12.4	20.0	13.9
Dissatisfaction with course		12.6	7.6	13.0	10.2	12.5	17.2	7.5	12.1
Financial difficulties		9.9	18.4	10.1	5.7	5.1	7.7	7.4	8.4
Social isolation	**	11.9	8.8	7.6	7.1	3.5	7.2	6.3	8.5
Break from study	***	41.8	5.4	10.0	18.3	10.8	10.1	11.2	24.3
Family commitments	***	1.2	2.1	3.9	9.0	15.6	49.1	16.5	10.6
Access to income support	***	14.5	3.5	9.5	10.8	3.4	11.0	7.8	10.6
Illness	***	7.5	5.6	0.7	9.3	4.0	9.4	15.2	7.4
Males									
Change of direction	***	33.9	18.5	30.2	21.2	2.5	8.4	19.5	23.6
Academic difficulties		21.6	4.9	16.6	18.6	18.6	23.7	18.6	19.4
Conflict with employment	***	7.2	14.1	2.7	13.7	34.7	14.1	23.7	14.6
Dissatisfaction with course		12.4	5.4	10.8	13.0	5.1	32.1	8.8	11.0
Financial difficulties	*	9.1	28.3	4.9	7.7	2.4	0.0	9.3	7.9
Social isolation		11.8	12.0	6.6	8.4	1.5	8.4	7.7	8.6
Break from study	***	37.2	10.8	4.7	20.8	6.1	0.0	12.2	22.4
Family commitments	***	1.5	0.0	0.0	0.0	15.0	21.7	15.0	5.2
Access to income support	**	16.3	0.0	7.5	6.5	1.3	0.0	6.2	9.5
Illness		6.3	0.0	0.0	5.7	1.5	8.4	11.0	5.2
Females									
Change of direction	***	35.4	32.6	21.5	15.3	10.0	2.3	14.9	21.2
Academic difficulties	*	23.1	11.2	19.8	10.8	26.3	23.6	22.2	21.2
Conflict with employment	***	4.1	7.6	11.3	18.4	33.8	12.2	16.1	13.3
Dissatisfaction with course		12.9	10.3	12.1	8.3	19.3	15.3	6.2	12.9
Financial difficulties		10.7	3.4	14.6	4.3	7.6	8.9	5.2	8.8
Social isolation		12.1	5.9	8.9	6.3	5.4	7.1	4.9	8.6
Break from study	***	45.3	0.0	12.8	17.0	15.7	10.5	10.2	25.7
Family commitments	***	0.9	4.5	6.9	15.9	15.9	52.8	18.6	14.6
Access to income support		13.1	7.4	11.4	14.2	5.5	12.4	10.0	11.6
Illness	*	8.5	11.9	1.2	12.2	6.5	9.6	20.5	9.2

Notes Values are the percent of students who did not re-enrol at any university in first semester 2004 who discontinued their course for the reason shown. Reasons were provided by the 1,226 students who did not re-enrol at the same university in first semester 2005 and who answered at least one item on reasons for withdrawing. Meaningful comparisons are within rows. See *Notes to tables.*

Table 9.5
Reasons for discontinuing 2004 study by type of student: All students

Type of student . . .		*School leavers* %	*Gap year* %	*Other young entrants* %	*Contin-uing student* %	*Full time workers* %	*Carers* %	*Other mature age* %	*All* %
Persons									
Change of direction	**	3.6	2.3	4.0	2.0	1.9	0.5	3.9	3.0
Academic difficulties	***	2.3	0.9	2.9	1.7	7.0	4.0	4.5	2.8
Conflict with employment	***	0.6	1.2	1.1	1.9	10.2	2.1	4.5	1.8
Dissatisfaction with course	*	1.3	0.7	2.0	1.1	3.8	2.9	1.7	1.6
Financial difficulties		1.0	1.7	1.6	0.6	1.5	1.3	1.7	1.1
Social isolation		1.2	0.8	1.2	0.8	1.1	1.2	1.4	1.1
Break from study	***	4.3	0.5	1.5	2.0	3.0	1.6	2.4	3.1
Family commitments	***	0.1	0.2	0.6	1.0	4.4	7.9	3.5	1.4
Access to income support		1.5	0.3	1.4	1.2	1.0	1.8	1.6	1.4
Illness	*	0.8	0.5	0.1	1.0	1.1	1.5	3.2	0.9
Males									
Change of direction		3.6	2.4	4.1	2.6	0.8	0.8	5.0	3.2
Academic difficulties		2.3	0.6	2.3	2.3	5.8	2.3	4.7	2.6
Conflict with employment	***	0.8	1.8	0.4	1.7	10.8	1.4	6.0	2.0
Dissatisfaction with course		1.3	0.7	1.5	1.6	1.6	3.1	2.2	1.5
Financial difficulties		1.0	3.6	0.7	0.9	0.7	0.0	2.4	1.1
Social isolation		1.3	1.5	0.9	1.0	0.5	0.8	2.0	1.2
Break from study	*	4.0	1.4	0.6	2.5	1.8	0.0	3.0	3.0
Family commitments	***	0.2	0.0	0.0	0.0	4.4	1.7	3.7	0.7
Access to income support		1.7	0.0	1.0	0.8	0.4	0.0	1.5	1.2
Illness		0.7	0.0	0.0	0.7	0.5	0.8	2.7	0.7
Females									
Change of direction	*	3.6	2.2	3.5	1.6	2.8	0.4	2.9	2.7
Academic difficulties	***	2.3	0.8	3.2	1.1	7.5	4.5	4.3	2.7
Conflict with employment	***	0.4	0.5	1.8	1.9	9.6	2.3	3.1	1.7
Dissatisfaction with course	*	1.3	0.7	1.9	0.9	5.5	2.9	1.2	1.7
Financial difficulties		1.1	0.2	2.3	0.4	2.2	1.7	1.0	1.1
Social isolation		1.2	0.4	1.4	0.7	1.5	1.3	1.0	1.1
Break from study	**	4.5	0.0	2.0	1.8	3.9	1.9	1.8	3.2
Family commitments	***	0.1	0.3	1.1	1.6	4.2	9.7	3.3	1.8
Access to income support		1.3	0.5	1.7	1.5	1.4	2.2	1.8	1.4
Illness		0.8	0.8	0.2	1.3	1.6	1.7	3.8	1.1

Notes Values are the percent of all commencing students who discontinued their course for the reason shown. Reasons were provided by the 1,226 students who did not re-enrol at the same university in first semester 2005 and who answered at least one item on reasons for withdrawing. Meaningful comparisons are within rows. See *Notes to tables.*

time workers. It was not, however, the reason given by all students in this category and conflict between study and work was also an important reason for smaller proportions of all other student types.

- There were no significant differences among types of student types in their likelihood of discontinuing because of dissatisfaction with their course or because of financial difficulties.
- School leavers were more likely to discontinue their course than were other students, possibly because they were new to the university, were more likely to have entered university by default rather than having to make areal choice, had a greater chance of breaking their major social connections when they left school and were more likely to rely on their university environment for their social life. Similarly, school leavers were more likely to say they discontinued their university study because they needed a break from study.
- Almost by definition, *Carers* (49.1%) were more likely to discontinue their study because of conflicts between study and family than were other types of students. The demands of a family were also an important reason for discontinuing among other categories of older students but of only slight importance for younger students.
- Not being able to access income support was a more important reason for school leavers (14.5%) withdrawing from their course than for some other categories of students such as those in full-time employment. Nevertheless, it remained a relatively important reason among several other categories of students including *Continuing students* (10.8%) and *Carers* (11.0%). Gap students were among the least likely to withdraw because of an inability to access income support, possibly because most had obtained independent status under Youth Allowance by taking their gap year and therefore could more readily access income support than could other school leavers.
- Illness was not randomly distributed among the different types of students, but the differences, although statistically significant, were not large. The students more likely to withdraw because of illness were the *Other mature age* (15.2%), *Carers* (9.4%) and *Continuing students* (9.3%). Students in these groups are more likely to be affected by the illness of a family member (e.g. children) than some other students.

Table 9.5 tells a slightly different story about the relationship between reasons for attrition and the types of students across all 2004 entrants rather than just those who did not continue at university. The results for *Financial difficulties* are similar—there is no significant difference for these reasons among the various types of students regardless of whether we consider those who did not continue or in all entrants.

The relationships in Table 9.4 are usually slightly strengthened or weakened in Table 9.5. For instance, the expected patterns for *Conflict with employment* and *Family commitments* are repeated in Table 9.5, although more strongly, and similarly the differences for *Illness* among student types are relatively larger. Other relationships are repeated in Table 9.5, but are weakened. Discontinuing because of a *Change of direction* is still significantly related to student type in Table 9.5 and is still higher for *School leavers* than the overall average, but is relatively lower compared with that average. The

change in pattern between Tables 9.4 and 9.5 is similar for discontinuing because of needing a *Break from study.*

The major differences are for the relationships with *Social isolation*, *Access to income support* and *Academic difficulties.* The first two were statistically significant in Table 9.4 but are weaker in Table 9.5 and no longer statistically significant. Withdrawing because of *Academic difficulties* is not statistically significant in Table 9.4 but in Table 9.5 the three categories of older students are now sufficiently above the mean to form a significant relationship. Among commencing students, *Full-time workers, Carers* and *Other mature age students* are more likely to withdraw because of academic difficulties, although there is no relationship in Table 9.4.

Whether we focus just on those students who did not enrol in university in first semester 2005 or on all the students who commenced in first semester 2004, the reasons students withdrew from their course are often linked to their stage of life. Students with full-time jobs were more likely to withdraw because of conflict with work and those with children because of conflict between study and their family commitments. Younger students were more likely to withdraw because they were changing direction or needed a break from study. These differences underlie much of the following discussion of student characteristics and reasons why students withdraw.

As in the previous chapter, the analyses in this chapter are supported by multivariate analyses (Tables A.8. A.9. A.11 and A.12) that attempt to isolate the unique effects of particular variables. This is important because of the clustering of student, study and course characteristics into stage-of-life descriptors. Two models underlie the analyses, one restricted to student background characteristics and another that includes study and enrolment characteristics. The more restricted model is included because the direct effects of student background variables tend to become lost in a large model where their effects are often absorbed into intervening characteristics such as whether the enrolments are full- or part-time. The full model includes many variables and there is a risk that some effects are washed out by being divided up between several characteristics. Nevertheless, the more robust effects are identified and the results are indicative. The following sections describe in turn the relationships for each of the ten reasons listed in Table 9.3.

9.6 Direction Changers

Just over one in every five students who did not enrol at university in first semester 2005 withdrew from their course because they wanted a change of direction (Table 9.2). The label *Change of direction* covers a multitude of related motivations. The items that form this scale (Table 9.2) include identifying a mismatch between a student's expectations of a course and the reality of the course, a mismatch between the course and its ability to fulfil a student's career expectations, changes in career goals and simply finding something they would like to do better.

In the context of students who did not re-enrol at university, these elements largely correspond to finding a pathway to employment other than through university

Box 9.2
Selected student characteristics positively associated with withdrawing from a course because of a *change of direction*

Students more likely to have withdrawn because they were seeking *a change of direction:*

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 Overall mean 22.3%

- were younger—15 to 19 years old (34.9%) or 20 to 24 year-olds (25.5%)
- did not speak English as their main language at home but spoke it frequently (37.5%) or spoke English at home as their main, but not only, language (32.6%)
- did not have a disability (23.2%)
- last attended a private (29.2%) or Catholic (27.1%) secondary school
- moved to attend university from overseas (85.2%) or within their own state (25.4%)
- had no prior university study (25.4%) and had not received credit for prior study (25.6%)
- had Year 12 as their highest level of educational attainment (28.3%)
- had been studying at school in 2003 (34.1%)
- reported more influences on their decision to enrol and were influenced by:
  - an advisor at school (35.7%)
  - an advisor somewhere other school, TAFE or university (35.5%)
  - a school or TAFE teacher (29.2%)
  - family (28.2%) or friends (32.1%)
  - information from the university (26.5%)
  - their Year 12 results (35.7%)
- enrolled for financial gain (25.7%)
- were not carers for someone mainly dependent on them (26.3%)
- were mainly living with their parents (34.6%)
- were either not working (25.3%) or working few hours per week and frequently missed classes because of work (30.8%)
- took 60-90 minutes to get to university from work or home (35.1%)
- received the Youth Allowance, especially at the full (39.4%) or partial (36.5%) dependent rate
- received the Austudy at the full rate (23.3%)
- relied on their parents or guardian as a major source of financial support (36.9%)
- were enrolled in a Group of 8 university (27.1%)

  had not really wanted to enrol at their university or in their course
- were enrolled full-time (28.6%), on-campus (24.5%) or a mix of on and off-campus (30.5%)
- had enrolled in a course in Architecture or building (44.0%), Agriculture or environmental science (29.3%), Information technology (29.1%), Health (28.5%) or Creative arts (26.8%)
- had passed some subjects but failed none (31.5%) or failed some (23.4%)

Continued

Box 9.2—*continued*
Selected student characteristics positively associated with withdrawing from a course because of a *change of direction*

Among all students, those more likely to have withdrawn because they were seeking a change of direction:	
ALL STUDENTS	**Overall mean 3.0%**
▪ were 15 to 19 years old (3.6%)	
▪ had no previous university experience (3.3%) and had not received credit for prior study (3.3%)	
▪ had a highest educational achievement of an apprenticeship or other vocational qualification (5.0%)	
▪ had been studying at school in 2003 (3.5%)	
▪ had *not* enrolled because they liked learning or to enter a career of choice	
▪ were *not* the main carers for someone dependent on them (3.2%)	
▪ were living with their parents during first semester 2004 (3.6%)	
▪ were *not* financially dependent on a spouse or partner or on a scholarship	
▪ were enrolled in a technology (3.8%), new generation (3.5%), innovative research (3.3%) or rural (3.2%) university	
▪ had wanted to enrol in their university with some reservations (5.1%) or had not wanted to enrol in their university, but didn't mind (4.4%)	
▪ had reservations about enrolling in their course (5.1%) or had not wanted to enrol in their course and either didn't mind (4.4%) or had really wanted another course (7.6%)	
▪ had mainly withdrawals and no assessment in first semester 2004 (10.4%)	

See Tables A.7 and A.10

qualifications, sometimes through TAFE or other VET providers and sometimes directly through the offer of a job. The focus, however, is on a change in direction related to a future career.

Tables 9.4 and 9.5 show that younger students, particularly school leavers, are more likely to have not enrolled at university in first semester 2005 because they wanted a change of direction. This theme is repeated in the results presented in Box 9.2. Students who were more likely to discontinue because of a change of direction were younger, mainly school leavers, often living with their parents. Many of the other characteristics of students who did not re-enrol because they wanted to change their career or life direction were correlates of youth.

Few characteristics were significant when examined in the multivariate analyses. In particular the relationships related to career advice and influences on enrolment disappear along with any influence of financial support.

Among students who did not re-enrol in first semester 2005, in the restricted multivariate model that focused on student background characteristics (Table A9), students who were more likely to discontinue because of a change of direction:

- were younger (15 to 19 years old);
- came from families in which English was either the main language, but not the only, language spoken or in which English was not the main language but was spoken frequently;
- moved from overseas to attend university;
- lived with their parents.

Some of these characteristics were no longer significant in the broader analyses that included study and course characteristics (Table A.8). Students who were more likely to discontinue because of a *Change of direction*:

- moved from overseas to attend university;
- were mainly living with their parents or their own children without a spouse;
- enrolled for the personal challenge;
- relied on their parents as a main source of financial support;
- were enrolled in a mixture of on- and off-campus units;
- were likely to report either wanting to have enrolled in their course with some reservations or really wanting to have enrolled in another course.

The apparent effect of the time taken to get to university is reversed in the multivariate analyses—students who took more than 90 minutes to travel to university were *less* likely not to re-enrol because of changing their direction. Although there are differences among the fields of study, most are small. Students enrolled in courses in *Health* and in *Agriculture and environmental science* were most likely not to re-enrol because of a change of direction while those in *Nursing* and *Science* were least likely.

Fewer relationships exist between not enrolling because of a change of direction and other variables *among all entrants.* In the restricted multivariate model that focused on student background characteristics (Table A12), two characteristics were associated with a higher likelihood of withdrawal because of changing direction:

- coming from the lowest two socioeconomic quintiles of entrants;
- having an apprenticeship or other vocational qualification as the highest educational qualification.

Students who grew up in families in which English was rarely or never spoken were less likely to discontinue because they wanted a change of direction.

In the model that includes study and course characteristics (Table A.11), the characteristics associated with a higher likelihood of not enrolling at university in first semester 2005 because of wanting a change of direction were:

- having been brought up in a family in which English was the main or only language;
- having an apprenticeship or other vocational qualification as the highest educational qualification.
- not enrolling to enter a career of choice;
- having been enrolled in a Technology university;
- having been enrolled part-time;
- having been enrolled in a mix of on and off campus study;

- not having enrolled in a double degree;
- not definitely having wanted to enrol in the course;
- having had some reservations or not wanted to enrol in the university (although students who had really wanted to enrol at *another* university were less likely not to re-enrol in 2005).

Differences among fields of study were not significant, although there was a tendency for students who had enrolled in a course in *Architecture and building* or in *Agriculture and environmental science* to be more likely and students studying a course in *Nursing* or *Health* to be less likely to withdraw from university because they were seeking a change of direction.

9.7 Academic Difficulties

Among students who did not enrol in university in first semester 2005, about one in five was strongly influenced to discontinue their course because they were having difficulties in successfully completing the course requirements, which is just under three in a every hundred students who enrol in a Bachelor's Degree at an Australian university (Table 9.2). *Academic difficulties* cover a variety of circumstances. Some students who passed all their units in first semester 2004, did not enrol at university in first semester 2005 because of 'academic difficulties', possibly because the effort required to pass was too great. The elements included in the measure include inadequate academic preparation, perceptions of being less able to cope with the work compared with other students, high workloads and stress about study.

Limited time in which to study can also create academic difficulties regardless of educational ability or background. The results in Table 9.5 suggest that *among all entrants* full-time workers in particular and mature age students in general are more likely to withdraw because of academic difficulties. These differences were not as apparent *among students who did not enrol at university in first semester 2005* (Table 9.4).

The results in Box 9.3 show the many student, study and course characteristics that are associated with discontinuing university study because of academic difficulties. *Among those who did not enrol in first semester 2005,* many of the characteristics might be expected to be associated with academic challenges—coming from a non-English speaking background, having a disability, not coming through Year 12 at school, having no prior university experience. The results that suggest students from private and Catholic schools are more likely to withdraw because of academic difficulties are consistent with previous research (Miller & Winn, 2004). Similarly living with a spouse and children create competing requirements that may interfere with study. Perhaps contrary to expectations, students whose decision to enrol was influenced by a variety of sources were more likely to discontinue because of academic difficulties.

The list of significant relationships is reduced in the multivariate analyses, but includes:

- having a disability;
- coming from a non-English speaking background; and
- caring for pre-school children (Table A.9)

Box 9.3
Selected student characteristics positively associated with withdrawing from a course because of *academic difficulties*

Students more likely to have withdrawn because of *academic difficulties*:

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 Overall mean 20.7%

- had both parents born overseas and were born overseas (35.7%) or had both parents born overseas and were born in Australia (27.7%)
- had grown up in families in which English was not the main language and rarely or never used (46.2%) or spoken frequently (44.1%)
- had a disability (40.4%)
- had been living overseas at age 15 (45.7%) or the last secondary school they attended was overseas (47.9%)
- had last attended a private (25.4%) or Catholic (23.1%) secondary school
- had no prior university study (23.1%)
- had been mainly studying in TAFE or somewhere else other than a university in 2003 (28.4%)
- reported more influences on their decision to enrol (29.7% for four or more influences) and were influenced by:
  - an advisor at school (33.2%)
  - an advisor at TAFE or university (38.9%)
  - a school or TAFE teacher (31.3%)
  - family (27.7%) or friends (29.5%)
  - information from the university (24.9%)
  - their Year 12 results (24.7%)
  - the availability of student income support (31.6%)
- enrolled because of a personal challenge (29.5%), financial gain (28.6%) or to enter a career of choice (23.0%)
- were care-givers for dependent persons, except those caring for pre-school children
- were living with children and no spouse (34.2%), a spouse and children (29.3%), or a university college or other residence (25.5%)
- reported that their paid work interfered with study a great deal (35.8%)
- received financial support from a parent or guardian (24.1%)
- had enrolled in a course in Information technology (34.9%), Health (33.4%) or Nursing (28.2%)
- had failed some (33.0%) or all (36.7%) their subjects in first semester 2004 or had not received any assessment (28.4%)

Continued

and in the more extended analyses:

- having a vocational qualification;
- having been influenced by a careers advisor at TAFE or university;
- enrolling as a personal challenge or for financial gain (although enrolling because of a love of learning was associated with a lower likelihood of discontinuing study because of academic difficulties);
- living with children only or with children and a partner;
- caring for pre-school children (Table A.8)

Box 9.3—*continued*
Selected student characteristics positively associated with withdrawing from a course because of *academic difficulties*: All students

Students more likely to have withdrawn because of *academic difficulties*:	
ALL STUDENTS	**Overall mean 2.8%**

- were 35 years or older (5.6%)
- were from the second lowest (3.4%) or lowest (3.2%) socioeconomic quintiles
- had a disability (6.3%)
- had a highest educational achievement of an apprenticeship or other vocational qualification (5.7%), incomplete schooling (4.6%) or a diploma (4.4%)
- had been studying at TAFE or somewhere other than university or school in 2003 (4.7%), in full-time work (4.4%) or not engaged in study or full-time work (4.5%)
- had been influenced to enrol by a careers advisor at school (4.1%), a careers advisor at university or TAFE (5.2%) or a school or TAFE teacher (4.0%)
- had not enrolled to enter a career of choice
- were the main carers for older children (6.9%)
- had been mainly living with a spouse and children (6.6%) or children and no spouse (6.8%) while studying
- were working 35 to 40 hours (6.1%) or more than 40 hours (5.2%) per week while studying had fixed hours without study leave (6.3%) and reported that paid work interfered with their study a great deal (12.4%)
- attended a rural (3.8%) or a technology (3.5%) university
- had reservations about enrolling at their university (3.6%) or had not wanted to enrol at their university, but didn't mind (4.6%).
- were enrolled part-time (5.9%) or off-campus (5.2%)
- had some passes and some fails (6.9%), no passes and some or all fails (12.7%) or withdrawals and no assessment (17.0%) in first semester 2004.

See Tables A.7 and A.10

For all students, however, the list of correlates in Box 8.3 is slightly different. Students who entered university through the TAFE pathway, have a disability, are caring for others or were influenced to enrol by any of several sources were still more likely than other students to withdraw because of academic difficulties. The new correlates include age and various work arrangements as well as an array of study and course characteristics—attendance at a rural or technology university, categories of less than full acceptance of their university or course and part-time enrolment.

The significant relationships in the multivariate analyses of student characteristics for all students are:

- coming from any socioeconomic quintile apart from the highest;
- having a disability; and
- having a highest educational attainment of an apprenticeship or other vocational qualification (Table A.12)

and in the multivariate analyses that include study and course characteristics:

- having a disability;
- having a highest educational attainment of an apprenticeship or other vocational qualification;
- being enrolled at a rural university;
- having been enrolled part-time;
- having really wanted to enrol in another course;

Coming from any socioeconomic quintile apart from the highest also bordered on statistical significance while enrolling because of a love of learning and having been studying at university in the year before enrolling reduced the likelihood of discontinuing because of academic difficulties.

9.8 Conflict with Employment

Paid work can interfere with study. Students who work more hours per week are more likely to discontinue their course because it conflicts with their employment, although flexible hours and the availability (and ability to use) study leave can mitigate the potential conflict. The problem is more acute for older students with families for whom full-time work is not optional. Perhaps not surprisingly, discontinuing first-year study and not enrolling in university in the subsequent year because of the demands of paid work is associated with financial difficulties (Table 9.2).

Most of the student, study and course characteristics associated with a higher rate of discontinuing university study because of a conflict with employment are not surprisingly correlates of full-time employment—older students, students who already have post-school qualifications, living with a spouse and children, not receiving government income support, reporting paid employment as a main source of income, part-time and off-campus enrolment and attending a rural, technology or new generation university (Box 9.4). The relationships are similar whether describing only students who discontinued or all students. The association with lower socioeconomic status for all students may be a little surprising, but this is consistent with previous research that suggests that mature age students tend to come from a lower socioeconomic background (Long & Hayden, 2001).

The multivariate analyses for *students who discontinued their university study* provide a similar, albeit shorter, list of effects of their background on the likelihood of a student discontinuing their university study because of conflict between their study and work:

- being at least 20 years old, but especially being 25 years or older;
- coming from a home in which English was rarely or never spoken; and
- having a diploma; and
- caring for others (Table A.9)

Students who had to move from overseas to attend university in Australia were less likely to discontinue university because of conflict between their study and work.

Box 9.4
Selected student characteristics positively associated with withdrawing from a course because of *Conflict with employment*

Students more likely to have withdrawn because of *conflict with work*:	
STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005	**Overall mean 13.9%**

- were 25 to 34 years (21.5%) or 35 years or older (22.1%)
- last attended a selective government secondary school (29.8%)
- had already completed a university qualification (21.5%) or an incomplete university qualification (23.1%)
- had completed a degree (19.7%) or diploma (23.1%) and received credit for prior study (23.3%)
- were mainly in full-time paid work (29.6%) or studying at university (17.4%) in 2003
- were influenced to enrol by their managers or colleagues at work (26.8%)
- enrolled because of a personal challenge (20.4%)
- were the main carers for older children (24.2%) or dependent adults (26.8%)
- were mainly living with spouse (20.6%) or children (19.5%) or both (19.5%) while studying in 2004
- worked 35 to 40 hours (24.5%) or more than 40 hours (52.9%) per week; either had no study leave with fixed hours (42.1%) or had study leave but found it difficult to use (28.0%); missed classes sometimes (30.9%) or frequently (71.3%) because of work; and found that their work interfered with their study somewhat (27.2%) or a great deal (52.3%)
- did not receive Youth Allowance (15.2%) or any income support (15.6%)
- relied on paid employment as a main source of income (18.9%)
- were enrolled in a rural (16.2%), technology (15.2%) or new generation (15.0%) university
- had not wanted to enrol at their university, but didn't mind (18.0%); but on the other hand, had definitely wanted to enrol in their course (16.3%)
- were enrolled part-time (22.5%) or off-campus (23.2%)
- Passed no subjects and failed some or all of their subjects in first semester 2004 (28.3%)

Continued

Several of these characteristics are no longer significant in the extended multivariate analyses, which show the following characteristics more likely to lead to lead to discontinuing from university because of a conflict between study and work, all else equal:

- coming from a rural or less accessible background;
- having moved from overseas to attend university;
- having been mainly in full-time work or studying at university in 2003;
- working more than 40 hours per week;
- having paid work as a main source of income while studying;
- being enrolled in a course in the *Creative arts*; and
- being enrolled in a technology university (Table A.8).

Box 9.4—*continued*
Selected student characteristics positively associated with withdrawing from a course because of *conflict with work*

Students more likely to have withdrawn because of *conflict with work*:

ALL STUDENTS **Overall mean 1.8%**

- were aged 25 to 34 years (4.6%) or older (4.8%)
- came from the lowest two socioeconomic quintiles (2.6%)
- had at least one parent born in Australia (2.1%)
- had an already completed (3.6%) or partly completed (3.9%) university qualification and received credit for prior study (3.6%)
- had last attended a government (2.4%) or selective government (2.3%) secondary school or an overseas secondary school (4.4%)
- had completed (3.2%) or partially completed (3.2%) some university study
- had a highest educational achievement of a degree or higher (3.6%), a diploma (4.3%) or apprenticeship or other vocational qualification (3.9%)
- had been mainly in full-time paid work (7.1%) in 2003
- had been influenced to enrol by their managers or colleagues at work (4.8%)
- had *not* enrolled to enter a career of choice
- were the main carers for older children (6.9%)
- had been mainly living with their spouse (4.9%), children (3.9%) or both (4.4%) while studying in 2004
- worked 35 to 40 hours (6.7%) or more than 40 hours (15.8%) per week while studying; either had no study leave with fixed hours (11.2%) or had study leave but found it difficult to use (5.2%); either did not have to attend classes (7.2%) or missed classes sometimes (5.3%) or frequently (17.1%) because of work; and found that their work interfered with their study somewhat (4.2%) or a great deal (18.1%)
- did not travel to university (5.4%)
- did not receive Youth Allowance (2.2%) or any income support (2.3%)
- had paid employment as a main source of income (2.9%)
- attended a rural (3.1%), a technology (2.4%) or a new generation (2.0%) university
- were enrolled part-time (7.1%) or off-campus (6.7%)
- had no passes and some or all fails (9.8%) or withdrawals and no assessment (8.5%) in first semester 2004.

See Tables A.7 and A.10

While the relationship of many of these characteristics with discontinuing because of employment are fairly obvious, it is not quite so clear why there should be a separate effect of attendance at a technology university or enrolment in a *Creative arts* course. In particular, it might have been expected that technology universities in particular would be oriented towards the teaching of mature age students and, if anything, would have arrangements in place to lessen any conflicts between work and study.

Relying financially on parents or a guardian and being enrolled in a *Humanities* or *Teacher education* course were associated with a lower likelihood of discontinuing university because of the demands of paid employment. A small proportion of students

who did not have a job while they were studying also reported that they discontinued because of a conflict between work and study. These students may have needed to find work or been offered a job and concluded that they could not continue studying.

The relationships in the multivariate analyses for *all students* are sparser—there are fewer relationships between discontinuing university and student, study or course characteristics. For the model restricted principally to student characteristics, the significant relationships are;

- being older;
- *not* having been living overseas at the age of 15;
- having a post-school qualification, especially a diploma or vocational qualification (including an apprenticeship);
- being the main carer for a disabled or vulnerable person;
- living with a spouse with no children or living alone while studying in 2004;

In the model that includes study and course characteristics, few variables are significant.

- working for more than 40 hours per week while studying;
- university travel time of 31-60 minutes and possibly longer;
- paid employment as a main source of income (and *not* support from parents); and
- enrolment at a rural or technology university.

9.9 Dissatisfaction with the Course

Students were unhappy with their course for a range of reasons—the quality of the teaching, the behaviour of the lecturers and the assessment among other concerns. Those with a high level of dissatisfaction with their course were 12.1% of students who discontinued university and 2.1% of all students who began their course in first semester 2004 (Table 9.2). Students who left university study because they were dissatisfied with their course were also more likely to have discontinued because of academic difficulties and feelings of social isolation (Table 9.3)

No significant differences were observed between types of students and their likelihood of discontinuing university because of their dissatisfaction with their course among only students who discontinued (Table 9.4), but among all commencing students there was a tendency for full-time workers and carers to be more likely to discontinue for this reason (Table 9.5). Similarly Box 9.5 shows few correlates with dissatisfaction for students who did not enrol in first semester 2005, but for all commencing students, the characteristics tend to cluster around those associated with full-time work and being a main carer for someone else.

Given the nature of the reason, perhaps the course characteristics associated with *Dissatisfaction* are of most interest. *Among students who had discontinued their university study,* dissatisfaction was higher among students enrolled in courses in

Box 9.5
Selected student characteristics positively associated with withdrawing because they were *Dissatisfied with their course*

Students more likely to have withdrawn because of *dissatisfaction with their course*:

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 **Overall mean 12.1%**

- had last attended a private secondary school (15.3%)
- had an incomplete university qualification (15.7%) or no qualification (12.8%)
- were mainly in full-time paid work (29.6%) or studying at university (17.4%) in 2003
- were influenced to enrol by an advisor at school (19.7%) or a school or TAFE teacher (17.4%)
- enrolled because of a personal challenge (18.1%) or for financial gain (16.6%) and had four reasons for enrolling (26.0%)
- were the main carers for older children (19.9%)
- had wanted to enrol at their university, but had reservations (18.0%) or had really wanted to enrol at another university (16.3%)
- had enrolled in a course in Information technology (22.7%); Architecture and building (20.6%); Nursing (19.1%) or Health (18.5%)
- had no passes and some or all fails (19.8%) in first semester 2005

ALL STUDENTS **Overall mean 1.6%**

- were 25 to 34 years old (2.0%) or older (3.4%)
- were from the lowest socioeconomic quintile (2.4%)
- had last attended a government (2.1%) or overseas (2.5%) secondary school
- had a highest educational attainment of a diploma (2.5%) or an apprenticeship or vocational qualification (2.8%)
- were mainly in full-time work (3.3%) or not studying and not in full-time work (apart from caring) (2.6%) before enrolling
- had *not* enrolled to enter a career of choice and had no reasons for enrolling (3.1%)
- were the main carers for older children (4.9%)
- had been mainly living with their spouse (3.2%), children (3.4%) or both (2.3%) while studying in 2004
- worked and either had no study leave with fixed hours (4.3%) or had study leave but found it difficult to use (2.7%); either did not have to attend classes (4.4%) or missed classes frequently (4.8%) because of work; and found that their work interfered with their study a great deal (6.9%)
- attended a technology university (2.5%)
- had reservations about enrolling in their university (3.0%)
- were enrolled part-time (3.9%) or off-campus (3.8%)
- had no passes and some or all fails (6.8%) or withdrawals and no assessment (8.1%) in first semester 2004.

See Tables A.7 and A.10

Information technology, Architecture and building, Nursing and *Health*. In the open-ended responses about reasons for withdrawal, there are several explicit references to *Information technology* courses and the gap between student expectations (which seem very practical) and course expectations that are perceived by students as very theoretical. There are parallel comments about Nursing, particularly by students who are up-grading their qualifications.

Students who had not wanted to enrol at their *university* (but not their *course*) also had higher levels of course dissatisfaction, but this was not uniform across categories.

Among all students, part-time and off-campus students were more likely to have discontinued university because they were dissatisfied with their course as were students who enrolled at technology universities.

The multivariate analyses of *students who discontinued their course* suggest that dissatisfaction with the course is related to the socio-economic background of the student. In the analyses restricted to student background characteristics, students from the lowest socioeconomic quintile were more likely than other students to have withdrawn because they were dissatisfied with their course and in the full model, the dividing line shifts to the highest quintile, which has a lower likelihood of dissatisfaction than the other four quintiles.

The relationship between dissatisfaction with the course and student characteristics can point to course characteristics that poorly engage certain types of students (such as students from low socioeconomic backgrounds) but for other characteristics it is more difficult to make this argument. For instance, students who have long trips to university are more likely to be dissatisfied with their course, something which on the surface at least, seems difficult to attribute to any inherent characteristic of the teaching, assessment or curriculum of the course. Similarly students who enrolled in the hope of financial gain or for the personal challenge were more likely to be dissatisfied. Although they are not consistent, the results suggest that students who were not necessarily happy at the outset about enrolling in their university or course were more likely to be dissatisfied with their course.

There is considerable variation among fields of study, but *Information technology* and *Architecture and building* remain the fields with the highest levels of students who discontinued because they were dissatisfied with their course, while *Engineering, Management and commerce* and the *Social sciences* were the lowest.

Among commencing students, there are very few variables that are significantly related to discontinuing university because of dissatisfaction with the course and the models overall are not significant. The results suggest that discontinuing because of dissatisfaction with the course is not focused on particular groups of students with particular attributes. There are still suggestions that students from lower socioeconomic backgrounds are more likely

Box 9.6
Selected student characteristics positively associated with withdrawing from their course because of *Financial difficulties*

Students more likely to have withdrawn from their course because of *financial difficulties*:

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 **Overall mean 8.4%**

- moved to attend university within their state (12.7), between states (10.9%) or from overseas (60.7%)
- had a highest educational attainment of an apprenticeship or other vocational qualification (10.9%)
- were influenced to enrol at university by an advisor at school (14.6%), a school or TAFE teacher (13.8%), the availability of student income support (16.7%).
- enrolled because they liked learning (12.8%), saw the course as a personal challenge (12.3%); hoped for financial gain (12.2%), wanted to enter a chosen career (18.6%) or because of three (18.6%) or four (16.5%) of these reasons
- mainly lived with their own children without a spouse while they were studying in 2004 (16.6%)
- had a paid job with no study leave and fixed hours of employment (11.9%), no study leave and flexible hours of employment (9.5%) or no paid employment (9.5%)
- traveled an hour to an hour and a half (20.5%) or longer (17.6%) to get to university
- used commercial loans (42.8%) or loans from family or friends (26.2%) as a main source of financial support
- studied full-time (9.9%)
- enrolled for a course in Science (18.9%), Creative arts (12.6%), Nursing (11.1%) or Health (10.5%)

ALL STUDENTS **Overall mean 1.1%**

- had a highest educational attainment of a diploma (1.7%) or an apprenticeship or vocational qualification (2.6%)
- worked, but had no fixed hours (3.2%) and reported that their paid work while studying interfered with their study a great deal (4.3%)
- were *not* financially dependent on their parents or guardians
- had enrolled at a rural university (2.0%)
- had no passes and some or all fails (4.8%) or withdrawals and no assessment (6.0%) in first semester 2004

See Tables A.7 and A.10

to discontinue because of dissatisfaction with their course as are students who had initial reservations about their university enrolment, and that students who enrolled to enter a career of choice are *less* likely to discontinue because they are dissatisfied with their course. There are, however, no characteristics of courses that are clearly related to higher levels of discontinuance because of dissatisfaction.

9.10 Financial Difficulties

Discontinuing university because of financial problems is spread across all student types, whether looking at those who discontinue or all commencing students (Tables A.4 and A.5). The major characteristics associated with discontinuing university because of financial difficulties are (Box 9.6):

- being a single parent;
- relying on loans (commercial or informal) as a main source of financial support;
- having a job that interfered with study, no job, or working flexible hours;
- lengthy travel time to get to university;
- having had to move to attend university, either within or between states or from overseas;
- having a vocational qualification as the highest educational attainment;
- having been influenced to enrol by the availability of government student income support and the advice of a careers advisor at school or a school or TAFE teacher;
- having many reasons to enrol; and
- being enrolled in a course in *Science, Creative arts, Nursing* or *Health.*

The characteristics related to withdrawing from university because of financial difficulties vary according to whether the reference is to students who withdrew from university or commencing students and whether the results are for simple percentages or multivariate analyses, but the results include:

- students from economically disadvantaged backgrounds whether indicated by family background or receipt of income support;
- single parents;
- caring for a disabled or vulnerable person;
- having been influenced to enrol by the availability of student income support;
- lengthy travel time to university;
- already having a vocational qualification; and
- the small group of students who moved from overseas to attend university.

9.11 Social Isolation

Feelings of not fitting in or not belonging and having no friends at university can influence a student's decision about whether to remain at university—6.2% of students who did not enrol at university in first semester 2005 reported that feeling *lonely, isolated or unwelcome* at university was a large influence on their decision to discontinue (Table 9.1).

Social isolation is part of a nexus of reasons that includes withdrawing from university because of academic difficulties and dissatisfaction with the course (Table 9.3). Social networks are often important for academic support in discussing lectures and assignments and keeping up-to-date with course requirements. Without them, a student can struggle.

Box 9.7
Selected student characteristics positively associated with withdrawing from their course because of *Social isolation*

Students more likely to have withdrawn from their course because of *social isolation*:

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 **Overall mean 8.5%**

- were 15 to 19 years (11.7%)
- had a disability (19.5%)
- were mainly studying at school (12.0%) or less than fully engaged in the labour force (excepting those who were mainly caring for family or friends) (13.5%) in 2003
- were influenced to enrol at university by an advisor at school (14.1%), family or friends (11.8%), or their Year 12 results (14.1%) in particular, or any reason beyond none.
- enrolled because they hoped for financial gain (12.4%) or wanted to enter a chosen career (10.1%)
- mainly lived with their parents (12.3%) or in a university college (10.4%) while they were studying in 2004 (16.6%)
- were not employed (9.5%) or worked 10 to 19 hours (11.3%) or 20 to 34 hours (9.3%) per week
- traveled an hour to an hour and a half (16.1%) or longer (12.6%) to get to university
- relied on their parents or guardian as a main source of financial support (13.3%)
- had wanted to enrol at their university but with some reservations (13.2%) or had really wanted to enrol at another university (13.1%)
- enrolled full-time (10.8%) or on-campus (9.9%)
- enrolled in a double degree (10.8%)
- had not wanted to enrol in their course and either didn't mind (16.8%) or really wanted another course (14.8%)
- had not received any credit for prior study (8.9%)

ALL STUDENTS **Overall mean 1.1%**

- had a disability (3.1%)
- had reservations about enrolling in their *university* (2.2%) and had not wanted to enrol in their course but didn't mind (2.5%) or had really wanted to enrol in another course (2.8%)
- had some passes and no fails (1.6%), some passes and some fails (2.0%), no passes and some or all fails (3.9%) or withdrawals and no assessment (7.3%) in first semester 2004

See Tables A.7 and A.10

Among students who discontinued, social isolation or loneliness is a more important reason for *School leavers* and relatively unimportant for *Full-time workers* (Table 9.4). These differences are evident in Box 9.7 which shows that withdrawing due to feelings of social isolation was more likely for younger, full-time students studying on-campus; students who had been mainly studying at school in 2003; students who were mainly living with their parents or at a university college while they were studying in 2004 and relied on their parents for financial help; and were not working full-time while studying.

Their decision to enrol was consequently more likely to have been influenced by a careers advisor at school, family or friends or their Year 12 results.

Box 9.7 shows some further characteristics associated with social isolation that are not captured by the *School leaver/Full-time worker* difference. Students with disabilities were particularly likely to report that social isolation was an important reason in their decision not to continue at university. So too were students who spent a lot of time travelling to university, possibly because the travel itself left little time for socialising or because living some distance from the university reduced the likelihood of people they already knew attending the university. And students who had not wanted to enrol in their course to begin with were also likely to report that they withdrew because they felt socially isolated.

The multivariate analyses suggest some additional characteristics that are associated with withdrawing from university because of isolation and loneliness. In addition to students having a disability, students from the lowest socioeconomic quintile are more likely to feel socially isolated (Table A.9). This effect may be partly due to cultural factors, but it may also reflect the social streaming of entrants to university which may simply leave students from lower socioeconomic backgrounds with fewer friends and acquaintances attending their university or their course. Conversely, the higher rates of entry of students from higher socioeconomic backgrounds are more likely to allow those students access to already formed social networks.

The multivariate analyses also suggest that students entering university through the VET sector, or receiving partial income support, or who really wanted to enrol in another course are more likely to leave university because of social isolation (Table A.8).

For *all students*, there is no difference among types of students in their likelihood of leaving university because of social isolation or loneliness (Table 9.5). This is evidenced by the few student, study and course characteristics listed in Box 9.8. They repeat some of the same themes—students with a disability; and students who were to varying degrees less than fully committed to enrolling at their university or in their course. The multivariate analyses identified just three influences: having a disability; coming from the lowest socioeconomic background quintile; and to varying degrees not wanted to enrol in their university or course. The models themselves, however, are not statistically significant.

9.12 Taking a Break from Study

A break from study meant different things to different students. For some it was the chance to travel and take a holiday; for others it was the chance to work and qualify for Youth Allowance by being classified as financially independent of their parents; for others it was a time to re-think their study plans after disappointment with their experiences of university in 2004; and for others it was just the chance to devote more time to their family or work. The idea of a break from study carried different

Box 9.8
Selected student characteristics positively associated with withdrawing from their course for a *break from study*

Students more likely to have withdrawn from their course for a *break from study:*
STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 **Overall mean 24.3%**
▪ were 15 to 19 years (41.3%) ▪ from the highest socio-economic quintile (33.8%) ▪ had one or more parents born in Australia (26.9%) ▪ lived in very accessible (urbanised) areas when they were 15 years old (26.7%) ▪ had no previous university study (27.7%) ▪ had Year 12 as their highest level of educational attainment (34.1%) ▪ were mainly studying at school (39.1%) or university (35.0%) in 2003 ▪ were influenced in their decision to enrol in their course by: ◦ a careers advisor at school (38.0%) ◦ a school or TAFE teacher (37.5%) ◦ family (33.3%) and friends (32.8%) ◦ information from the university (40.2%) ◦ Year 12 results (40.2%) ◦ and generally had more influences on their decision to enrol in their course ▪ enrolled for financial gain (29.7%) ▪ were *not* the main carer for someone (27.2%) ▪ mainly lived with their parents (34.6%) or at a university college (28.9%) ▪ worked 1 to 9 hours or (32.9%), 10 to 19 hours (34.8%) or 20 to 34 hours (27.6%) per week; had no study leave, but worked flexible hours (34.2%) or had study leave and used it (27.4%); never (31.7%) or rarely (30.0%) missed classes because of work; and reported that their work rarely interfered with their study (31.0%) ▪ traveled more than 90 minutes to get to university (30.5%) ▪ relied on their parents or guardian as a main source of financial support (18.5%) ▪ enrolled at a Group of 8 university (33.4%) ▪ enrolled full-time (30.0%) or on-campus (27.5%) ▪ had wanted to enrol in their course with some reservations (27.7%) or had not wanted to enrol in their course and either didn't mind (36.2%) or really wanted another course (32.3%) ▪ had not received any credit for prior study (26.6%) ▪ Passes some and failed some units (36.0%) or passed no units and failed some or all of their units in first semester

Continued

connotations for students too. Some implied that it was a temporary interruption to their course, some that it was a chance to take a new direction at university later; and others that it was an end to their university ambitions for the foreseeable future.

Box 9.8—*continued*
Selected student characteristics positively associated with withdrawing from their course for a *break from study*

Students more likely to have withdrawn from their course for a *break from study:*	
ALL STUDENTS	**Overall mean 3.1%**

- were 15 to 19 years (4.2%)
- had one or both parents born in Australia (3.9%)
- grew up in a home in which only English was spoken (3.5%)
- lived in a very accessible (urban) region when they were teenagers (3.3%)
- had undertaken no previous university study (3.5%)
- were mainly studying at school (4.0%) or at a TAFE or somewhere else other than a university (3.9%) in the year before they enrolled
- were influenced in their decision to enrol in their course by:
  - a school or TAFE teacher (4.7%)
  - Year 12 results (3.9%)
- had *not* enrolled because they liked learning or to enter a career of choice and had no (4.8%) or only one reason (3.8%) for enrolling in their course
- worked and had no study leave with flexible (4.7%) or fixed (3.8%) hours and found that their employment interfered a great deal with their study (6.3%)
- had their main source of financial support from paid employment (3.6%) or commercial loans (5.9%)
- were enrolled at a technology (3.9%), innovative research (3.7%) or rural (4.0%) university
- had some reservations about enrolling in their university (4.8%) or had not wanted to enrol at their university and either didn't mind (4.3%) or similarly had reservations about enrolling in their course (4.1%) or had not wanted to enrol in their course and either didn't mind (5.4%) or really wanted another course (6.1%)
- received some passes and no fails (4.4%), some passes and some fails (7.5%), no passes and some or all fails (11.0%) or withdrawals and no assessment (7.1%) in first semester 2004

See Tables A.7 and A.10

Despite the different meanings and connotations of the phrase 'break from study', it was overwhelmingly students who entered university directly from school who reported leaving university because they needed a break from study (Tables 9.4 and 9.5). Many of the relationships listed in Box 9.8 are associated with *School leavers*—their youth, lack of previous university study and post-school qualifications, having been mainly studying at school in 2003; a range of influences on their decision to enrol that are associated with attendance at school; living with their parents or at a university college while studying in 2004; were not the main carers for anyone else; and relied on parents as a main source of financial support.

Some other characteristics are less clearly associated with being a *School leaver. Among students who had left university,* students from the highest socioeconomic quintile, who grew up in an urban area or who had at least one parent born in Australia were more

likely to leave university because they needed a break from study. Students who were squeezed for time by lengthy travel or work and who worked part-time were also more likely to discontinue their study because they needed a break. And students who were less than fully committed to their course were more likely to have left university because they wanted a break from study.

Among all students, fewer of these characteristics are significant, although the general association with characteristics of *School leavers* remains and extends to include students who were studying at a TAFE or other non-school non-university institution. The association with full-time and on-campus study disappears and the relationship with whether the student had really wanted to enrol in their course is extended to enrolment at the university.

Type of university is related to the likelihood of requiring a break from study differently for students who left university and for all students. Among students who left university, those who attended a *Group of 8* university were more likely to have left because they needed a break, but among all students, it is those who enrolled in technology, innovative research or regional universities who were more likely to leave because they needed a break from study. This difference is due to the lower attrition rate for students attending Group of 8 universities. When all students are considered, this lower attrition rate is taken into account and hence students attending a Group of 8 university move from being *more* likely to leave university because they need a break to being *less* likely.

The multivariate analyses reduce the number of factors associated with leaving university because of needing a break considerably. *Among students who had left university,* the restricted analysis shows that being female or aged under 20 increased the likelihood of leaving university in order to take a break from study while the broader analysis found that studying at school in 2003, *not* having been influenced to enrol by a university or TAFE careers advisor and working more than 20 hours a week increased the likelihood of leaving university in order to take a break from study.

Among all students, being under 20 and from an only English-speaking family were the only significant effects in the restricted model (Table A12) while in the extended model the significant effects were:

- *not* being in full-time work or out of the labour force and study in 2003;
- *not* enrolling to enter a career of choice
- working 20 to 34 hours per week;
- being enrolled in a technology or a rural university
- being enrolled part-time;
- really wanting another course (Table A.12).

9.13 Family Commitments

More than one in ten students who left university indicated that *My study clashed with my family commitments* was a *large* influence on their decision to discontinue (Table 9.1). Family commitments tap the interests of students described as *Carers* (Tables 9.4 and 9.5), although family commitments are not restricted to parents caring for children.

Box 9.9
Selected student characteristics positively associated with withdrawing from their course because of family commitments

Students more likely to have withdrawn from their course because of *family commitments:*

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 Overall mean 10.6%

- were female (14.6%)
- were 25 to 34 years (16.4%) or 35 years or older (35.4%)
- were from families in which both parents and the student were born overseas (15.5%)
- had been living overseas when they were 15 years old (21.8%)
- had not moved to attend university (12.3%) or had moved from overseas (22.3%)
- had already completed a university course (17.2%)
- had a highest level of educational attainment of a degree or higher (16.9%), a diploma (21.2%) or incomplete schooling (19.2%)
- had been mainly caring for a family member or a friend (48.4%), not studying or fully engaged in the labour force (27.7%) or studying at TAFE (17.2%) or in full-time work (13.9%) in 2003
- were influenced in their decision to enrol in their course by work experience in a field of interest (14.3%) or no influences (15.8%)
- enrolled because they liked learning (14.9%), as a personal challenge (16.3%) or to enter a career of choice (13.2%); and for two (14.1%), three (14.6%) or four (16.8%) reasons
- were the main carer for pre-school children (46.5%), primary school children (46.1%) older children (44.7%) or others (40.3%)
- mainly lived with their children and no spouse (50.0%), a spouse and children (47.3%) or a spouse and no children (23.5%) while they were studying in 2004
- were an employer or self-employed (20.1%), worked fixed hours with no study leave (15.7%) or had study leave but found it difficult to use (15.4%), and reported that paid work interfered with study somewhat (14.4%) or a great deal (18.4%)
- did not travel to university (21.1%)
- did not receive the Youth Allowance (11.8%) or any income support (12.0%)
- relied on their spouse or partner as a main source of financial support (37.6%)
- had definitely wanted to enrol at their university (13.5%) and in their course (14.5%)
- enrolled part-time (23.8%) or solely off-campus (22.9%) or a mix of on and off campus study (13.4%)
- were enrolled in Education (31.4%), Nursing (21.9%) or Teacher education (31.4%)
- had received credit for previous study (17.2%)
- had passed all their units (11.4%) or withdrawn from all their units without assessment (16.7%) in first semester 2004

Continued

Box 9.9—*continued*
Selected student characteristics positively associated with withdrawing from their course because of *Family commitments*

Students more likely to have withdrawn from their course because of *family commitments:*

ALL STUDENTS **Overall mean 1.4%**

- were female (1.8%)
- were 25 to 34 years (3.3%) or older (7.2%)
- came from the middle (1.7%), second lowest (1.9%) and lowest (1.7%) family socioeconomic quintiles
- did not move to attend university (1.7%)
- had already completed (2.4%) or partly completed (1.9%) a university course
- had a highest level of educational attainment of a degree or higher (2.9%), a diploma (3.9%), an apprenticeship or other vocational qualification (3.3%) or incomplete schooling (2.9%)
- had been mainly caring for a family member or a friend (11.0%), not studying and not fully engaged in the labour force (4.5%), studying at TAFE (2.6%) or in full-time work (3.2%) in 2003
- had no influences on their decision to enrol in their course (2.7%)
- were the main carer for pre-school children (10.6%), primary school children (8.6%) older children (10.4%) or others (9.4%)
- mainly lived with their children and no spouse (9.7%), a spouse and children (10.4%) or a spouse and no children (5.3%) while they were studying in 2004
- worked 20 to 34 hours (2.0%), 35 to 40 hours (4.1%) or longer (3.2%) per week while studying; were employers or self-employed (3.2%), worked fixed hours with no study leave (3.9%) or had study leave but found it difficult to use (2.8%); did not have to attend classes (4.9%) or frequently missed classes because of work (4.1%); or found that work interfered with study somewhat (2.1%) or a great deal (6.1%).
- did not receive Youth Allowance (1.7%) or any student income support (1.7%)
- received financial support from their spouse or partner (6.7%) and not from their parents
- were enrolled part-time (7.2%) or off campus (6.3%)
- were more likely to be enrolled in courses in *Nursing* (3.2%) or *Teacher education* (2.8%)
- had wanted to enrol in their course (1.7%)
- had some passes and no fails (1.9%) or withdrawals and no assessment (9.7%) in first semester 2004

See Tables A.7 and A.10

Young students can and do have commitments to their parents and there are commitments to partners and extended family. Caring for dependents is not the only form of family commitment as some of the comments in Box 9.1 make clear. Students also have concerns about socialising and contributing financially to their family.

Box 9.9 details the characteristics of students who withdrew because their study clashed with their family commitments and most are associated with being female or being older or both. *For students who did not re-enrol in first semester 2005,* there were some additional characteristics associated with students withdrawing because of a clash between their study and family commitments:

- Students who had been born overseas and whose parents had been born overseas, had been living overseas when they were teenagers and had moved from overseas to attend university, a characteristic that may reflect cultural differences about perceptions of the role of women and the importance of the family.
- Students who had wanted to enrol in their university and course and appeared to have withdrawn from their courses reluctantly.
- Students who had been enrolled part-time, off-campus or in a mix of off-campus, possibly to fit in with the requirements of work and family;
- Students for whom family commitments were in addition to conflict between their study and work.
- Students who had enrolled because they liked learning, for the personal challenge or to enter a career of choice, especially in *Nursing* and *Teacher education.*

Many of these characteristics are repeated in Box 9.9 for *all students*, although country of birth is not a correlate of withdrawal because of family commitments.

The multivariate analyses found similar effects. *Among students who did not re-enrol at university in first semester 2005,* the restricted analyses found that students most likely to withdraw because of family commitments:

- were female;
- were 35 years or older;
- caring for pre-school children or disabled or vulnerable persons—caring for older children had less or little effect on the decision to withdraw from university study;
- were living with a spouse, children or both and surprisingly, living at a university college or residence;
- had been living overseas when they were teenagers;
- had *not* moved within their state in order to attend university.

The multivariate analyses that included study and course characteristics found that the influences on a decision to withdraw from study because of family commitments, all else equal, included:

- caring for pre-school children or disabled or vulnerable persons—caring for older children had less or little impact on the decision to withdraw from university study;
- living with a partner, children, or both while studying in 2004 and living at a university college or residence;
- growing up in a family in which English was not the main language but was spoken frequently and had been living overseas while a teenager;
- part-time enrolment; and
- enrolment at any university other than a rural university.

Box 9.10
Selected student characteristics positively associated with withdrawing from their course because they could not get *Access to government income support*

Students more likely to have withdrawn from their course because they could not get *access to government income support:*

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 **Overall mean 10.6%**

- were 15 to 19 year-olds (14.3%)
- were from families in which one or both parents were born in Australia (11.7%)
- were from families in which English was the only language spoken (11.5%)
- had moved to attend university, but didn't have to (20.7%) or had moved within their own state (23.7%) or had moved from overseas (22.3%)
- had been studying in 2003 at school (13.5%), at university (15.3%) or at TAFE or elsewhere (12.9%)
- were influenced in their decision to enrol by a careers advisor at school (18.6%) or at university or TAFE (19.3%) or by a school or TAFE teacher (22.0%)
- enrolled because they hoped for financial returns from their course (15.1%) or to enter a chosen career (13.4%) or for more than one reason
- mainly lived with their children and no spouse (18.1%) or a university college or other residence (19.7%) while they were studying in 2004
- missed classes sometimes (14.7%) or frequently (24.5%) because of their paid work
- traveled between 60 and 90 minutes (17.7%) or longer (14.0%) to get to university
- did not receive the Youth Allowance (12.1%), Austudy (11.3%) or any student income support (12.7%)
- relied on financial support from their parents or guardians (14.9%), from commercial loans (56.1%) or from loans from family and friends (40.0%)
- enrolled full-time (13.3%)
- had received credit for previous study (17.2%)

ALL STUDENTS **Overall mean 1.4%**

- had one or both parents born in Australia (1.7%)
- grew up in a home in which English was the only language spoken (1.6%)
- were influenced in their decision to enrol in their course by a school or TAFE teacher (2.7%)
- were single parents (3.5%) or living with a spouse or partner without children (2.3%)
- worked in a job with no study leave and fixed hours (3.6%) or in a job in which study leave was available but difficult to use (2.2%); and reported that their paid work had interfered with their study a great deal (5.6%)
- did not receive Youth Allowance (1.7%) or any student income support (1.8%)
- had commercial loans as a main source of income (10.9%) while they were studying
- were enrolled at a rural university (2.5%)
- had passed some units with no failures (2.4%), passed no units and failed some or all units (5.2%) or had withdrawn without assessment from all units (5.9%) in first semester 2004

See Tables A.7 and A.10

Part-time enrolment might be considered an insulation against conflicts between study and family commitments, but these results suggest that there may be an element of self-selection—students who feel that their studies are more at risk from family commitments enrol part-time and then when study and family commitments conflict, there is little room to reduce the workload.

Among all students, the multivariate analyses found a limited number of effects. For the restricted model these were:

- caring for pre-school children or disabled or vulnerable persons—caring for older children had less or little impact on the decision to withdraw from university study;
- living with a spouse, children or both;
- being 35 years or older;
- not having moved in order to attend university.

and for the full model were:

- caring for pre-school children or disabled or vulnerable persons—caring for older children had less or little impact on the decision to withdraw from university study;
- living with a partner, children, or both while studying in 2004; and
- being enrolled part-time.

9.14 Access to Income Support

One in ten students who withdrew from university reported that an inability to get government income support (Youth Allowance, Austudy, ABSTUDY) was a *large* influence on their decision to withdraw from university (Table 9.1). This was just over one percent of all entrants (Table 9.2). *Among students who did not enrol at university in first semester 2005*, *School leavers* were more likely than other students to have withdrawn because of difficulty in accessing government income support (Table 9.4), but *among all entrants,* there was little difference among types of student (Table 9.5).

The story, however, is a little more complex. *Among students who left university,* students who left university because they could not access government student income support were typically younger, had been studying at school, TAFE or university in 2003 and were financially supported by their parents. They were also more likely to be Australian born and from an English-speaking background. They were unlikely to be enrolled part-time or to have been in full-time paid employment (Box 9.10).

Some exhibited signs of financial distress. They relied on commercial loans or on loans from family and friends to support their study in 2004 and had had to move to attend university (but generally not from interstate). Some were more likely to miss classes because of their paid work and to spend more time travelling to university and less likely to receive any government income support (a small number report having received government income support while studying in 2004, but as response to the open-ended questions suggest, the issue might have been the level of support or its continuance). Sole parents were also more likely to have left university because of being unable to access student income support schemes.

The multivariate analyses reveal some different aspects among the relationships. The model restricted to student characteristics found that, all else equal, the students more likely to withdraw because of not being able to access student income support were:

- older (35 years or over);
- students who moved within their own state to enrol at university;
- students living with a spouse or partner but no children or with children but no spouse or partner.

The model containing a more complete array of student, study and course characteristics shows that the students more likely to withdraw because of not being able to access student income support were:

- from the lowest socioeconomic quintile;
- students who moved within their own state to attend university;
- influenced to enrol by a careers advisor at university or TAFE or by a school or TAFE teacher;
- students living with a spouse or partner but no children; with children but no spouse or partner; or by themselves.
- less likely to receive support from the government;
- financially reliant on loans from family or friends or on commercial loans;
- enrolled full-time; and
- those who had not wanted to enrol in their course, but didn't mind.

Among all students, the relationships are less well structured. The effects of age, study in 2003 and moving to attend university were not as evident. The relationships with being Australian born and from an English-speaking background were still significant, as were aspects of conflict between work and study. Students enrolled at regional universities and who were less than fully committed to enrolment in their course or at their university were more likely to discontinue through not being able to access student income support schemes.

The restricted multivariate analysis identified several effects:

- being younger (15 to 19 years old);
- a highest educational attainment of a diploma or apprenticeship or other VET qualification;
- being a sole parent or living with a partner without children.

The full model identified the following effects that influenced withdrawing from university because of not being able to access government income support:

- having a highest educational attainment of a diploma or apprenticeship or other VET qualification;
- being influenced to enrol by a school or TAFE teacher;
- being a sole parent, living with a partner without children or living in some 'other' arrangement (mainly living alone);
- being enrolled in a rural university; and
- having not wanted to enrol in the course, but not minding.

Most of these relationships make some sense in terms of the targeting of student income support schemes (partners without children), particular needs (sole parents) and possibly access to part-time work (regional universities). The pathway to university through TAFE and other post-school non-degree courses also seems to create needs that are not well met by current financial and other arrangements. Other characteristics, however, are more difficult to explain.

There are some differences among fields of study and the relationship borders on statistical significance. The study of *Architecture and building* and *Engineering*, all else equal, may make greater financial demands on students than other fields of study.

9.15 Illness

Illness was a *large* influence on the decision to discontinue their study of 7.4% of students who did not enrol at university in 2005 and 0.9% of entrants (Table 9.1). As with the broader society, however, illness is not randomly distributed among students or among those who withdrew, but nor was there always a clear or easily interpreted pattern of relationships. Withdrawing because of illness was somewhat higher among mature age students, particularly *Other mature age students* (Tables 9.4 and 9.5).

Having a *disability* was strongly associated with withdrawing from university study because of illness. It is possible that in answering the questions some students may have considered their illness to be a disability, but this will not have been so in every case. A disability is defined as an impairment that has an impact on the ability to study and requiring some special support or consideration for the student. However, a disability is not necessarily an illness e.g. a student with a hearing impairment is not ill.

Among students who discontinued their studies at university, some other student, study and course characteristics were related to discontinuing their university studies, although it is not always easy to make sense of these sometimes disparate relationships. Some characteristics cluster around on-going university study and being female (partly due to students including pregnancy as an illness) and being the main carer for others, particularly vulnerable persons or persons with a disability, and a negative relationship with any characteristics associated with full-time work. Students who travelled for more than an hour to get to university were also more likely to withdraw because of illness (Box 9.11).

The multivariate analysis of the restricted model suggested that among students who did not enrol at university in first semester 2005, those who discontinued because of illness were more likely to (Table A.9):

Box 9.11
Selected student characteristics positively associated with withdrawing from their course because of *illness*

Students more likely to have withdrawn from their course because of their own *illness:*

STUDENTS WHO DID NOT RE-ENROL IN FIRST SEMESTER 2005 **Overall mean 7.4%**

- were female (9.2%)
- had a disability (39.2%)
- had moved between states (22.7%) or from overseas (22.3%) to attend university
- had been mainly studying at university (11.4%) or not studying and not full-engaged in employment (14.5%) in 2003
- were influenced in their decision to enrol in their course by a school or TAFE teacher (11.1%)
- had enrolled in their course to enter a career of choice (9.4%)
- were not in paid employment (10.0%) or worked relatively few hours per week (11.7%)
- traveled between an hour and an hour and a half (14.4%) or longer (17.3%) to get to university
- relied on financial support from the government (13.0%) or from loans from family and friends (24.3%)

ALL STUDENTS **Overall mean 0.9%**

- were 25 to 34 years old (1.4%) or older (1.9%)
- had a disability (6.1%)
- were enrolled part-time (1.9%)
- had passed some units with no failures (1.7%), passed no units and failed some or all units (3.3%) or had withdrawn without assessment from all units (6.1%) in first semester 2004

See Tables A.7 and A.10

- have a disability
- be female
- be the main carer for someone else
- have had to move between states to attend university.

The model containing a fuller array of variables identified the following characteristics (Table A.8):

- having a disability
- being female
- being the main carer for someone else
- being 20 years old or over
- not having studied at TAFE or elsewhere in 2003
- having enrolled to enter a career of choice
- travelling for an hour or more to get to university.

Table 9.6
Summary of attrition rates for all students and reasons for discontinuing for students who did not enrol at university in first semester 2005 by student, study and course characteristics

	Attrition obs.	*Attrition adj.*	*Chng directn*	*Acad. diff*	*Conf with employ*	*Dissat with crse*	*Finan. diffic.*	*Social isolatn*	*Break from study*	*Family commit -ments*	*Access income support*	*Illness*
Sex	O	O	O	O	O	O	O	O	+ve	+ve	O	+ve
Age	25+	O	-ve	O	+ve	O	O	O	-ve	+ve	-ve	20-24
Socioeconomic b'd	-ve	-ve	O	O	O	-ve	-ve	-ve	O	O	-ve	O
Indigenous	O	O	O	O	O	O	O	O	O	O	O	O
English at home	Eng.	Eng.	Mn/frq	notEng	Never	O	NotMn	O	O	notEng	O	O
Disability	O	O	-ve	+ve	O	O	O	+ve	O	O	O	+ve
Access (Rurality)	Remote	O	O	O'seas	Remote	O	O	O	O	notOs	O	O
Moved	not Mvd	O	O'seas	O	notOs	O	O'seas	O	O	notMvd	Within	Betwn
Highest edn attain.	not Y12	DgDpAp	O	App	Dip	O	notDeg	O	O	O	O	O
In 2003 at school	-ve	O	O	O	O	O	O	O	O	O	O	O
ft paid work	+ve	O	O	O	+ve	O	O	O	-ve	O	O	O
at TAFE/other	+ve	O	O	O	O	O	O	-ve	O	O	O	-ve
at university	-ve	- ve	O	O	+ve	O	O	O	O	O	O	O
caring	+ve	O	O	O	O	O	O	O	-ve	O	O	O
Other	+ve	O	O	O	O	O	O	O	-ve	O	O	O
E'ment influenced by:												
Advisor at school	O	O	O	O	+ve	O	O	O	O	O	O	O
Advisor at uni/TAFE	O	O	O	+ve	O	O	O	O	-ve	O	+ve	O
Other Advisor	O	O	O	O	O	O	O	O	O	O	O	O
School/TAFE tchr	O	O	O	O	O	+ve	O	O	O	O	+ve	O
Family	-ve	O	O	O	O	O	O	O	O	O	O	O
Friends	O	O	O	O	O	O	O	O	O	O	O	O
Former/curr. students	-ve	O	O	O	O	O	O	O	O	O	O	O
Info. from univ.	-ve	O	O	O	O	O	O	O	O	O	O	O
Managers at work	+ve	O	O	O	O	O	O	O	O	O	O	O
Year 12 results	-ve	O	O	O	O	O	O	O	O	O	O	O
Student inc. support	O	O	O	O	O	O	+ve	O	O	O	O	O
Work experience	O	O	O	O	O	O	O	O	O	O	O	O
Like learning	-ve	O	O	-ve	O	O	+ve	O	O	O	O	O
Personal challenge	-ve	O	+ve	+ve	+ve	O	O	O	O	O	O	O
Financial gain	-ve	O	O	+ve	+ve	+ve	O	O	O	O	O	O
Career of choice	-ve	-ve	O	O	O	O	+ve	O	O	O	O	+ve
Caring for preschool	+ve	O	O	-ve	O	-ve	O	O	O	+ve	O	O
primary	+ve	O	O	O	O	O	-ve	O	O	O	O	O
older	+ve	O	O	O	O	O	O	O	O	O	O	O
other	+ve	+ve	O	O	+ve	O	+ve	O	O	+ve	O	+ve
Living with parents	-ve	O	+ve	O	O	O	O	+ve	O	-ve	-ve	O
spouse, no child	+ve	+ve	-ve	O	O	O	O	O	O	+ve	+ve	O
spouse & child	+ve	O	O	+ve	O	O	O	-ve	O	+ve	O	O
child, no partner	+ve	O	O	O	O	O	+ve	O	O	+ve	+ve	O
college	-ve	O	O	O	O	O	O	O	O	+ve	O	O
other	+ve	+ve	-ve	-ve	O	O	O	-ve	O	O	+ve	O
Hours of work	+ve	O	O	O	41+hrs	O	O	O	20-40	O	O	O
Time to university	90+min	+ve	Ove	O	O	60/90m	60+m	O	O	O	O	60+m

Table 9.6—*continued*
Summary of attrition rates for all students and reasons for discontinuing for students who did not enrol at university in first semester 2005 by student, study and course characteristics

	Attrition obs.	*Attrition adj.*	*Chng directn*	*Acad. diff*	*Conf with employ*	*Dissat with crse*	*Finan. diffic.*	*Social isolatn*	*Break from study*	*Family commit -ments*	*Access income support*	*Illness*
Fin. support govt	-ve	O	O	O	O	O	O	O	O	O	-ve	O
employment	+ve	O	O	O	+ve	O	O	O	O	O	O	O
spouse	+ve	O	O	O	O	O	O	O	O	O	O	O
parents	-ve	-ve	+ve	O	-ve	O	-ve	O	O	O	O	O
other relatives	-ve	O	O	O	O	O	O	O	O	O	O	O
savings/asset sales	-ve	O	O	O	O	O	O	O	O	+ve	O	O
commercial loans	O	O	O	O	O	O	O	O	O	O	+ve	O
loans from family	O	O	O	O	O	O	O	O	O	O	+ve	O
any scholarship	-ve	-ve	O	O	O	O	O	O	O	O	O	O
Income support	None	O	O	O	O	O	O	None	O	O	None	O
Univ. Group of 8	-ve	-ve	O	O	-ve	O	-ve	O	+ve	+ve	O	O
Technology	+ve	+ve	O	O	+ve	O	+ve	O	O	O	O	O
Innov. research	O	+ve	O	O	O	O	O	O	+ve	O	O	O
Rural	+ve	+ve	O	O	O	O	+ve	O	O	-ve	O	O
New gen.	O	+ve	O	O	O	O	O	O	-ve	O	O	O
Wanted university												
Yes, definitely	-ve	-ve	O	O	O	-ve	O	O	O	O	O	O
Some reservations	+ve	+ve	O	O	O	+ve	O	O	O	O	O	O
No, didn't mind	+ve	+ve	O	O	O	O	O	O	O	O	O	O
Wanted another	-ve	-ve	O	O	O	+ve	O	O	O	O	O	O
Full-time/part-time	pt	pt	O	O	O	O	O	O	O	pt	ft	O
On/off campus	Off/mix	O	Mix	O	O	O	O	O	O	O	O	O
Double degree	-ve	O	O	O	O	-ve	O	O	O	O	O	O
Field of study												
Creative arts	O	O	O	O	+ve	O	O	O	O	O	O	O
Social sciences	O	O	O	O	O	O	O	O	O	O	O	O
Humanities	O	O	O	O	-ve	O	O	O	O	O	O	O
Commerce	O	-ve	O	O	O	-ve	-ve	O	O	O	O	O
Agric. Environ Sci	O	+ve	+ve	O	O	O	O	O	O	O	O	O
Info tech.	+ve	O	O	+ve	O	+ve	O	O	O	O	O	O
Science	-ve	O	-ve	O	O	O	+ve	O	O	O	O	O
Engineering	+ve	+ve	O	-ve	O	-ve	O	O	O	O	O	O
Arch. & building	O	O	O	O	O	+ve	-ve	O	O	O	O	O
Nursing	O	O	-ve	O	-ve	O	O	O	O	O	O	O
Health	-ve	-ve	+ve	O	O	O	O	O	O	O	O	O
Teach edn	O	O	O	O	-ve	O	O	O	O	O	O	O
Education	+ve	+ve	O	O	O	O	O	O	O	O	O	O
Law	-ve	-ve	O	O	O	O	O	O	O	O	O	O
Wanted course												
Yes, definitely	-ve	-ve	-ve	O	O	-ve	O	-ve	O	O	-ve	O
Some reservations	+ve	+ve	+ve	O	O	O	O	-ve	O	O	O	O
No, didn't mind	+ve	+ve	-ve	O	O	+ve	O	O	O	O	+ve	O
Wanted another	+ve	+ve	+ve	O	O	O	O	+ve	O	O	O	O

Table 9.7
Summary of attrition rates and reasons for discontinuing by student, study and course characteristics: All students

	Attrition obs.	*Attrition adj.*	*Chng directn*	*Acad. diff*	*Conf with employ*	*Dissat with crse*	*Finan. diffic.*	*Social isolatn*	*Break from study*	*Family commit -ments*	*Access income support*	*Illness*
Sex	O	O	O	O	O	O	O	O	O	O	O	O
Age	25+	O	O	O	-ve	O	O	O	-ve	+ve	-ve	O
Socioeconomic b'd	-ve	-ve	-ve	-ve	O	-ve	-ve	-ve	O	O	O	O
Indigenous	O	O	O	O	O	O	O	O	O	O	O	O
English at home	Eng.	Eng.	Eng.	O	O	O	O	O	notEng	O	O	O
Disability	O	O	O	+ve	O	O	O	+ve	O	O	O	+ve
Access (Rurality)	Remote	O	O	O	O	O	O	O	O	O	O	O
Moved	not Mvd	---	O	O	O	O	o'seas	O	O	O	O	O
Highest edn attain.	not Y12	DgDpAp	App	App	DpAp	O	App	O	O	O	DpAp	O
In 2003 at school	-ve	O	O	+ve	O	O	O	O	+ve	O	O	O
ft paid work	+ve	O	O	+ve	O	O	O	O	-ve	O	O	O
at TAFE/other	+ve	O	O	O	O	O	O	O	O	O	O	O
at university	-ve	- ve	O	-ve	O	O	O	O	O	O	O	O
caring	+ve	O	O	O	O	O	O	O	O	O	O	O
Other	+ve	O	O	+ve	O	O	O	O	-ve	O	O	O
E'ment influenced by:												
Advisor at school	O	O	O	O	O	O	O	O	O	O	O	O
Advisor at uni/TAFE	O	O	O	O	O	O	O	O	O	O	O	O
School/TAFE tchr	O	O	O	O	O	O	O	O	O	O	+ve	O
Other Advisor	O	O	O	O	O	O	O	O	O	O	O	O
Family	-ve	O	O	O	O	O	O	O	O	O	O	O
Friends	O	O	O	O	O	O	O	O	O	O	O	O
Former/curr. students	-ve	O	O	O	O	O	O	O	O	O	O	O
Info. from univ.	-ve	O	O	O	O	O	O	O	O	O	O	O
Managers at work	+ve	O	O	O	O	O	O	O	O	O	O	O
Year 12 results	-ve	O	O	O	O	O	O	O	O	O	O	O
Student inc. support	O	O	O	O	O	O	O	O	O	O	O	O
Work experience	O	O	O	O	O	O	O	O	O	O	O	O
Like learning	-ve	O	O	-ve	O	O	O	O	O	O	O	O
Personal challenge	-ve	O	O	O	O	O	O	O	O	O	O	O
Financial gain	-ve	O	O	O	O	O	O	O	O	O	O	O
Career of choice	-ve	-ve	-ve	O	O	-ve	O	O	-ve	O	O	O
Caring for preschool	+ve	O	O	O	O	O	O	O	O	+ve	O	O
primary	+ve	O	O	O	O	O	O	O	O	O	O	O
older	+ve	O	O	O	O	O	O	O	O	O	O	O
others	+ve	+ve	O	O	+ve	O	+ve	O	O	+ve	O	+ve
Living with parents	-ve	O	O	O	O	O	O	O	O	-ve	-ve	O
spouse, no child	+ve	+ve	O	O	+ve	O	O	O	O	+ve	+ve	O
spouse & child	+ve	O	O	O	O	O	O	O	O	+ve	O	O
child, no partner	+ve	O	O	O	O	O	+ve	O	O	+ve	+ve	O
college	-ve	O	O	O	O	O	O	O	O	O	O	O
other	+ve	+ve	O	O	+ve	O	O	O	O	O	+ve	O
Hours of work	+ve	O	O	O	40+hs	O	O	O	20/34hs	O	O	O
Time to university	90+min	+ve	O	O	31-60	O	60+min	O	O	O	O	90+min

Table 9.7—*continued*
Summary of attrition rates and reasons for discontinuing by student, study and course characteristics: All students

	Attrition obs.	*Attrition adj.*	*Chng directn*	*Acad. diff*	*Conf with employ*	*Dissat with crse*	*Finan. diffic.*	*Social isolatn*	*Break from study*	*Family commit -ments*	*Access income support*	*Illness*
Fin. support govt	-ve	O	O	O	O	O	O	O	O	O	-ve	O
employment	+ve	O	O	O	+ve	O	O	O	O	O	O	O
spouse	+ve	O	O	O	O	O	O	O	O	O	O	O
parents	-ve	-ve	O	O	-ve	O	-ve	O	O	O	O	O
other relatives	-ve	O	O	O	O	O	O	O	O	O	O	O
savings/asset sales	-ve	O	O	O	O	O	O	O	O	O	O	O
commercial loans	O	O	O	O	O	O	O	O	O	O	O	O
loans from family	O	O	O	O	O	O	O	O	O	O	O	O
any scholarship	-ve	-ve	O	O	O	O	O	O	O	O	O	O
Income support	None	O	O	O	O	O	O	O	O	O	O	O
Univ. Group of 8	-ve	-ve	O	-ve	-ve	O	-ve	O	-ve	O	-ve	O
Technology	+ve	+ve	+ve	O	+ve	O	O	O	+ve	O	O	O
Innov. research	O	+ve	O	O	O	O	O	O	O	O	O	O
Rural	+ve	+ve	O	+ve	+ve	O	+ve	O	+ve	O	+ve	O
New gen.	O	+ve	O	O	O	O	O	O	O	O	-ve	O
Wanted university												
Yes, definitely	-ve	-ve	-ve	O	O	-ve	O	-ve	O	O	O	O
Some reservations	+ve	+ve	+ve	O	O	+ve	O	+ve	O	O	O	O
No, didn't mind	+ve	+ve	+ve	O	O	O	O	O	O	O	O	O
Wanted another	-ve	-ve	-ve	O	O	O	O	-ve	O	O	O	O
Full-time/part-time	pt	pt	pt	O	O	O	O	O	pt	pt	O	O
On/off campus	Off/mix	O	Mix	O	O	O	O	O	O	O	O	O
Double degree	-ve	O	-ve	O	O	O	O	O	O	O	O	O
Field of study												
Creative arts	O	O	O	O	+ve	O	O	O	O	O	O	O
Social sciences	O	O	O	O	+ve	O	O	O	O	O	O	+ve
Humanities	O	O	O	O	O	O	O	O	O	O	O	O
Commerce	O	-ve	O	-ve	O	-ve	-ve	-ve	O	O	-ve	O
Agric. Environ Sci	O	+ve	+ve	O	O	O	O	O	+ve	+ve	O	O
Info tech.	+ve	O	O	+ve	O	+ve	O	-ve	O	O	-ve	O
Science	-ve	O	O	O	O	O	+ve	O	O	O	O	O
Engineering	+ve	+ve	O	O	O	O	O	O	O	+ve	+ve	O
Arch. & building	O	O	+ve	+ve	O	O	O	+ve	O	-ve	+ve	-ve
Nursing	O	O	-ve	O	O	O	O	O	O	O	O	O
Health	-ve	-ve	-ve	O	-ve	O	O	-ve	-ve	-ve	O	O
Teach edn	O	O	O	O	O	O	O	+ve	O	O	O	O
Education	+ve	O	O	O	O	-ve	O	O	O	O	O	O
Law	-ve	-ve	O	-ve	-ve	+ve	O	O	O	-ve	O	O
Wanted course			O									
Yes, definitely	-ve	-ve	-ve	O	O	O	O	-ve	-ve	O	-ve	O
Some reservations	+ve	+ve	+ve	O	O	O	O	O	O	O	O	O
No, didn't mind	+ve	+ve	O	O	O	O	O	+ve	O	O	+ve	O
Wanted another	+ve	+ve	+ve	+ve	O	O	O	+ve	+ve	O	O	O

Among all students, only a few characteristics were significantly related to discontinuing because of illness—being older, having a disability and being enrolled part-time (Box 9.11). The multivariate analyses, however, identify only one variable, having a *disability*. When this variable was removed from the analysis (because of its possible definitional relationship to discontinuing through illness), the only other significant characteristic in the restricted model was being the main carer for a disabled or vulnerable person (Table A.12) and in the broader model only travelling 90 minutes or longer to get to university was significant (although the models themselves were not significant) (Table A.11). The effort involved in caring for others and lengthy travel may predispose students to illness or, if they become ill, make that illness too great a hurdle for them to continue their studies.

9.16 Summary

Tables 9.6 and 9.7 provide a summary of the relationships of each of the ten reasons for discontinuing study discussed in this chapter with a variety of student, study and enrolment characteristics for students who did not enrol at a university in first semester 2005 and for all commencing students respectively. The tables also show a summary of the relationships of attrition from university with the same set of student, study and enrolment characteristics, which is the same in both tables. For attrition rates, the tables show both the observed (Table A.2) and the adjusted or multivariate values (Tables A.5 and A.6), but for the various reasons only the adjusted values are used.

The relationships are presented in summary form—as O (no relationship), as a +ve (a positive relationship with attrition or the corresponding reason) or as -ve (a negative relationship with attrition or the corresponding reason). In places an abbreviated descriptor is used where a relationship applies to a particular category. For instance, Table 9.7 shows that *among commencing students* part-time students have a higher rate of attrition, both as (observed) percentages and in the (adjusted) multivariate analyses and that they are more likely to discontinue because of a Change of direction, needing a Break from study and Family commitments, all else equal.

Some liberties have been taken in interpreting the results in the original tables from which the values in Tables 9.6 and 9.7 are drawn. The descriptions sometimes convey the sense of the relationship rather than corresponding to the literal results. The results for the fields of study, in particular, are often simply the fields with the highest and lowest values and are often not statistically significant. All other results are statistically significant.

10. Changing Courses

The previous chapter examined students who did not enrol at a university in first semester 2005 as a proportion of all students who commenced a Bachelor's Degree in 2004. This chapter examines the characteristics of students who were enrolled at a university in 2005, but in a different course from the one they first commenced in 2004.

Some of these students made a course change within a university, others moved to a different university.

Twelve per cent of students who commenced a Bachelor's Degree in 2004 had changed to a different course by first semester 2005. The group comprises:

- 8.2% of commencing students who indicated that they enrolled in the same university in first semester 2005, but in a different course.
- 3.8% of commencing students who were enrolled in a 'different course or program' at a different university in April 2005.

Students who change courses are recorded in administrative records as commencing a new course and therefore as not having completed their first course. Changing courses can thus appear to be a form of non-completion or attrition.

However, it is important to avoid confusing the extent of course change with attrition. In this chapter, students who re-enrolled in 2005 are used as a reference group. The 12.0% of commencing students who enrolled in a different course in 2005 were 13.9% of students who re-enrolled.

Results presented in Tables A.2, A.3 and A.4 and the multivariate analyses in Tables A.5 and A.6 are based only on students who enrolled at university in first semester 2005. They thus exclude students who changed courses in 2004 but did not re-enrol in 2005. These students are counted as having attritted.

Among students in groups with high attrition there are likely to be fewer course changers than among groups with lower attrition.

Attrition raises some issues that also arise in the case of course change, but to a lesser extent because the student continues to study (e.g. personal issues around failure and possible talent wastage). However, both attrition and course change raise similar issues of efficiency and wasted resources, especially if students changing courses do not gain full credit transfer, regardless of whether they stay at their first university, or move to another.

McMillan (2005) is one of the few studies of course change among university students, although it is restricted to young people most of whom completed Year 12 in 1998 and entered university in either 1999 or 2000. The study found that 14.3% of students who commenced a university course in 1999 or 2000 had enrolled in a different course by the end of 2001. In contrast, the present study includes both school leavers and older students and is concerned mainly with a student's enrolment status one year after commencing their course. The analysis in McMillan also compares "course changers" with all other

students. As described above, the comparisons in this report are of "course changers" with students who continued their study but did not change courses.

Both studies use a similar definition of a student who changes their course. In McMillan a course changer is a student who changed the award for which they were studying (e.g. a Bachelor of Science). A student who changed universities but did not change course was thus excluded (eg a student who changed from a Bachelor of Science degree at one university to the same degree at another university). Similarly in this chapter, a student can remain in the same course even if they have changed universities.

However, in comparing the results from the two studies it is important to remember that in this survey students were asked to self-report a course change, rather than changes being noted from administrative records. This raises the possibility that some students who report that they have changed their course are in fact still studying for the same award.

10.1 Types of Students

Table 10.1 shows how the likelihood of changing courses varies among the types of students who enrolled at university in first semester 2005. School leavers and students who took a gap year are three or four percentage points more likely than the overall average to change course, other young entrants and continuing students are slightly less likely than average to change courses, while the three categories of older students are six to eight percentage points less likely than average to change their course. In relative terms, school entrants and gap year entrants who remain enrolled at university are more than twice (and in some instances, three times) as likely to change their course as are older students.

The difference between male (14.0%) and female (13.8%) students in the extent to which they change courses is not statistically significant. There are, however, some differences between male and female students among types of students. For instance, a higher percentage than average of the small number of male students who took a gap year changed their course by the start of first semester 2005 and the percent of *Other mature*

Table 10.1
Enrolment in a different course in first semester 2005 by type of student: Students enrolled at university in first semester 2005

Enrolled in a different course in first semester 2005		*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*All students*
		%	%	%	%	%	%	%	%
Persons	***	17.1	16.6	11.0	11.8	6.8	5.7	7.7	13.9
Males	**	16.2	21.3	11.9	11.1	7.4	6.4	10.7	14.0
Females	***	17.8	14.2	10.3	12.3	6.4	5.5	5.2	13.8

See *Notes to tables*

age female students who changed their course was markedly lower than for males. Nevertheless in general the overall pattern of higher rates of course changes among school leavers and lower rates for older students is true for both male and female students separately. McMillan (2005) reports that among younger students direct entry to university from school is associated with higher rates of course change, which is consistent only with the results for females in Table 10.1.

10.2 Student and Course Characteristics

The remainder of this chapter describes the relationships between the characteristics of the student and their course with whether the student changed their course. Only statistically significant relationships are discussed, although Table A.2 shows the full list of variables including the percentages for variables for which there was no significant relationship. In some cases the absence of a relationship is as interesting as the presence of a relationship. The preceding discussion, for instance, noted that there was no difference between males and females. McMillan (2005) reports that students whose parents had a Bachelor's Degree were more likely to change courses and that students who had attended an independent school were more likely to change courses. There is little indication of these relationships in the present study but this may reflect differences in the student groups and the reporting of course change.

The following discussion describes the relationships under five broad categories: personal background characteristics; enrolment characteristics; characteristics while studying; student finances and course characteristics. Most of the relationships are not very large in absolute terms and consist of differences of no more than five or six percentage points. The relative differences are larger. The larger relationships are mainly with course and enrolment characteristics and student finances. Not surprisingly, perhaps, responses to the question about the degree to which students had wanted to enrol in their course produced the strongest relationship with whether or not a student changed their course.

Among students who re-enrolled, those who were more likely to change their course were:

- ***Younger students*** - 17.4% of 15 to 19 year-olds changed their course compared with only 4.6% of 25 to 34 year-olds and 8.4% of students aged 35 years or older. This pattern was repeated for male and female students separately (Tables A.3 and A.4) although the relationship was less pronounced for older males and the tendency to change courses among older female students was somewhat lower.

  Much of the difference in rates of change of course among age categories is carried by other student background and course variables. The effect of age is still significant when controlling for other student background variables and has a similar pattern (Table A.6)—students aged 25 to 34 years are least likely to change their course. Controlling for additional variables removes any direct effect of age on the likelihood of changing courses (Table A.5).

- ***Second generation migrants*** - 17.2% of students born in Australia but with neither parent born in Australia change their course compared with 13.7% of non-migrants and 12.1% of first generation migrants. The pattern is similar for male and female students considered separately, but is not statistically significant in either case. Controlling for the full array of variables means that students from homes in which English was not the main language but was frequently spoken had a *lower* likelihood of changing courses.

- ***Students whose highest level of educational attainment was Year 12*** - 16.6% of students with only Year 12 changed course compared with lower proportions of students in all other categories. This pattern was more marked for female students than for males. Male students who had already completed a degree also had a slightly higher rate of course change. When other background variables are held constant, the effect of educational attainment is weaker (Table A.6). Only students who had already completed a diploma were less likely to change courses than students whose highest educational attainment was Year 12. A similar result can be seen when further variables are held constant (Table A.5).

- ***Students who were studying at school in 2003*** - other students, especially those who had been working full-time in 2003 (7.7%), were less likely to change courses. The results for male and female students separately are also significant and possibly more marked for female students. The effect of studying at school in 2003 is slightly stronger for males and the few males who were mainly caring for others were more likely to change their courses. Differences in the level of course changes among the various types of main activity in 2003 are not statistically significant in the multivariate analysis.

- ***Students whose course enrolment was influenced by their family (15.2%), friends (16.1%) or Year 12 results (18.3%) or by four or more sources (16.8%)***. Several other influences were associated with lower levels of changing courses—students whose decision to enrol was influenced by managers or colleagues at work (8.4%) or by their work experience (11.1%). The apparent effect of these influences, however, reflects other life-stage characteristics and when these are held constant in the multivariate analyses (Tables A.5 and A.6), there are no relationships between any influences on enrolment decision and whether students change their course by the start of their second year.

- ***Students who were* not *the main carer for children dependent on them*** *(14.7%)*. There are relatively few students caring for dependent children or other adults. So although the level of change of course by the start of the second year of their course is only a little above the mean, the corresponding levels for carers are well below the mean, particularly carers for primary school age (5.9%) and older (5.2%) children. Surprisingly the effect of caring roles has a stronger relationship with change of course for males than females (Tables A.3 and A.4), which may reflect the differential influence of other related variables. When the influence of these other variables is removed in the multivariate relationships, there is no influence of a student's role as a carer on their likelihood of changing their course before the start of their second year.

- ***Students who were living with their parents** (15.9%) **or at a university college or other residence** (15.4%).* Living arrangements reflect life-cycle characteristics. Younger students are more likely to live with their parents or in a university residence and younger students are more likely to change courses. Hence the higher levels of course changing for students living in university accommodation (13.2%) and with their parents (11.6%). Students living with a partner or children change courses at only quite low rates. The multivariate analyses (Tables A.5 and A.6) suggest that there is little effect of living arrangements beyond any life-cycle or other variables.

- ***Students who travelled more than 90 minutes to get to university from home or work (18.7%).*** Although it makes sense that a student who has to travel for a long time to get to university might want to make changes to reduce their travel time, it is not clear why travel time should lead students to change their course rather than their university. Perhaps differences in course timetabling or course location are influential. The extreme category for this variable is 7.6% for students who do not travel to university—mainly external or off-campus students. Although this contributes to the statistical significance of the relationship overall, travel time for other students remains statistically significant. The relationship is more pronounced for female students (Table A.4), but is not significant when other variables are held constant.

- ***Students whose main source of financial support was other relatives (28.8%). savings or sale of assets (18.7%) or their parents or a guardian (15.3%).*** Government income support appears to have little influence on whether a student changes their university course. For male students there was some indication that access to partial Youth Allowance under the independence criterion (19.9%) or the full dependent rate (29.7%) did have an influence. However, government income support overall is not related to the extent to which students change their course.

  Only financial support from relatives other than parents or a spouse and support from commercial loans remain positively associated with a higher likelihood of changing course by the start of second year when other student and course characteristics are held constant.

  It might be expected that, all else equal, the more secure a student's finances, the greater the risks they can take with their university studies—by changing courses and possibly taking longer to complete their course. This does not seem to be borne out by these results. Relying on savings, commercial loans or (possibly) relatives other than parents or a spouse might be more precarious than relying on parental financial support. Some of these categories are very small and perhaps capture students in relatively unique situations that are not otherwise held constant in the analyses.

- ***Students who attend the innovative research universities.*** The rate of course change is markedly higher at the innovative research universities (20.2%) than at other universities and there is little difference among the other types of universities. The pattern is similar for both male and female students, although only the result for female students is significant. This difference remains statistically significant after controlling for other student and course differences between universities. The source

of this difference is unclear although potentially important from a policy perspective. A fuller understanding of its implications requires further exploration and would potentially be of particular use to these universities in determining if a response is necessary, and the shape it might take.

- ***Students who had not wanted to enrol at their university.*** There is a substantial relationship between this variable with whether or not students change their course. Students who had any doubts about their enrolment at their university were more likely to change courses and the greater the doubt, the greater the likelihood of changing course. Among students who had really wanted to enrol at another university, 23.2% were enrolled in a different course by first semester 2005. For students who had wanted to enrol at their university, only 11.3% changed their course. The pattern is less clear for male students, but quite strong for female students. The relationship disappears when other student and course characteristics are held constant.

- ***Full-time students.*** Among students who are still enrolled at university in their second year, full-time students (14.8%) are more than twice as likely as part-time students (6.4%) to be enrolled in a different course. Results are similar and significant for both male and female students considered separately. The difference, however, is no longer significant after controlling for other student and course characteristics, which suggests that the difference has more to do with the types of students who enrol full and part-time rather than something inherent in full or part-time study. McMillan (2005) also reports that full-time students were more likely to change their course.

- ***Students studying on-campus.*** Students who study on-campus (14.5%) are more likely to change their course than are students who study off-campus (6.0%). The difference may be due to differences in the types of students who study on and off-campus or possibly to the more limited choice of courses available for off-campus study.

  When other student and course characteristics are held constant, the difference is no longer statistically significant, which is consistent with the conclusion that the results reflect the types of students who enrol for external study. However, the analyses include a surrogate for off-campus study in the variable 'Travel time to university'—the category 'did not travel to university' captures off-campus students. Even when this variable is removed from the multivariate analyses, mode of study does not become statistically significant.

- ***Students who enrolled in courses in Science, Information Technology or the Humanities.*** Although the variation in the extent to which students change their course is substantial and statistically significant, estimates for particular fields of study are sometimes based on relatively few students and some caution is required in interpreting the results. Students who initially enrolled in a course in Science (20.3%), Information Technology (17.0%) or the Humanities (20.3%) in 2004 and who enrolled at university in first semester 2005 were more likely than other students to have

enrolled in a different course. The students least likely to change courses had enrolled in Nursing (5.7%) and Law (6.2%).

The differences among fields of study partly reflect the characteristics of the students that enrol in them. Nevertheless, the variable is statistically significant when tested as a whole. Controlling for many other student and course characteristics, the fields of study with low levels of course change are still Nursing and Law while those with high levels of course change are the Humanities and Science. The results suggest that students tend to shift from generalist to more directly vocational courses.

McMillan (2005) also found major differences among fields of study in the likelihood of a student changing their course. However, the results do support the shift noted above. Using a slightly different classification from that used in this study, students studying a Science course were the most likely to change their course, but were followed by a grouping of Medicine, Dentistry, Veterinary Science and Law and then Society and culture (excluding Law). Only the finding for Science is directly supported in this study. At the other end of the scale, Education, Agriculture and Environmental Science and Health (excluding Medicine, Dentistry and Veterinary Science) have the lowest levels of course change. 'Education' in McMillan is probably dominated by Teacher Education enrolments while Health is dominated by Nursing.

- ***Students who had wanted to enrol in another course.*** Not surprisingly, the extent to which a student had wanted to enrol in their course had a large influence on whether they enrolled in a different course in first semester 2005. Students who had really wanted to enrol in a different course in 2004 were more likely to have enrolled in a different course by 2005 (43.7%)—one of the strongest effects on changing course. The likelihood of changing courses varied with the extent to which students had wanted to enrol. Only 7.8% of students who had definitely wanted to enrol in their 2004 course changed their enrolment in 2005; 20.7% of those who had some reservations about their course; and 29.7% of those who had not wanted to enrol in their course, but didn't mind.

  The effect of this variable is large in the context of this survey and is one of the few unambiguous results in Table A.7 for predicting students who will enrol in a different course at the same university. Little of the effect of this variable can be attributed to any other student or course characteristic with which it may be related. It is important to remember though that the question about the extent to which students had wanted to enrol in their 2004 course was retrospective and responses may include an element of reconciling subsequent behaviour with earlier intentions.

  McMillan reports a similar relationship using a course preference measure. Students for whom their course was their first preference (in the process that allocates university places to mainly school leavers) were less likely to change their course.

  These results support a conclusion that the proportion of students who change course would decline if more students were able to gain access to their course of choice in the first instance.

- ***Students who had* not *received credit for prior study.*** Students who had received credit for prior study were less likely to change their course (7.9%). Students with experience of university may be better able to select their course. This group includes students who have already changed their course and possibly improved the match between their aspirations and abilities and the course in which they were enrolled.

  Students who received no credit for prior study are mainly new entrants to higher education. Thus they have had no previous opportunities to make a better match between their hopes and abilities and their university course. When the opportunity to change courses arose in first semester 2005, more of them (11.0%) were likely to take it.

- ***Students who had mixed results from their first semester study.*** Students who passed all their subjects were less likely to change their course (9.7%), but so too were students who failed all their subjects (5.7%). The reasons for the two groups are probably different—the first are doing well and have no need to change, while students in the second group may not have been able to identify, or been offered, other options.

  It was the students with results somewhere in between who were more likely to change their course, particularly those who had withdrawn from at least one unit. The level of change among students whose results consisted only of withdrawals or no assessment results in first semester 2004 (16.5%) and those with some passes but no fails (15.3%) suggests that some of these students had decided fairly early in 2004 that they did not like or were unlikely to pass some subjects in their course. These students were more likely to change their course in first semester 2005.

  Students who attempted all subjects and passed some and failed others were only slightly more likely than average to change their course (11.9%) the next year. The fact that they continue with individual units rather than withdrawing even though they may be struggling may point to a greater persistence with their studies.

10.3 Summary

Two variables have an over-riding influence on whether a student changed his or her course—the extent to which a student had wanted to enrol in their university or in the course. The more they had wanted to enrol, the less likely they were to change courses. In the model containing the full array of variables, these are the only characteristics that are significant. In the model restricted to student background characteristics, some other influences can be seen. Being 15 to 19 or having moved from interstate to attend university increases the probability of change while coming from a more rural background reduces the likelihood of a student changing courses.

11. In Their Own Words

Students who identified themselves as having left their course completed a small number of open-ended questions. This section draws on students' answers to these questions together with their responses to multiple choice questions about reasons for discontinuing and cross tabulations of those responses with information about their backgrounds.

Three open-ended questions were included in the survey:

> *Q65. I would have remained in the course and university in which I enrolled in first semester 2004 if…*
> *Q66. If you changed to a different course or program, please briefly explain why:*
> *Q67. Please briefly explain any other reasons that influenced you to discontinue your first semester study in 2004.*

11.1 Method

An initial search for common words and themes in the comments identified seven main types of factors that had contributed to students' decisions to leave their course:

- Financial concerns
- Employment-related issues
- Career-related issues
- Isolation or loneliness
- Health-related issues
- The teaching and support provided by the university
- Family responsibilities.

Word searches were conducted using key words in these seven main areas to construct separate files of comments under each heading. Additional searches were then conducted of three sub-themes, where there appeared to be sufficient comments to warrant separate files:

- Travel (to and from the university)
- External study and Distance learning
- Workload (i.e. academic workload)

A search was also conducted using the phrase 'too much' as this appeared regularly throughout the comments.

The number of students indicating in their comments that they had left university in order to travel overseas was surprising, as we had not identified this from the literature as a common or important reason for discontinuing. However, the comments were very similar in nature and there thus appeared no need to collate them for separate analysis. It was interesting to note though that the students citing this reason appeared from the comments to be young and either free from responsibilities of family or work, or able to

set these commitments aside to take up travel opportunities. It may be that the literature overlooks these students because they can be hard to reach and so may be missed by surveys of discontinued students.

In addition to the phrase 'too much', consideration was also given to conducting a search using the word 'balance', as this also appeared to be used regularly throughout the comments. It was decided, however, not to pursue this theme, as the word was found most often in the context of comments about the difficulties of combining study with work or family commitments and many of these comments were already included under these headings.

The method produced ten separate files of comments. The three largest were: Financial reasons; Teaching and support; and surprisingly, Travel (to and from the university). The smallest were 'Too much' and 'External study and Distance Learning'. The files do not contain all the comments relevant to the theme, but only those found by searching under the key words. In addition, short or incomplete comments, such as the simple phrases 'family commitments' or 'too far' were excluded because they did not add to understanding the reasons for attrition beyond what could be learned from the analysis of the quantitative data. Commonly repeated phrases were also noted rather than recorded. Some comments appear in several different files, as they relate to a number of different issues.

The comments are discussed here under headings linked to the scales used in Chapter 9 (see also Appendix B) which deals with the reasons why students discontinued their studies. Each section outlines the major issues raised in the comments and concludes with some suggestions for strategies to improve student retention.

11.2 Overview

The comments support a view that in most cases students leave a course for a range or combination of reasons, rather than for one reason alone. This pattern is reported in various national and international studies which demonstrate that students drop out of university for a group or cluster of reasons (Moore *et al.*, 1995; McInnis *et al.*, 2000). A few students identify a 'main reason' and 'other' reasons, but the vast majority merely list reasons without indicating any order of influence.

Broadly, the comments suggest that the reasons students leave can be categorised as either positive or negative. Students citing 'positive' reasons have made active decisions to leave their course because they have found, or are looking for, a better alternative. For instance, they have found another course that better suits their career goals; they have changed their career goals; they have taken up opportunities for work or travel. Students citing 'negative' reasons would have preferred to continue the course they were undertaking, but circumstances have made it difficult or impossible for them to do so. These include ill health, financial concerns, work or family commitments; and a poor initial experience of university.

In some cases the decision to leave appears to have been made initially for one reason with other reasons being cited to rationalise and re-inforce the decision. More commonly though it appears that factors have combined to influence against continuation. Sometimes there is a suggestion that one reason has become the 'last straw' – students have battled other difficulties but this last one has pushed them to the point where continuation with the study is no longer a possibility.

The comments also support the data analysis indicating that younger and older students are influenced to varying extents by factors connected to their life stage. For older students discontinuation appears to be often linked to difficulties in balancing study with other commitments and responsibilities – especially to family and work. The costs of study (including income foregone) are also of major concern, particularly if the student has financial commitments such as a mortgage.

Younger students more often cite reasons including a change of career plan, difficulties in adjusting to university, especially if they have relocated to attend, missing family and friends left behind and failure to enjoy the course they are studying.

However, there are some areas where the comments suggest that differences according to life stage are small. These include concerns about the academic workload, the quality of teaching, support and guidance and whether they believe they are receiving value for the money they are investing in their study.

11.3 Change of Direction

As noted in Chapter 9, the label *Change of direction* covers many related reasons for discontinuing, including identifying a mismatch between a student's expectations and the reality of a course, between the course and its ability to meet a student's career objectives, changes in career goals and simply finding something better to do. Just over one in every five students who did not enrol at university in first semester 2005 withdrew because they wanted a change of direction.

Students more likely to discontinue because of a change of direction were younger, mainly school leavers, often living with their parents. The data analysis suggests a profile of a 'direction-changer' as a young student, entering university from school, a little unsure about what kind of tertiary study they want to do and where they want to do it; living with their parents, and without responsibilities for caring for others; working part-time and studying toward a future career.

This profile has a strong presence in the comments which respond to open-ended questions, particularly in comments in the category 'career-related'. However, many factors appear to play a part in contributing to a decision to change direction.

A student may gain new information or insights about the career they had chosen:

> *(I) began to understand the requirements of the career my program trained for, and became disenchanted with its orthodox regulations.*

A mismatch becomes apparent when a student realises that they may not be suited to the career they had in mind, or the career may not be what they had hoped:

> *I decided the career was not suited to me*
>
> *I was not enjoying the course and was anxious and unhappy at the thought of pursuing a career in this job.*
>
> *I am happy that I studied the subject and realized it was not for me.*
>
> *I realised I no longer wanted to study my current subjects and that they would not lead to a career I would really enjoy.*

In many cases students change direction because they have identified something that they would like to do better:

> *I discovered a love for physics after doing a physics unit, and changed my degree accordingly.*
>
> *I thought a career in multimedia would positively influence my community (but I), didn't find it stimulating, found it meaningless. I wanted to get into a career where I could actually help people & make a difference. I was reading psychology books in design lectures, things just changed.*
>
> *I was not interested in or good at commerce and considered the prospect of a future career in it repulsive. I became interested in politics and decided to enrol in an arts degree in 2nd semester 2005.*

Change of direction can also be influenced by employment opportunities or experience outside university:

> *My part time employment at the time influenced my decision to study for a full time career in that same profession.*
>
> *(I) got offered a position in the fire service which was another career prospect that I had.*

Paradoxically, while it appears that the vast majority of direction changers are younger students, these students display maturity in recognising that they may have lacked the maturity to make career decisions when they began the course they have left, and that they need more information and experience to choose the career that is right for them:

> *At 16, I don't think I was really mature enough to make the decision of my 'life-time career'. I'm glad I got the opportunity to travel and live overseas and do not*

> *plan to go back to uni for a few years, and don't know what course/direction I want to take*
>
> *... Felt that I needed a year break from studying to explore and confirm career aspirations. I gained experience in the industry I was interested in through employment.*
>
> *I decided to do work experience before going back to uni so I could be sure that the course I was doing would lead me to a career I enjoy.*

The comments suggest that the initial university experience helps younger students in particular to identify the course and career that is right, or not right, for them. Universities might assist these students by providing information and opportunities to identify alternative paths to their career goals and to move from their initial course to another, or from one stream, or elective, to another, when it becomes clear that their initial choices will not meet their needs and interests. There may also be a case for students undecided about their future to enrol first in a generalist degree with the opportunity to move to a more vocational program if they later decide on a career:

> *The first degree I was doing did not tell me where I would eventuate and I was told to do this if I was unsure of which degree to choose, half-way through this degree, however, I decided on a more specific career that would suit me.*

11.4 Academic Reasons

Some students leave because they find their work at university difficult. The analysis of data in Chapter 9 noted that among students who did not enrol in university in first semester 2005, about one in five was strongly influenced to discontinue their course because they were having difficulties in successfully completing course requirements.

Among students not enrolling in first semester 2005, those who cited academic difficulties as a strong influence included students from non-English speaking backgrounds, with a disability, not coming through Year 12 at school and having no prior university experience. Students from private and Catholic schools were also more likely to withdraw for this reason. There were also students living with a spouse and children whose study was affected by competing commitments.

Answers to the open-ended questions cast light on the experiences that cause these students to identify academic reasons for their discontinuation. The reasons largely fall into two groups: poor quality teaching coupled with inadequate or poor interaction with teaching staff; and concerns about academic workload.

Among the students commenting on the poor quality of teaching and academic support are several who suggest that staff seem to lack interest in most students, favouring only the high achievers:

> *The lack of tutor/lecturer interest in student progress…*

> *… I was not gifted in the area of study I was doing, but passed all my subjects, however only those at the top of the classes received praise & attention.*

There are concerns that staff fail to explain procedures, assessment and course content adequately:

> *… A tutor would say "assignment is on the website". And if you went to ask a question about it they hardly even remembered that one was assigned.*
>
> *There was no help. The teachers were very rude and weren't interested in helping.*

In a few cases, students indicate that they were treated unfairly or disrespectfully by a staff member:

> *There was no other opinion of my work if the teacher didn't like it you failed which I find extremely unfair.*
>
> *(I would have continued if…) the staff were more supportive, the technology teacher would have treated me fairly…the teachers were more helpful rather than being so hard-headed, and that the actual faculty coordinators treated me & friends with respect.*

A small number of students also suggest that staff lack understanding of, and in some cases discriminate against, particular students:

> *Lecturers were not readily accessible nor encouraging & very little acknowledgement of the difficulties faced by mature aged students trying to manage career/ family life/ study.*
>
> *…teacher attacked younger male class members*

Large class sizes are an issue for a number of students who raise concerns about poor interaction with teaching staff:

> (I would have continued if..) *I could have received a little more help from the lecturers & tute teachers. I found it difficult to voice my opinion & ask for help as there are so many students all in the same room or lecture theatre.*
>
> *I felt very invisible in a course with 800 students … there was no one on one interaction with teachers. They talk to you on that huge stage that you feel they're celebrities. They don't allow for you to contact them, basically teaching staff were extremely unapproachable that I thought there's no difference doing this by correspondence…*
>
> *(I would have continued if…) more help was offered with my work and if greater interaction between students and teachers were completed such as smaller classes allowing greater interaction.*

Comments favour smaller class sizes where there is greater support:

> *My new course has just 18 people in the first year. It is intimate with a lot of teacher - student contact. It is better run with less, but not no bureaucracy. It is more organised and a lot more enjoyable!*

Among the students expressing concerns about the academic workload are some who do not appear to be fully committed to the course they were studying:

> *Workload was extremely large and I had no motivation to become a physio.*

and students having difficulties balancing study and their other commitments:

> *Far too big a workload for part-time, I spent =~ 40 hrs/week & still needed extensions for assignments etc – I needed more understanding & support as an "older" student.*

> *The high work load left little time for part time work which made it difficult to buy materials required for course.*

Heavy workloads appear to cause stress and anxiety for some students leading to 'burn out' when coupled with pressure to perform:

> *Perhaps if I could cope with the workload and felt comfortable and not insecure, I would have stayed.*

> *Too much stress with the work load. I didn't understand some of the tasks and when I asked for help from my course co-ordinators they were very rarely helpful or they explained it in a way that I didn't understand …*

> *I just 'burnt' out. I worked extremely hard and got excellent results but in the end to achieve those results I had to give up all my leisure time and everything was to do with uni, which I have come to learn is not a very healthy way to live. I do not believe there is enough support at all for young students who are under extreme pressure to perform.*

One student who switched to a course in TAFE found the workload considerably more manageable:

> *I went to TAFE for the very reason I left uni. TAFE was more practically taught with relevance …. The workload was spaced out better with less pressure and the teachers were a lot more supportive.*

However, comments suggest not all students find the academic workload too heavy or the work too challenging. A minority are disappointed that the study is duller and less challenging than they expected:

> *It was portrayed through high school how important uni was and then I got there and it was irrelevant and a bludge. Teachers would tell you the answers.*

Students who had been studying by external mode raise many of the same academic reasons for their discontinuation as other students, but also some specific to their study

mode. Difficulties in communicating with teachers appear to be common, with students indicating that communication problems leave them feeling isolated and unsupported:

> *I had to rely on emails etc. I only had one email answered and that was after 3 long distance phone calls.*
>
> *Felt totally isolated. …unfairly treated…was told that if I had attended the lectures I would have known certain information …*
>
> *Basically the fees I paid were for the privilege to sit an exam and that is all.*
>
> *…unable to receive some information on time. e.g. waiting for answers for questions for assignments.*
>
> *I found that the teachers really didn't seem to care about external students*
>
> *Staff … were awful - never answered online queries directly - expected other group members to answer administrative questions - no contact re study - no contact with other students (other) than a wishy washy chat site.*

Some find the quality of some course materials to be wanting:

> *…sloppily prepared notes and poor tuition*

Several cite instances of poor delivery of this material, inadequate academic support and a lack of feedback on their work:

> *Course delivery was very slap happy and confusing.*
>
> *In 2005 in my 2nd year units all support seemed to fall away (no lecture tapes any more, no website for units as in 1st year where you could chat with other externals) the work was harder & without the same support as 1st year I really struggled…*
>
> *…had a great deal of difficulty with one subject and was unable to get help.*
>
> *There is no assignment feed back…*
>
> *I was just given a text book to read… Felt totally isolated.*

While many students comment that aspects of their university study are 'too hard' or 'too difficult', only a few of these comments refer to the academic work – more are about combining work and study, living away from home, or financial circumstances. Those that do refer to the study signal a lack of academic preparation, sometimes coupled with a lack of confidence and becoming discouraged:

> (I would have continued if…) *I had been better prepared for uni in high school and if my parents didn't pressure me so much about uni and if people would stop telling me that my course was too hard and they knew I wouldn't make it.*

> (I would have continued if…) *I had the adequate mathematical prerequisites with no gaps in my knowledge, which came as a consequence of poor/different teaching …*
>
> (I would have continued if…) *I had prepared better before the course started. The main reason for my failure was my own lack of preparation.*

Comments also indicate that students may not know where to go to seek advice and support when they are failing, or may be too discouraged to seek it out:

> *I entered with advance standing… I failed some subjects - I was too scared to seek help or advice from lecturers during semester, and also at the end of the year when I realised I'd failed. I didn't think they would want me to come back, and was scared I would fail again.*

Not knowing where to go for any type of advice can deter students from persisting:

> *Lack of support from teachers etc., lack of "how uni works" knowledge i.e. essay writing, WebCT, not knowing what course best suits me as I couldn't find the right person to talk to about it.*

The comments point to a need to ensure that new students are adequately prepared for university study, feel valued and respected, and have opportunities to meet and talk with each other and with academic staff, both formally and informally. This will include providing new students with more information about approaches to teaching within a university and sources they can draw on for assistance and advice. Comments suggest also that universities may need to be more flexible where students are having difficulties in dealing with their academic workload and more pro-active in providing support and advice to students who are failing.

The comments indicate also that greater attention is required to assisting and supporting the increasing number of students whose time on campus is limited due to work, family or other commitments and who are disadvantaged as a result. New methods need to be explored for providing these students with the academic support that will enable them to complete successfully, including more opportunities to seek guidance from staff, to obtain the information that they need about course requirements and assessments, and to engage in discussion with other students. Greater flexibility is also needed in teaching and assessment, to take these other commitments into consideration. Any remaining notion within institutions of students as young, full-time and without other responsibilities must be discarded.

Many of the issues younger students raise appear to be related to poor transitions to university, especially difficulties in adapting to the differences between university and school, including in approaches to teaching and learning:

> *I felt my course did not satisfy me and university education was considerably different to high school/HSC, and felt* I *should return another day… the way the syllabus was taught was extremely difficult to understand; difficulty adjusting to the different styles of teaching from high school…*

> *…, it was an unwelcoming environment - large classes, teachers who weren't understanding etc… it was a big change from school - hard to adjust*
>
> *…the environment, the people, the uni staff, the teachers, basically the whole lot was hard to understand and get along with, which made me fell very very very uncomfortable and extremely lonely.*
>
> *I was told I could do the course fresh out of high school, and when I saw the work that I was required to complete I knew I needed more than high school level knowledge.*
>
> *I found the transition from school to uni difficult especially the support + motivation that teachers provided as well as friends.*

The comments suggest also that universities need to pay greater attention to the quality of teaching and academic support for all students, but particularly for those enrolled externally.

11.5 Conflict with Employment

As noted in Chapter 9, the more hours a student spends per week in employment, the more likely she or he is to discontinue due to conflict between study and employment, although flexible hours and the availability (and ability to use) study leave can provide some relief. Work-study conflicts are more acute for older students with families for whom full-time work is not optional. Discontinuation because of the demands of paid work is associated with financial difficulties.

Most students who discontinue due to a conflict with employment are older, already have post school qualifications, live with a spouse and children, do not receive government income support, report paid employment as a main source of income, enrol part-time and off-campus. They thus have characteristics that suggest study is only one part of very busy and complex lives.

Many of their characteristics would also see these students considered disadvantaged in higher education. They were more often from families with lower socio-economic backgrounds, in which the parents had lower levels of education or their education was unknown; they were more often the first in the family to attend university; and born outside Australia.

Comments highlight the difficulties students in paid employment face in finding a balance between their different commitments and also demonstrate that in addition to work and study these students also have family commitments. Many appear to be under heavy time pressures:

> (I would have continued if…) *I could have found a way to balance work and study to allow me to support/provide for me and my partner.*
>
> (I would have continued if…) *I could have got more time to work and study. I found it hard to study, attend classes and tests and work.*

> (I would have continued if…) *I could have had more work/study balance; more time off work; could have studied full-time.*
>
> *In reality, I was not prepared for the time required and finding a balance between home, work and study proved difficult. I also feel I should have selected fewer subjects.*

Students find that work demands mean they lack the energy they need to study successfully:

> *I was working night shift and was just too tired to attend lectures during the day.*
>
> *I was falling asleep in evening lecture & tutorials after working a 12-hr day.*
>
> *It was very hard to concentrate in class after a full day of work (too tired and hungry).*

However there is a reluctance to reduce their study load because of the length of time it will then take to complete the course:

> *I found it difficult to work full-time and then have the energy to study at night-time. My first semester only entailed one subject- accounting, but if I continued to study one subject per semester, then I would have had to study for the next 12 years. Not very practical.*

Lack of study leave, or insufficient study leave, is an issue:

> *Unable to study (or rather do it justice) while working full time. Since it was chemistry it required 3 1 hr lectures and 1 3 hr lab plus weekly quizzes, preparation for exams etc. All lectures were during work hours. I was only given study leave to attend lectures.*

Work placements that are a compulsory part of a course also raise practical difficulties for students with employment commitments and financial concerns:

> *I could not afford to undertake field placement and withdraw from full time work in the interim. I needed to wait 12 months to save for this.*
>
> (I would have continued if…) *there were less 'placements' as I need to work to support my children. To attend experience related work, I would have to give up paid work.*
>
> *I suspended study in 2005 because I could not financially take on a work placement through study. I need to prepare myself and my workplace for me to undergo placement (wage free) in another work place.*

Comments also highlight that while many students manage sometimes elaborate arrangements to accommodate their various commitments, these arrangements can fall apart very quickly if even only one or two critical elements change:

> *My employer suffered financial crisis and restructure & redundancy. As a result, I had to change jobs and could no longer continue with my courses.*

> *Work, de-facto separation made it more difficult as I needed to rely on child care more, and stress. It becomes too hard to juggle part time university, a small child and part time work.*
>
> *Work increased & family commitments took over & I realised I would not be able to commit as much time as required to study as I would have liked. Therefore decided to defer until those issues settled down.*

Some students trying to reconcile study and paid work commitments appeal for greater flexibility, and more on-line or distance learning options, or more course delivery outside standard working hours:

> (I would have continued if…) *they provided an off-campus component to the course there was no flexibility if your work clashed as timetable etc. All on-campus 4/days/week*
>
> (I would have continued if…) *it was offered externally…My new course allows assignment +exam online which suits my 50+ hrs p/wk work.*

However, some students enrolled externally are also unsatisfied with the degree of flexibility they are offered:

> *Their "flexible" delivery program was not such, it adhered to the same rules & deadlines as those attending on campus & information could only be obtained from the internet.*
>
> *…there is no flexibility in due dates.*
>
> *…distance education is not for a full time worker with home as well as work*

Given the many difficulties, one student concludes that:

> *Seems courses at (university) cater for young, single students with no responsibility*

These comments emphasise a need for greater support for students endeavouring to combine study with paid employment commitments, including greater flexibility in course delivery, assessment and attendance requirements. In addition more flexible arrangements are required for compulsory placements – including providing earlier notice for students of placement requirements so that they have more time to make appropriate arrangements. Placements within students' existing workplaces might also be given further consideration, where appropriate.

Comments suggest two further ways in which employment influences discontinuation. Firstly, work experience can change career and course choices particularly for younger students:

> *Did some trade work experience over the summer break and really enjoyed the work & got offered an apprenticeship.*

> *I was offered a promotion at my work. I have decided to change my course due to my work. My degree was related to my work but I have changed my career.*

Secondly students leave to take up employment opportunities:

> (I would have continued if…) *I did not have a promotion at work that required my attention.*
>
> *I was offered a part-time job working for a private town planning firm which offered me work if I got into planning in 2005, which I did.*
>
> *Got a job where I was paid more and therefore required to work heaps more hours and evenings.*
>
> *Offered job in army.*

While these circumstances do not generally require attention greater flexibility may be required to assist students in cases such as the following:

> *An offer to go overseas with work for 3 weeks. Which the university would not let me do if I stayed enrolled. I then deferred and never went back.*
>
> (I would have continued if…) *I had not have received a promotion, requiring additional working hours. If university did not take up so many hours (outside of work & family commitments).*

11.6 Dissatisfaction with Course

About 12 % of students who discontinued did so because they were dissatisfied with their course. Many of these students were also more likely to have discontinued because of academic difficulties and feelings of social isolation (Table 9.3). As noted in Chapter 9, there was a tendency for full-time workers and carers to be more likely to discontinue for this reason. Dissatisfaction with courses was highest among students in *Information technology, Architecture and building, Nursing* and *Health*.

The majority of students offering comments about their course appear strongly vocationally oriented and keen to reach their career goals as quickly (and as inexpensively) as possible - attitudes typified by the following comment:

> *The course I changed to provided me with the practical training and qualifications to enter directly into the profession. Study at university was too time consuming and difficult to maintain whilst working. Too expensive and didn't provide direct qualification other course did.*

Course-related reasons for discontinuing thus follow the identification of a better alternative path to career goals, one that is perhaps shorter and less costly:

> (I would have continued if…*) I felt the course was necessary for me to be successful in my career of interest, it was a large commitment & required a lot of time & I believe a lot*

> *was irrelevant in my career of interest. I changed to a TAFE course which is directly focused on my career choice & the hours are more flexible & less demanding*
>
> *I changed my mind about how I would go about get into the career of my choice. The new path didn't require me to attend university.*
>
> *I was offered a great job which would get me into the career I wanted to go without having to stay at uni for 3 years.*

These vocationally-oriented students appear to become frustrated with their study when they cannot see the relevance of some course content to professional requirements in their future careers:

> *… I was doing nursing and they were teaching things that have got nothing to do with nursing. I work at a hospital … and when students are there doing placements they have not got a clue about anything. I feel sorry for them, paying good money and getting all the wrong information*
>
> *I just wanted to learn how to do programming on computer not what any of those other garbage classes were trying to teach …*

Concerns about having to take subjects they believe are irrelevant are linked with views about the costs of study and the value they receive for the money they invest in it:

> *Too many subjects not relevant to final career choice. Could not afford to pay for study when I was not confident of my career path.*
>
> (I would have continued if…) *the course was worthwhile. A complete waste of time and money, not relevant at all*
>
> *I assist in running of successful family business which will return far more income than uni study ever will... Study was good (subjects relative to course) but too much time wasted on irrelevant units & therefore fees etc etc. Study must be relevant.*

Similarly, comments also indicate that once a student realizes that a course is inappropriate, costs become more of a concern:

> *Once I started the course I realised the course does not suit my career needs. I knew I wouldn't finish the course so I discontinued as soon as I could, otherwise I would have felt I would be studying towards something I did not want to do and also increase my HECS debt.*
>
> *It's too costly to do if you are not 100% that it is the career you want...*

Comments indicate that a small group of students always intended to use their study as a route to something better – usually another course more directly relevant to their career goals – so never intended to complete the course in which they originally enrolled. This course may have been the only one to which they were able to gain entry, perhaps because of an inadequate entrance score, or a lack of pre-requisite study:

> *The course I enrolled in 2004 was not something that I wanted to pursue as a career… it was the only university course I was accepted into based upon my year 12 results. My main aim was at least get into uni and eventually transfer into something I like (which is what I've done).*
>
> *The course I enrolled in wasn't what I wanted to do to take my chosen career. It was intended as a 'stepping stone' to another course.*
>
> *Not my first choice of study/career direction but my (tertiary entrance) score wouldn't allow me to enrol in my preferred course*

Using one course as a pathway to entering another is not a track chosen only by younger students, but also by some mature-age students:

> *As a mature aged student I had to prove that I could get a good grade & then change course to what I wanted.*

The number of students indicating that they have changed course because they based their initial choice on poor or misleading information is very small, and these students do not necessarily lay the blame on others:

> *I had expectations of what my course was going to be like based on info sent from the uni as well as career advisors, and those expectations weren't met.*
>
> *I did not research my program enough in 2003 and settled for a university close to me that had a good description of my chosen program in the booklet. After a chance visit to another uni, and hearing good reports about it, I did some research and realized. Not only was the university much better, but the subjects in my program were much broader & more what I was wanting to study. I am now much, much happier here*

More often it appears that students leave a course because they lack information about the possible career options that might arise from it:

> *I was somewhat unsure as to what my career options would be after completing my Arts degree. Although I enjoyed the course I felt I needed a more structured program tailored to a professional qualification in which I would (perhaps) more easily find work.*
>
> *I didn't know where the course would lead to, it led to an uncertain future because I had no career in mind at the end of it.*
>
> *I did not feel that my chosen course was preparing me for a career (i.e.: I felt like the whole thing was pointless).*
>
> (I would have continued if…) *the teaching had been more professional, friendly, approachable and adequate, and if it had given me more of a sense of what the industry is actually like.*

> *I decided, during the year that my course gave me a degree, but no direct job when I finished. My new course allows me to feel more secure because I know where I am going and what I am going to do once with the degree (I went from animal science to nursing).*

While the comments indicate that many students aim to achieve their career goals as quickly as they can and that their course choices reflect this attitude, they also indicate that there are other students who are keen to move forward more slowly and indirectly, gaining experiences to assist them to make career and life choices:

> *(I wanted) to participate in subjects I was interested in but not available during my first course…wanted a broader education before completing a career orientated degree.*

> *I really had no idea what I want to do so I figured I should earn some money while I figured that out.*

Travel and work tend to feature strongly in these students' plans:

> *I felt like a break from study, and I wanted to travel overseas, which required full-time work for most of the year.*

> *I wish to travel around Europe, so I have spent this year working + I leave for Europe in October. The uni was not helpful in directing me to a better course, and I now have different career goals.*

> *I needed a break after a hard 2 years [Years 11 and 12] and was not ready to continue my studies. I wanted to take time out, work and travel.*

Finally comments suggest that some students become discouraged by poor organisation of their courses, including timetabling and assessment. For instance:

> *… more students enrolled in this course, and the uni didn't know how to handle this. 2 months into our course and the uni still didn't know what to do. Then we had our first assignment due the next month and we still didn't know what we were supposed to do.*

> (I would have continued if…) *I had felt the course was better structured and involved more "hands on" field experience.*

Or by a lack of subject choices within the course:

> (I would have continued if…) *I could have chosen other subjects which I wanted to do. So that I could be more specific in my degree structure.*

> (I would have continued if…) *the university had a wider variety of subjects on offer. I changed courses because I wanted more subject choices which were not available at the institution I was attending.*

Or a lack of flexibility for a student with a disability:

> (I would have continued if…) attendance *& assessment was more flexible to allow for illness & disability*

The comments indicate a tension between the vocational aspirations of students, coupled with a focus on obtaining value for the money they are spending on tertiary education, with a broader view of the purposes of education within higher education institutions. Students want to take the shortest and least expensive route to achieving career outcomes and are uninterested in, and concerned about the amount of time and costs they spend on participating in units that appear to have little relevance to their chosen career. This may in part reflect the rising costs of higher education and is suggestive of an increasing urgency among students to minimise these as far as possible.

The comments point to a need for greater attention to:

- Assisting career-focussed students to identify the most appropriate course and electives to help them to achieve their career goals
- Ensuring that course structures and content emphasise relevance to practice
- Ensuring enrolled students are aware of opportunities to intermit for travel or work
- Providing students in generalist courses with more information about career options
- Flexibility within course arrangements to accommodate students with work and family responsibilities and those with a disability.

11.7 Financial Difficulties

The data analysis in Chapter 9 found that discontinuing university because of financial problems is spread across all student types. However, students who leave citing financial reasons include some who are disadvantaged in higher education:

- Students from economically disadvantaged backgrounds.
- Students who are single parents.

Comments highlight ways in which the financial difficulties students experience compound with other factors to work against continuation with study. For instance, financial difficulties compound with university practices:

> *… needed more work to survive also the timetable went from 3 days in semester 1 to 4 days in 2nd semester - impossible for me to attend all classes. Tried to find a way around it but university was inflexible & did not really care!*

The breakdown of an important relationship:

> *I separated from my de-facto partner so did not have the financial and physical support that I previously had and needed to study whilst working full time.*

> *I became a single parent and suffered major financial losses in first semester. Due to this financial stress I had no option but to forgo my education to focus on my employment as I relied on a single income, with little to no assistance from the government.*

The loss of a job or other form of income support:

> *Had to withdraw before the census date due to lack of funds, i.e.: could not make upfront HECS payment because hours were cut in previously reliable casual job.*

> *My husband's situation changed with employment & I needed to return to fulltime work.*

And many other kinds of personal difficulties:

> *I was a single mum, working, studying, 3 kids. I had several financial difficulties, car broke down & child support difficulties. Also some personal issues - death of close friend & grandparents.*

Many students need paid employment to support themselves, their study and their families, particularly if they are ineligible for government income support, or if the support available is insufficient to meet their needs. However, combining work and study can be very difficult, especially if the course has a high workload:

> *Course was very demanding both in contact hours, study commitment and extra financial requirements for materials. The high work load left little time for part time work which made it difficult to buy materials required for course.*

Students are also concerned that their work commitments will affect their academic performance:

> *I am married and my spouse is working full time so I am not entitled to government assistance. A 'sole income' is not enough to support us so I have to work therefore jeopardising my grades and study goals.*

> (I would have continued if)… I *had substantial financial backing so work would not have interfered with my studies and practical placements.*

Comments further indicate that many students are concerned about the levels of debt they are incurring through their study, particularly when they are unsure that they are in the most appropriate course, or lack motivation to complete the course:

> *HECS debt is too high to spend more time in a course I'm not sure I want to do.*

> *Did not enjoy it and the HECS debt was a killer. I would rather get paid to learn or learn for free e.g. apprenticeship.*

> *I feel university is a waste of time and money for me. To get the degree I wanted it would have taken nearly 10 years. Doing my apprenticeship I will probably own my own business in 10 years instead of being fresh out of uni and not guaranteed a job and having accumulated a large amount of debt!*

I need to develop a sense of myself and my own being, before committing to a full-time 3 to 4 year course that may not be what I want to do. And I didn't want… debt … from a potentially useless activity.

Not happy with the course & the pressure of a large HECS debt from other study meant I didn't feel able to continue without good reason.

,

Not enough application to study and I was racking up HECS debt - needed the extra discipline and structure of TAFE. I can move back to uni if I do better - needed to be older and more motivated!

I had a marriage break down. I was not able to study and work I would have lost my home and my children. I now have a HECS debt and no degree!

Assessments of the likely costs connected with the study have an influence on the choices that students make about courses and institutions, particularly when the student is also experiencing financial difficulties:

I dearly wanted to become a nurse, but financial reality was that it would take four years part-time study with no income (plus paying HECS) and at the end my income would be about one quarter what it is now.

I wanted to study law …but the HECS fees were too high considering my financial capabilities.

My course was very expensive for me and it did not teach me the things I wanted to learn so I had to find an alternative, as well as save some money for future study.

Seeking to reduce study costs, some students leave in order to seek or take up alternative study choices that do not entail such heavy financial burdens:

I left to earn money as a bricklayer's labourer because I was struggling financially. I enjoyed the trade lifestyle better, so I began my apprenticeship.

I wanted to get a professional trade & get paid to learn which is why I got an apprenticeship. I still got paid to learn.

Sometimes the financial difficulties and associated issues that students describe are sufficient to contribute to ill-health:

Due to stress from trying to meet the financial commitments of university I suffered a break down and left because of health reasons.

My health was suffering immensely due to the stress I was under trying to cope with the workload of assignments and lack of finances.

Students re-locating to attend university, such as students from rural areas, appear to face additional costs for travel and accommodation, that impact on continuation particularly when combined with difficulties in adjusting to a new environment, as well as to university study. Comments suggest that more could be done to assist these students:

> (I would have continued if…)- *affordable accommodation was available for interstate students and adequate supports services (such as those available for international students) were available to students re-locating from interstate/country areas. I had to return home due to financial reasons and course was not available in home state.*
>
> *I had to move away from home, as my family lives in a rural area. Not only did I have to get used to going to university, I had to get used to the city & living independently. I also did not receive much financial support from the government (I received rent assistance), making it difficult for me to take part in social activities & therefore meet new people and to enjoy 'city life'. I do not feel universities cater enough for rural students.*

While many students make strong efforts to deal with difficult financial circumstances, living an 'impoverished student lifestyle' (as one student describes it) can be too high a price to pay for their study:

> *I left because I literally could not afford a decent life.*

Students seek value for the money they are investing in their study. A decision to leave thus sometimes follows a realization that sufficient value is not being received, or that future benefits will not compensate for expenditure – or for the financial hardship experienced while studying.

How students judge whether a course is worth continuing appears to vary, depending on factors including the student's motivation for doing the course (e.g. whether they wanted to do it, or drifted into it; whether they believe it will lead to career benefits), the student's age and personal circumstances, and the student's perception of the quality of the course.

> *I did not feel I was getting much from uni - with increased class fees/HECS and an increase in students per tutorial class was ridiculous. Too much for much less. Uni is expensive & the government do not realise how poor the quality is & how hard it is for students.*

For older students, the decision to change or leave can follow a realization that the costs of their study, including income foregone, are such that later career benefits may be insufficient to compensate:

> *Staying on at uni meant that I would have had to halve my income and lose around $26,000 a year in lost income, could not do this. At my age no hope making this up and the benefits are minimal.*

However, career pay-offs are also important to younger students:

> *University was not financially justifiable for me. I am now 19 and earn $45,000 pa from a qualification not earned at university. University was a waste of an entire year $3000 worth of HECS & the $1000 worth of materials.*

The comments emphasise that financial issues are of concern to most students but particularly for those with financial commitments and supporting family members. Financial concerns cause students to look for less costly study alternatives, they also require many students to engage in paid employment, which impacts on their ability to attend classes and complete course requirements. Any actions which reduce the financial concerns of students may thus help to prevent attrition, particularly if they reduce the financial burdens of students with families and/or students who must relocate to attend university.

The comments suggest also that while students are aware of the direct costs that their study will entail, ie course fees or HECS, in some cases the total nature and magnitude of the financial burden associated with study, including the cost of required materials and resources and indirect costs including travel to and from the university, child care and accommodation may only become clear once they commence and will cause a re-assessment of the costs and benefits of continuing.

Additionally in some cases, the financial burden associated with participating in higher education only starts to create difficulties if the often complex arrangements that students have put in place to ensure they have the capacity to meet costs begin to unravel, forcing them to leave university until they can address the difficulties that arise.

Both circumstances point to a need for additional financial assistance to students to assist them to overcome both short term and long term financial difficulties that place them at risk of leaving their study. These might include:

- Extending travel concessions to students who are currently ineligible.
- Providing travel subsidies to students who live at some distance from their university.
- Providing additional subsidies to assist students to meet the costs of accommodation, child care or respite care.
- Extending provision of rent assistance to students on Austudy
- Abolish taxation on equity scholarships provided by universities to assist students from low income backgrounds
- Providing practicum bursaries to LSES students in nursing and teaching courses to cover loss of paid employment when they re-locate to undertake their practicum placement
- Offering grants or low cost loans to students to meet unexpected out-of pocket expenses or temporary financial difficulties.

Access to Income Support

One in ten students who withdrew from university reported that their inability to obtain government income support (e.g. Youth Allowance, Austudy, ABSTUDY) was a large influence on their decision to withdraw from university.

Among discontinuing students, these students were typically younger, had been studying at school, TAFE or university in 2003 and were financially supported by their parents. They were more likely to be Australian born and from an English-speaking background;

were unlikely to be enrolled part-time or to have been in full-time paid employment. However sole parents also more often cited this reason as a strong influence for discontinuing.

Some of these students showed signs of financial distress. They relied on commercial loans or on loans from family and friends to support their study in 2004. Some were more likely to miss classes because of their paid work and to spend more time travelling to university.

The comments indicate that while many students identify that ineligibility for Austudy or other form of government financial support has influenced their discontinuation:

> (I would have continued if…) *I was eligible for Austudy/youth allowance.*

Others were eligible for support, but had found the level of support insufficient to meet their needs. They thus would have been able to continue their study if support were offered at a higher level, so that they did not need to supplement their income through paid work – or could work fewer hours:

> (I would have continued if…) *govt financial assistance was available, which aided mature aged students to find an acceptable balance between the need to work full time (to meet existing debts and circumstances) and the time commitment to full time study)*
>
> (I would have continued if…) *I had substantial financial backing so work would not have interfered with my studies and practical placements.*
>
> *…no money to support myself-even with youth allowance.*
>
> (I would have continued if…) *the expenses were lower or the government gave more money. Too hard to survive on Austudy, eat & study. It's too hard as too expensive*
>
> *I wasn't able to obtain Austudy beyond semester 1, 2004; and anyway the Austudy funding did not cover living costs & the time it took to work to cover living costs interfered with my studies.*
>
> (I would have continued if…) *I could have afforded it. I could not afford to devote my time to full time study and pay my bills. Austudy and part time work was not sufficient to keep myself and 2 sons at school and university.*
>
> *Trying to support myself and undertake the required workload, I found a struggle. Austudy is drastically insufficient. If you are trying to educate the people of Australia, this issue needs to be addressed immediately*

Some comments identified problems with the amount they were allowed to earn before their income support was reduced:

> *Austudy at more that $140 wk. How can you pay rent in Melb & school & books & food & bills & travel for $150 - if you work all you can earn with Austudy is $300 - it's very difficult.*

> *I could only earn a minimal amount before my Austudy was cut off - meaning I had to work more to live.*

Another referred to what they saw as inequities in the Austudy parental income test:

> *I come from a family which has two parents, this makes a big difference, that they both work full-time to make ends meet, but for me to get Austudy this is not able to happen due to the fact they both work. (both salaries separated are well below the average but combined they exceed the threshold). And if I work over the holidays and through and I fall in a gap where they then take family assistance off my parents. This system does not promote you to work hard. A system that rewards people for doing the right thing such as achieving a GPA of 6 over a semester would at least encourage people to achieve. Now this would be better for the community as a whole. This is what happened to a lot of people I know, some parents just can't keep supporting them so much.*

One Indigenous student pointed to changes in Abstudy arrangements which had disadvantaged them:

> *I still had the Abstudy student loan....the removal of the loan drove me to indebtedness that I haven't recovered from and won't for some years yet*

Financial distress among students that relates to ineligibility for income support, or the inadequacy of the support provided, suggests that current government income support arrangements may require review to determine how widespread are these difficulties and whether, and what, action is necessary to address them.

11.8 Social Isolation

About 6% of students who did not enrol at university in first semester 2005 reported that feeling lonely, isolated or unwelcome at university was a large influence on their decision to discontinue (Table 8.1). The data analysis found that social isolation or loneliness is a more important reason for younger, full-time students studying on-campus who had been mainly studying at school in 2003. They are more likely to be living with their parents or at a university college, reliant on their parents for financial help and not working full-time.

Students with disabilities in particular were likely to report that social isolation was an important reason for their discontinuation. This reason was also important to students who spent a lot of time travelling to university. Students who had not wanted to enrol in their course to begin with were also likely to report that they withdrew because they felt socially isolated.

Students commenting on isolation or loneliness also appear to be mainly younger. Among them are many who have moved away from home, friends and family to attend university:

> *Hard to live so far away from family. No support in city-expense in living in city*

> *(I would have continued if…) I had not had to live away from home, and I had some friends with me. Also it was expensive to live away from home tiring to travel…I wanted to live at home. I was lonely boarding*
>
> *Too lonely in Melbourne. Now on campus in Wagga (uni) very happy.*
>
> *I felt very alone at the uni and along way from home.*
>
> *I was living 800km away from boyfriend of 5 years also family and friends*
>
> *I did not make hardly any friends. I was living away from home and did not like Brisbane. (The) uni was dirty, smoky/smelly and certainly not welcoming or appealing.*

The power of loneliness is such that changing to a university closer to home may be preferable for these students, even if they regard the new university or course as less reputable or appropriate to their needs and interests:

> *because I was so far away from my family & friends so I changed to a university that was closer to home.*
>
> *I changed to X university because it was close to home, previous school, work & friends.*
>
> *my uni was in [a regional centre] - my family and friends lived in Brisbane. I really enjoyed (the university) it's a great uni even better that the one I am at now. I just missed my family and friends too much*

Similarly, students with friends at other universities may change to be closer to them:

> *(I would have continued if…)…. I knew more people who went to my uni…all my school friends were at different unis*
>
> *wanted to study closer to friends*

Students describe a number of different aspects of the university environment which cause them to feel uncomfortable. For instance, unfriendliness and lack of support:

> *I hated (the) university. The people were unfriendly the staff unapproachable and I became depressed in this situation.*
>
> *Did not find university very welcoming I felt excluded no friends and no support.*

The nature of the academic work:

> *I found writing and structuring assignments particularly difficult. I felt like there was no one that could assist me with this. I studied 1 subject in sem 1 which I found eased me into uni study but the second subject I studied in sem 2 was incredibly complex and I felt very uncomfortable and out of my depth.*
>
> *(I would have continued if) I had enjoyed the course, I didn't like the teaching staff and the other students in my course were a bit boring sometimes, so I changed to have more*

> *fun. I wanted to draw more and make things (I changed from architecture to industrial design). And I wanted uni to be less serious and to have more fun, less fiddly and stressful.*

A course under threat:

> *The fact that (the) nursing faculty was discussing closing the course did not make me feel comfortable or welcome. It made me worry that I wouldn't have a faculty to come back to the next year.*

The size of classes and of the university itself often seem to cause feelings of unimportance and isolation, as well as creating practical difficulties to making new friends:

> *I have never felt more alone and unimportant than I did in my time at (that) university. I was just a number to them and I have to go back because no-one else offers vet science.*

> *…was lost in big classes, with different people in each of them.*

> *I missed home a lot-family/friends/boyfriend. I also find it hard to make friends at such a large uni.*

> *Thought that the uni was a cold place. The timetable was such that in different semesters you wouldn't meet the same people. Hence you did not make close friends.*

> *(I would have continued if…) I had of found it easier to make friends I didn't enjoy being at the university campus and found I had nobody to talk to…I found the university very large and I didn't like the campus. Mainly I felt too lonely and didn't enjoy going to that university everyday.*

Feeling different from other students is a common element in the loneliness students feel. This may be due to perceived differences in interests, values, cultural backgrounds and goals:

> *Lack of friends. Felt uncomfortable in such an immoral environment -> girls, lame talks about life -> e.g. Footy, big brother -> people wasting time at pubs/clubs, etc.*

> *Wishing to savor the subject matter later on amongst adults (not kids), possible in the U.K. without feeling things to be spoilt & devoid of stimulation via my peers lack of regard for the non-vocationally motivated students.*

> *Despite the many nationalities (*at X university) *they're isn't much of a multicultural feel, they all stick together… and if you're not one of those you've got nowhere to be. I would go a whole week without speaking to a soul. At high school I was a very outgoing, happy and friendly person and I felt that (x university) was beginning to change me, indeed it has. I was isolated and lonely. Perhaps it was due to the fact that I came from a predominantly migrant school and thrust into Anglo …. 2004 affected my confidence in deeds with others and instilled in me a cynical view of society in general...*

> *Myself as the sole token student of my ethnicity within the "native" speakers stream within the Chinese department, had not felt victim and unwilling to be an accessory to their racial discrimination and blatant bias*
>
> *Found it hard to collaborate with the other students in the course, they had different interests to mine.*
>
> *I am far more passionate about my new course, my fellow students are much more like me and we have meaningful interaction not based on shopping, drinking & looking sexy! The staff are excited, engaging, welcoming. I feel at home!*

While many students find it hard to make friends it can be particularly difficult for part-time students whose time on campus is limited:

> *It's hard being part time (particularly when working) and it's hard to make friends as I have to return to work.*

Several students comment on the nature of the differences between school and university and the discomfort this causes:

> *(I would have continued if…) the change from high school to university was smoother. The difference was too intimidating and extreme from the comfort I experience from high school.*
>
> *Overall, I was very uncomfortable at university. I didn't want to ask questions or ask for help due to embarrassment. The lifestyles, atmosphere, course and pressure weren't at all what I was expecting and the change was too vast.*

Some suggest that transition from school to TAFE is easier due to greater similarities between the two:

> *TAFE and high school I found more closely related in how the relationships, subjects, courses etc were designed. Going to TAFE was an easier and less extreme change from high school.*
>
> *University environment didn't suit me. TAFE learning environment is more, flexible, open, helpful.*

For many students, the feelings of loneliness and isolation that they experience compound with other kinds of difficulties, such as dissatisfaction with the course, the support offered and financial concerns, to influence discontinuation:

> (I would have continued if…) *I had more friends. And wasn't so lonely I could manage my financial difficulties better i.e.: had more money. If I was not forced to do chemistry. Suffered depression - no friends - no money -*
>
> (I would have continued if…) *the course was enjoyable. The uni was closer. The uni was more open/friendly/helpful. Disliked course. Lack of communication between*

> *teacher/student. Hated 2 1/2 hrs travel. Friends all lived ages away/ course teachers were unhelpful. Lack of help to use library or research*
>
> *Difficult to find a computer to use, not used to so much travelling to & from uni, homesick, didn't make friends easily, hard to know who to talk to at uni, felt very isolated.*

Not all who experience loneliness and isolation are young. Some older students also feel different from the majority of younger students:

> *I felt alone at the uni especially not being young and being different from the majority of students.*
>
> *Being 26 when starting a course filled with 17 & 18 years olds I found it quite hard to relate to a lot of the 120 odd other students.*

Students enrolled externally also experience particular kinds of isolation. Comments indicate that the isolated nature of external study, exacerbated by other factors such as difficulties in communicating with other students and staff, are the primary cause of external students losing motivation to continue:

> *…it is too difficult to motivate yourself when studying externally and there's no one to talk to about your problems*
>
> *…external study is very lonely & isolated. I found it difficult to get motivated.*
>
> *… prefer personal interaction. Missed not discussing issues with other students.*

The comments highlight the need for more support for students in transition from school to university and particularly for those who relocate to attend university, to assist them to feel welcomed, supported, accustomed to and comfortable within the university environment. More attention is also required to social aspects of university – ensuring that all students have opportunities to meet and make friends with others who share similar interests and values – and to mix with and learn about people they see as different from themselves, so that difference itself feels less uncomfortable. This means providing them with a variety of opportunities to interact with each other and with staff, through social activities and events, including clubs the provision of social spaces (e.g. cafes, clubrooms etc) and an interactive on-line environment that connects students with similar interests.

Further attention is also needed to help external students to feel welcomed and valued by their universities, staff and fellow students. Comments suggest that this will entail providing more opportunities for these students to interact with staff and other students, as well as greater consistency in providing even very basic support, feedback and information to these students. Opportunities to interact with other external students are particularly sought after by external students. While distance may create difficulties in providing social activities and events that will assist this, more could be done to create an interactive on-line environment that provides much greater information, ongoing support and opportunity for interaction, such as through forums for informal as well as formal

discussion between students, support for the development and continuation of student-student networks (e.g. chat rooms, email, telephone etc) and for other initiatives that will help to create a vibrant and supportive virtual learning community.

11.9 Family Commitments

About one in ten students who left university indicated that conflict between their study and family commitments was a large influence on their discontinuation. As might be expected, many of these students were parents caring for children, but not exclusively. Other forms of family commitments were also apparent.

The data analysis found that students citing this reason tended to be female and older. They appeared to have withdrawn from their courses reluctantly, having wanted to enrol in their university and course. They were more often enrolled part-time, off-campus or in a mix of the two modes, possibly in attempts to reconcile competing commitments. Many also indicated conflicts between study and work.

Comments underline that families can have several different influences on university study, including on the choice of university and course, which affects younger students in particular. Family commitments, responsibilities or unexpected family circumstances can impact on the ability of students to continue with study, or with their motivation to study, particularly for older students with children. Family related reasons for discontinuing are very often linked with the financial circumstances and paid work responsibilities of the students concerned. Comments help to explain and underline difficulties students face in combining study with family responsibilities – and very often also work responsibilities.

Competing responsibilities are an issue for many students with families, creating stress and anxiety and feelings of inadequacy:

> *Family commitments. Caring for my 3 small children and needing to work part-time to assist in our financial situation.*
>
> (I would have continued if…) *Combining study, work and family commitments were possible, without causing major panic, anxiety attacks to occur.*
>
> *University is not family friendly, it takes over your whole life in each semester. You find yourself re - introducing yourself to your family at the end of semesters.*
>
> *… in terms of age of children was not the best. The necessity to increase my working hours this year on top of uni I found overwhelming. I felt our life was pressured too much and that was a not an outcome I desired. I think my age is now a deterrent to p/time study & I cannot afford to study full time.*

Students experience difficulties in reconciling competing responsibilities even with support:

> *Found it very difficult to be "super mum" i.e. study, work, manage family & maintain a healthy relationship with my very supportive husband.*

But lives are more difficult still without the support of a spouse or partner:

> *I found the demands of caring for my children alone (one of whom is disabled) and maintaining contact with friends too great, I just didn't have enough time to maintain a house and family as well as complete the set study for my courses.*
>
> (I would have continued if…) *I could have a balance between my family commitments and studies. Specially with young children. It was hard to continue my studies without a big support from someone else.*

Extended family support for indigenous students can be too far from campus and complicated by family's health issues:

> *My mum was caring for my three children and she also has a grandson who is in her care full-time plus her husband who has a disability and that was/is too much for one lady to do all of that! (with the cleaning, laundry getting the kids ready for school everyday(and) a husband with a disability....It made me think a lot about my mum having to do all of that on her own*

Unexpected disasters can prevent students continuing with their studies:

> *(I would have continued if…) I didn't experience a house fire at my home and lose all my belongings. This caused my two children and I to be homeless*

Students with young children may have difficulties in finding suitable childcare – and the costs of this care may be beyond their budget. :

> (I would have continued if…) *I had adequate child care & the course met my expectations*
>
> *Costs of studying with one income ($50k) & two babies in child care was far too high.*

Enrolling in external study is not always a solution to these or similar difficulties:

> (I would have continued if…) *I did not have a new baby and a 3yr old child at home full time with me. I found it difficult to study off- campus and to remain disciplined. Studying at night when family was asleep was very hard as I was tired also with 2 very young children.*
>
> *It was very difficult to work full time and study full time, even if it was distance ed.*

The difficulties of combining study with family commitments can become too much:

> *Too much on my plate with course and family. If you are going to commit to uni you must have suitable time to give it a fair shot.*

The comments lead to a view that universities could do more to become family-friendly institutions that actively assist rather than tolerate students combining family and study

responsibilities, often with work responsibilities as well by developing and implementing work/life balance policies for students. Possible initiatives include ensuring that those who defer or leave for family reasons have a re-entry pathway open to them and are provided with the assistance they need to return to study; increasing flexibility in course requirements; and providing information and training to staff members to increase their understanding of the impacts of family responsibilities on study. Such training could include different cultural understandings of family responsibilities, especially as they relate to Indigenous students.

Governments might also further assist students with family responsibilities by providing support that will reduce the financial burdens that force students with families to participate in paid work at current levels; and ensuring that students have access to high-quality low-cost childcare or respite care.

An option to assist these students would be to provide part-time students with families who are working full-time with the opportunity to defer HECS payments until they have completed the study, or to reduce the level of the repayments while they are studying. This would recognise the additional costs these students incur in participating in higher education and reduce the financial burden this places on them and their families.

11.10 Taking a Break from Study

As noted in the introduction to this chapter, there were a large number of comments indicating that the student had discontinued study in order to travel overseas. These comments were made overwhelmingly by younger students. Due to their similarity, these comments were not separately analysed.

The data analysis in Chapter 9 noted that the phrase ‘taking a break from study’ had a number of meanings and connotations: For some it was the chance to travel and take a holiday; for others it was the chance to work and qualify for Youth Allowance; to re-think their study plans after disappointment with their experiences of university in 2004; and or to devote more time to their family or work. Some implied that it was a temporary interruption to their study, some that it was a chance to take a new direction at university later; and others that it was an end to their university ambitions for the foreseeable future.

Those citing ‘taking a break’ as a large influence on their discontinuation were overwhelmingly students who entered university directly from school. They did not have family responsibilities (were not the main carers for anyone else) but they relied on parents as a main source of financial support. Among discontinuing students, those from the highest socioeconomic quintile, who grew up in an urban area or who had at least one parent born in Australia were more likely to leave university because they needed a break from study.

Students who were squeezed for time by lengthy travel or work and who worked part-time were also more likely to discontinue because they needed a break. Students who were less than fully committed to their course were also more likely to have discontinued for this reason.

Comments also indicate that taking a break was an issue for school leavers who wanted to do something different after many years of study, but that it was also an assertion of independence and adulthood:

> *Just to take a break after 12 years of continuous study. Earn money for future needs e.g. Car, clothes...*
>
> *Needed a break from study eg) straight out of high school and into university.*
>
> *Wanted a break from study. Wanted to earn some money instead of being totally dependent on my parents.*
>
> *I wished to work for a year and save some money. I also felt I needed a break from schooling. I intended to look into alternative universities during this break.*

Taking a break was also a time for re-thinking about the future, especially when first year had not gone well, or the student had been unsure about the course they had entered, or the career they had chosen:

> *I also wanted to take a break from studying after year 12 but went to uni to appease my parents and when I realised my career path change I withdrew from studies.*
>
> *I needed to take a break from studying and think about what I wanted to do with my life and what I want to study not a go no where degree*
>
> *I wanted to take a break from studying and I found it difficult to motivate myself for some of the subjects that were compulsory and didn't interest me.*
>
> *. I needed a break from study and time to decide what I want to do with my life.*

Taking a break was also about gaining new insights in a different way:

> *I wanted to have a break from study and see a bit of the world.*
>
> *I wanted a break from study to travel, broaden my horizons.*

Comments indicate students had a number of different financial motivations for taking a break to work to earn or save money. Some sought to support major purchases such as a car. Some sought money to travel:

> *I needed a break from study to save money and travel.*

Others sought financial independence that would make them eligible for government financial assistance when they returned to study:

> *I wanted a break from studying & a chance to earn more money to study in 2006 and also have earnt enough to be entitled to youth allowance.*

Comments also indicate that 'taking a break' was often a response to difficult personal circumstances such as stress or other illness, the death of a family member, or a relationship breakdown:

> *I knew I needed an extended break from study because I was totally burnt out - I was perplexed that the material I was studying contained topics in which I was interested but, put into a classroom context, all my interest diminished.*
>
> *I needed time for myself (a break) because my mother passed away*

Few students commented on the effect of this break on them, but for one who did there was no doubt that the experience was positive:

> *I had many different jobs & saw a lot of the world in my year off & I feel I've come back with a bit of perspective on life.*

Overall, the comments suggest that deciding to take a break from study is largely positive for students and should not be viewed in the same way as discontinuation for more negative reasons, where the student has been forced to the decision reluctantly.
It is unclear from the comments how many of the students who choose to take a break return to higher education at some point in the future. However, they do suggest that if and when these students do so they will be much more certain about their career goals, the course they choose, will be more committed to the study and bring with them greater knowledge of the world.

11.11 Illness

The data analysis in Chapter 9 noted that illness was a large influence on the discontinuation of 7.4% of students who did not enrol at university in 2005. Withdrawing because of illness was higher among mature age students and students with a disability. Partly due to some students including pregnancy as an illness this reason was more important for females. Students who travelled for more than an hour to get to university were also more likely to withdraw because of illness.

Comments indicate that reasons related to illness are linked to conflict between study and family commitments. Even highly motivated students change priorities when there is illness or death in the family, with their study being relegated to a lower place, behind family concerns:

> *Partner was diagnosed with leukemia in August & I fell pregnant, so have taken a 12mth leave of absence.*
>
> *My mother was diagnosed with a terminal illness causing me to put my life on hold.*
>
> (I would have continued if…) *there was not the relational emotional pressures with my spouse arising from two recent deaths in her family and also from financial pressures arising from me being a low earning full time student for the previous three years.*

> (I would have continued if…) *my daughter hadn't needed an operation she needed my care for a little while and that distracted me from my studies*
>
> *Juggling a full time job & part time 2nd job young family and my father passing away suddenly. Family commitments became a priority over study.*

Illness and death in the family can hinder continuation with study in particular ways for Indigenous students:

> *I was enrolled in the Bachelor of Education conversion course for Aboriginal Islander education officers but I had to relocate twice due to family (immediate) falling ill and dying.*

Some students indicated that they were dissatisfied with the way in which the university had responded to their illness:

> *The university catered better to the needs of those who got sick during exam time. I had glandular fever could not attend all supplementaries and was failed!*
>
> *I presented the university with a doctor's certificate and was assured that I tendered this before the last day of deferment, however when I enquired in 2005 I was told this was not so!*

Illness had also caused academic difficulties that were too hard to overcome:

> *I got really behind due to missing classes when I got sick and when I tried to catch up I found working with some people in groups too difficult (to meet and do work).*

The effect of illness on study could also be indirect, e.g. through its impact on the paid work that supported continuation:

> *(I would have continued if) …I didn't become sick and lose my job, thus my means to pay for study.*

A number of students indicated that their study had contributed to their illness, through stress, particularly when combined with the stresses of other commitments, such as work and in the absence of the supports. For instance:

> *Workload between employment and study severely affected my health forcing me to withdraw along with poor course structure and lack of useful resource support.*

For some students the price of their health was too high to pay:

> *I made myself sick and I thought it wasn't worth doing something if I was going to be like that.*

The comments underline the need for:

- Initiatives to reduce stress on students, particularly those with a range of commitments that put their study at risk
- Support for students suffering from stress so that they are able to overcome it and return to study.
- Flexibility to accommodate the academic needs of students returning after a period of ill-health, whether their own, or a family member
- Recognition of the particular constraints that illness and death within the family causes Indigenous students and their effects on continuation with the study and flexibility to accommodate these.

11.12 Dissatisfaction with the University

While the data analysis did not highlight dissatisfaction with the University as a reason for discontinuation sufficiently influential to be separately considered, it is an issue closely related to dissatisfaction with course, academic difficulties, and social isolation – all of which were found to be strong influences on discontinuation.

A considerable number of comments in response to the open-ended questions indicated dissatisfaction with aspects of the university.

Some of these comments indicated that they were made by students who had changed universities and that these students had not particularly wanted to enrol in the first university, i.e. they would have preferred to enrol elsewhere, for instance:

> *The course was not my first preference and I felt that it was not beneficial to me or my chosen career*

Their comments suggest that these 'university-changers' were concerned with two main issues: the distance they had to travel to university; and the university environment and how comfortable they felt within it. A few mention the university resources and a very small number also mention the reputation or status of the university, but neither of these issues appears important enough on their own to cause students to change universities. Rather they are linked with a range of other factors, for instance

> (X university) *is seen as better (than Y) and time travelling was frustrating, I wanted something closer*
>
> *My original intention was to enroll in another university. The program allows more flexibility in career choice is more secure in terms of job attainment. It also is intellectually provocative. (main reason) my current university is more globally recognised and has more resources to facilitate learning. It also has a good reputation.*

For many students the time spent in travelling to and from university is wasteful and could better be spent on other activities. In some cases it appears also to hinder study and the student's engagement in activities such as the part-time work some students need to support themselves:

> *I only passed 1 subject in 1st semester as I was travelling to uni & looking after small child. Had very little time to put into my studies and assignments.*
>
> *…had to travel long distance as couldn't afford to live close to uni, but because of travel had no time for part-time work to earn money…*

The costs associated with travel are also of concern, particularly to students facing other financial concerns and responsibilities:

> *…the stress added to the costs of travel 800km per week, lack of continued financial support & threat of "debt" recovery- inability to fund accommodation, enormous time lost in travel, incompatible with creativity!*
>
> *The main reason for discontinuing study in 2004 was due to travel each day and having to work to cover the costs of travelling.*

An inability to find affordable accommodation near university is an issue for students from rural regions in particular:

> (I would have continued if)*…I had been able to afford accommodation closer to the university, or at least been able to afford travelling costs. Also, I had too many commitments that kept me where I was. My parents couldn't afford to help me with accommodation or travelling costs and I live in a remote rural town, which makes it more difficult for travelling to uni or work.*

Travel concerns are also associated with frustrations about timetabling:

> *I was unhappy with uni for two major reasons. Travel - hour of travel each day x 2 combined with (university's) very inflexible timetabling. (i.e. I had 8-10 hours contact spread over 4 days.) I had one day where I traveled 50-60 mins for a 45 min tute & then 50-60mins home. I applied to transfer to a similar course at a closer uni (and was accepted)*

They arise also in connection with university decisions about where a course will be delivered:

> (I would have continued if…) *they didn't move the entire course to (another campus) which I was going to be unable to travel to each day.*

The discomfort some students experience within a university environment and that leads them to leave or to study elsewhere can arise from a number of different types of experiences. Missing friends, finding difficulties in making friends and loneliness and isolation will be discussed later, but also contributing are experiences that make the student feel devalued, such as being placed in very large classes:

> *I felt like I didn't count in the end and "crowded out" as there were always too many students in the lectures and tutorials*

A small number of students indicate that they feel threatened within the university environment:

> *The location of the campus made drugs a serious& ongoing issue.*
>
> *What pushed me to actually leave was a rape by another student who was in two of my classes*

Some feel 'different' or alienated:

> *I have been raised in a conservative, Catholic family, and found it difficult to cope with the complacent worldliness of students and staff at (university).*
>
> *I felt inferior to everyone else*
>
> *I felt as though I didn't know what to do and was never right.*
>
> *Felt alienated and isolated in the university environment owing to significant perceived differences to other students*

The few students who comment on inadequate resources provided by the university raise several aspects of the issue. The first is a lack of resources required for the study within the university:

> *Having one copy of recommended reading between two campuses was an absolute nonsense.*
>
> *…law library was so substandard that set assignments couldn't be completed.*

Second is inadequate user-friendliness of resources:

> *…found… resources hard to use.*

Thirdly was pressure on resources due to the number of students:

> *Lectures were really crowded and there never seemed to be enough resources or time (from the lecturers) available for the students.*

The reputation of the university and the resources it provides for students can be factors in students' decisions to leave, but their effect is limited. Fewer students would change universities if they were able to gain entry initially to their preferred university; were able to find affordable accommodation close to the university, so that they could minimise the time and costs of travel; or if greater financial support were available to assist them to meet travel and accommodation costs.

The 'institutional habitus' – the values and practices of the institutions – and its 'fit' with the 'familial habituses' of students (Thomas, 2002) is also important. Comments indicate that some students, for a number of reasons, feel unimportant and undervalued,

particularly where the university has many students, classes are large and impersonal and staff and other students appear indifferent to them or intimidating.

An ‘institutional habitus’ that is accepting of difference and which facilitates greater match with the students from different social and cultural backgrounds, will help to address this situation. As Thomas indicates, this is characterized by staff attitudes and relationships with students that minimize social and academic distance, making students feel valued and able to seek guidance; the use of inclusive teaching and learning strategies; collaborative or socially-orientated teaching and learning; a range of assessment practices that give all students opportunities to succeed; choice, flexibility and support with regard to accommodation; a diversity of social spaces; and the absence of expectations that students must change to fit in with the institution.

12. Changing Universities

This chapter examines the extent to which students enrol in a new university in the year after they commence their course, which students are more likely to change universities and why they change. In total, 6.9% of students who commenced a Bachelor's Degree in first semester 2004 were enrolled in a different university in first semester 2005, which is 8.0% of students who were still enrolled in a university in first semester 2005.

Students were asked if they had enrolled in the same university in first semester 2005 and, if they had not, were asked if they had been enrolled in a university in April 2005. A small number of students may have changed universities and not been recorded—students who changed universities in 2004 or early 2005 and then left before April 2005.

This chapter focuses on students who changed universities as a proportion of those who were enrolled at university in first semester 2005. As with the previous chapter, the reason for shifting the reference group from all students who did not change universities to just those students who were enrolled at university in first semester 2005 and did not change universities is to avoid confounding the extent of university change with attrition. Categories of students with high attrition would have a smaller proportion of students available to change universities. Hence Tables A.2, A.3 and A.4 and the multivariate analyses in Tables A.5 and A.6, on which this chapter is based, are restricted to students who were enrolled at university in first semester 2005.

Changing universities is frequently a positive move by students—when they had enrolled in 2004 it was their intention to change universities. When students' Year 12 or other results do not allow them direct entry to a course of choice, they can enrol strategically in a course to use their academic results from that course as a stepping stone to the same or a different course in another university. These students create pathways within undergraduate study at university and enrol with no intention of completing their course.

Although the majority of university change (55.4%) is associated with students changing courses, a substantial minority of students do not change their course. They may be seeking to enrol in a university or course that they perceive to be more prestigious and which they believe will provide better career prospects after graduation.

Other students change universities for different reasons. They may be prompted by loneliness or the costs of travel to seek enrolment at a different university where they have friends or that is closer to home. Their enrolment may or may not have been made with the hope of later changing to a different university, but after a year of study it seemed sensible to make the change. Still other students are driven to change universities by their university experiences during 2004 and may move to a university that is less convenient or was initially less desirable.

Although the majority of students choose to change universities, this is often not without cost to themselves and others. If their initial study is fully recognised within their new university, then it is a seamless transition without cost. To the extent that their study in the initial university is not recognised by the new university, however, the student and others bear that cost.

12.1 Types of Students

Table 12.1 shows the way in which the likelihood of changing courses varies among the types of students for those who enrolled at university in first semester 2005. As with changing courses, again it is school leavers who are more likely than other students to change universities and the three categories that correspond to mainly mature age students who are least likely to change universities. The pattern is repeated for both male and female students, but the differences are not significant for male students. The overall difference between male (7.8%) and female (8.1%) students is not statistically significant.

There are several reasons why *School leavers* might be expected to be more likely to change universities in their second year. School leavers are more likely to be geographically mobile as the first years of university correspond with a transition into adult status and independence from their parents.

School leavers are also less likely to already have careers, jobs and families that limit opportunities for moving home to enrol at different universities. By definition, they are new entrants to university. Students in some other categories, especially *Continuing students,* have already had opportunities to change their course and their university. In this sense, *School leavers* are a step behind older students in selecting pathways through undergraduate university education.

Table 12.1
Enrolment in a different university in first semester 2005 by type of student: Students enrolled at university in first semester 2005

Enrolled in a different course in first semester 2005		*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*All students*
		%	%	%	%	%	%	%	%
Persons	***	10.4	7.7	6.9	4.8	5.8	2.9	5.9	8.0
Males		9.5	11.8	6.8	5.5	3.8	2.7	4.4	7.8
Females	***	11.1	5.5	6.9	4.2	7.1	3.0	7.2	8.1

See *Notes to tables*

12.2 Who changes universities?

The relationships of student and course variables with the likelihood of students changing university generally accord with the observation that school leavers are more likely to change universities than are other students. Hence characteristics such as age, educational attainment, living arrangements and financial support reflect the connection with school leavers. Apart from the expected strong relationships to questions about the degree to which students had wanted to enrol in their course and (particularly) university, the only other course characteristic of any importance is the type of university in which the student was enrolled. In the multivariate analyses containing all the variables, only two

characteristics are statistically significant—the extent to which the student had wanted to enrol in their course and university in 2004. The discussion draws on results in Tables A.2, A.3 and A.4 for persons, males and females respectively and on results from multivariate analyses in Tables A.5 and A.6.

Among students who were enrolled at university in first semester 2005, those who were more likely to change university were:

- ***Younger students***—10.5% of 15 to 19 year-olds changed universities compared with only 4.3% of 25 to 34 year-olds and 4.5% of students aged 35 years or older. This pattern was similar for male and female students separately (Tables A.3 and A.4) although the relationship was less pronounced and not significant for male students. Age is of course strongly linked to entry to university from school and other lifestyle characteristics. The effect of age persists holding other student background characteristics constant (Table A.6) but disappears in the full multivariate model (Table 5).

- ***Students living in urban areas***—8.6% of students whose family lived in *Very accessible* areas when they were teenagers changed universities compared with 8.2% of students from *Accessible* areas and 5.1% of students from less accessible areas. For both males and females separately, students from less accessible areas are less likely to change universities, but neither relationship is statistically significant. The relationship is still significant when other background variables are controlled. This effect may simply reflect the greater choice among universities available to most students in most capital cities—choices they may be able to access without major personal or financial disadvantage and some possible advantages.

- ***Students who had to move between states to attend university***—14.7% of students who had to move between states to attend their university changed universities compared with 7.8% of students who did not move and 8.3% who moved within their state. The pattern was similar for male and female students considered separately, but neither relationship was statistically significant. The effect of moving between states is significant when other background variables are held constant.

  Students who move between states to attend university may be exhibiting a greater willingness to move to attend university—a willingness that can exhibit itself in a higher rate of inter-university mobility in their second year of university study. On the other hand, some of this higher rate of university mobility may be the result of moving to a university closer to home in the second year.

- ***Students who had not enrolled at university before first semester 2004***—8.9% of students who had never attended university before changed courses compared with 6.3% who had partially completed a course and 3.9% who had completed a course. The relationship was similar for male and female students, but only significant for female students. A similar pattern is evident in whether a student had received credit for earlier courses. These patterns are consistent with higher levels of movement between universities by *School leavers*.

- ***Students whose highest level of educational attainment was Year 12***—9.2% of students with only Year 12 changed course compared with lower proportions of students in all other categories. This pattern was statistically significant for female students. When other background variables are held constant, the effect of highest educational attainment of Year 12 is not statistically significant (Table A.6). Again, this suggests Year 12 without any post-school qualifications is a correlate of School leavers
- ***Students who were studying at school in 2003***—were more than twice as likely to change university as students in most other categories of activity in 2003. This pattern is stronger for female students. Differences among the various types of main activity in 2003 in the extent to which students change universities are not statistically significant when other variables are held constant.
- ***Students for whom their Year 12 results were a major influence on their decision to enrol in 2004***—11.2% of students whose decision to enrol in their 2004 course was influenced by their Year 12 results had changed universities by first semester 2005, a result that is repeated for male (11.2%) and female (11.1%) students separately. Students may enrol in a university or course simply because they can—the course has a higher entry score than similar courses in other universities or different courses in the same university. Alternatively students may enrol at a university or in a course only because their Year 12 results were not sufficiently strong to gain entrance to a preferred course or university. The influence of Year 12 results on enrolment, however, is part of the *School leaver* matrix of characteristics and if Year 12 results have an effect over and above this general correlation, its effect should be significant in the multivariate analysis, but it is not.
- ***Students who were* not *the main carer for children dependent on them***—8.5% of students who were *not* the main carer for someone else changed universities compared with only 2.3% of students who were caring for a pre-school child and (2.4%) of students who were the main carer for a primary school aged child. The pattern is similar for male and female students, although the relationship is only significant for female students. Holding other background variables constant, there is no influence of a student's role as a carer on their likelihood of changing their university before the start of the next year. Caring for children or others may place time, social or financial constraints on geographic mobility.
- ***Students who were living with their parents** (8.8%) **or at a university college or other residence** (8.8%).* Students who were living with children, either with (2.1%) or without (1.4%) a partner were less likely to enrol at a different university in 2005. Students in *Other* circumstances (mainly living alone) (7.3%) or living with a partner but no children (6.5%) were closer to the mean. Male and female students show the same pattern, but only the relationship for females is significant.
- ***Students who travelled more than 90 minutes to get to university from home or work (18.5%).*** While enrolling in a university requiring substantial travel might be interpreted as a strong commitment to the university or course, the situation may not be the result of choice. A student who has to travel for a long time to get to university

is more likely to want to change universities if possible, simply because of the costs of travel, both direct financial costs and opportunity costs. They are also less likely to have wanted to enrol at their university in the first place. The relationship is equally strong for male and female students, although only statistically significant for female students. It is not significant in the multivariate analyses where other variables such as the extent to which a student had wanted to enrol at their university are held constant.

- ***Students for whom their parents or a guardian were a main source of financial support (9.2%).*** This effect is relatively small and is consistent with the matrix of variables associated with being a *School leaver*. None of the other financial variables is statistically significant.
- ***Students who had enrolled at a New Generation university (11.3%).*** Students who had enrolled at a Technology university (5.5%) or a Group of 8 university (6.1%) were less likely to change university than were students who enrolled at a rural (8.9%) or innovative research (9.6%) university. The pattern is similar for both male and female students, although only the result for female students is significant. The New Generation universities suffer both from problems of students' perceptions about their prestige and provide a first foothold in the university system for those seeking pathways to other universities that they cannot enter directly on the basis of academic merit. The effect of the type of university in which a student was enrolled is not significant when controlled for other student and course characteristics, particularly the extent to which a student had wanted to enrol at their university or in their course.

- ***Students who had not definitely wanted to enrol at their university.*** The relationship of this variable with whether or not students enrolled at a different university is large. The less a student had wanted to enrol at their university, the more likely they were to be enrolled at a different university in first semester 2005. Only 3.5% of students who had definitely wanted to enrol at their university changed universities, compared with 12.3% who had some reservations, 19.9% who didn't want to but didn't mind and 34.2% who had really wanted to enrol at another university. This pattern is repeated for male and female students separately and remains statistically significant after controlling for a number of other student and course related variables.

- ***Students who had not definitely wanted to enrol in their course.*** The extent to which a student had wanted to enrol in their course also had a large influence on whether they enrolled in a different university in first semester 2005. Only 4.7% of students who had definitely wanted to enrol in their course in first semester 2004 changed universities by first semester 2005. In contrast, 11.1% of students who had some reservations about enrolling in their course had changed universities by first semester 2005, 18.0% of those who had not wanted to enrol in their course but didn't mind being in the course and 25.8% of those who had definitely wanted to enrol in another course, had changed universities.

- ***Students who had withdrawn from all their units or not received any assessment in first semester (25.0%).*** Students who passed all their subjects were less likely to change their university (7.1%), while students who had passed some units and failed none (10.3%), passed some units and failed some (9.1%) or had passed no units and

failed some (10.2%) were slightly more likely to change university. The overall pattern is similar for male and female students, but significant only for females.

Despite the higher rates of university transfer among students who had withdrawn from all their units or not received any assessment in first semester 2004, the majority of students who enrolled at a different university in first semester 2005 (73.3%) had passed all their units in first semester 2004. A further 10.9% had passed some units without failing any, 6.8% had passed some units and failed others and only 9.0% had failed all their units or received no assessment.

12.2 Why do students change universities?

Students who changed universities were asked how much their decision to discontinue the study they were doing in first semester 2004 was influenced by each of 64 potential reasons. They could answer that the question had *No influence, A little influence, Moderate influence* or a *Large influence.* These are the same questions asked of students who did not continue at university (Table 8.1).

The distribution of responses to these questions is shown in Table 12.1. They are ordered in the table by the percent who responded *Large influence.* In general and putting to side issues of the metric, the more important reasons why students change universities are the first ten or so in that list. The proportion of students who responded *Large influence* declines rapidly from over 50% for the first item to under 10% for the twelfth. Most of the remaining items were endorsed by increasingly small proportions of the students who changed universities.

The students were not asked why they changed universities—just about the influences on their decision to discontinue their 2004 study. Nevertheless their main responses often address the issue of moving to a different university. Most of the more important reasons are parts of only two of the scales described in Appendix B—*University choice* and *Change of direction.* Only two of the top 12 reasons were not covered by these scales—*I couldn't study the subjects I wanted* and *I didn't like the way the course was taught.* The first is not part any of the seven scales described in Appendix B while the second is part of the *Dissatisfaction with course* scale.

It is understandable that some of the main reasons identified in Chapter 8 as influencing the decisions to discontinue their study of students who did not enrol at university in 2005 should not be as important for students who change universities. For instance, if a student experienced conflicts of study with work or family commitments, those problems are unlikely to be resolved by changing universities. Similarly if a student discontinues because of financial difficulties or illness, changing universities is unlikely to resolve the problem. There are of course some scenarios where enrolling in a different university (and possibly a different course) would address these difficulties, but in general it is reasonable to expect (and Table 12.1 shows) that they are less important for students who change universities.

Table 12.2
Reasons for discontinuing 2004 study: Students who enrolled at a different university in first semester 2005 (%)

Influence . . .	None	A little	Mod-erate	Large	Total	n	Mean
How much was your decision to discontinue the study you were doing in first semester 2004 influenced by each of the reasons below?							
I was offered a place in a course I preferred	30.5	5.1	10.1	54.3	100.0	627	62.8
I wanted to study somewhere else	20.9	13.0	16.4	49.6	100.0	638	64.9
I found something I'd like to do better	35.3	9.6	16.6	38.5	100.0	627	52.8
I found a better path to my career goals	37.3	8.3	19.7	34.7	100.0	629	50.6
I always intended to move to another university	43.3	11.9	13.1	31.7	100.0	634	44.4
I changed my career goals	52.2	9.4	11.2	27.1	100.0	627	37.8
I discovered that the course would not help me achieve my career goals	47.6	13.5	16.6	22.3	100.0	636	37.9
I couldn't study the subjects I wanted	54.7	13.7	11.5	20.1	100.0	637	32.3
The course wasn't what I expected	56.7	12.5	15.4	15.4	100.0	634	29.8
I didn't like the way the course was taught	56.5	17.2	12.5	13.8	100.0	635	27.8
The subjects weren't as interesting as I expected	54.4	17.5	14.4	13.7	100.0	636	29.1
The university was not prestigious enough	70.2	12.2	8.3	9.3	100.0	634	18.9
I didn't get enough help from academic staff	67.7	15.0	10.1	7.2	100.0	632	19.0
I felt lonely, isolate or unwelcome	75.1	11.1	6.9	7.0	100.0	637	15.3
The course didn't challenge me enough	73.5	12.4	7.2	6.9	100.0	636	15.8
The course was too theoretical	73.6	11.6	7.8	6.9	100.0	635	16.0
I had trouble finding out things I needed to know	70.8	13.1	9.2	6.9	100.0	635	17.4
I felt stressed and anxious about my study	74.9	12.4	6.2	6.6	100.0	626	14.8
I felt that I didn't fit in at university	73.8	13.9	6.3	6.1	100.0	635	14.9
The course timetable didn't suit me	76.5	11.8	5.6	6.1	100.0	636	13.7
It was difficult to balance study & work commitments	76.5	12.8	5.4	5.3	100.0	629	13.2
I needed a break from study	83.3	7.3	4.2	5.2	100.0	635	10.4
I couldn't get govt income support (YthAllow, etc)	86.1	4.0	4.8	5.2	100.0	630	9.7
I needed help and didn't know who to ask	80.2	9.2	5.5	5.1	100.0	629	11.8
I had trouble making friends	80.2	10.2	5.1	4.4	100.0	631	11.2
I couldn't cope with the work as well as other students	78.1	10.5	7.0	4.3	100.0	636	12.5
The work was harder than I expected	77.0	11.6	7.2	4.2	100.0	637	12.8
I felt different from other students	80.7	10.0	5.5	3.8	100.0	631	10.8
I had trouble getting the study resources I needed	77.1	13.0	6.3	3.6	100.0	629	12.1
I moved with my family to another location	95.5	0.2	0.9	3.4	100.0	631	4.1
My friends were at another university	76.7	12.5	7.4	3.3	100.0	630	12.5
I felt that I was not treated fairly at university	87.5	7.2	2.0	3.3	100.0	633	7.0
I didn't feel adequately prepared	79.6	12.3	4.9	3.2	100.0	635	10.6

Cont /-

Table 12.2—*continued*
Reasons for discontinuing 2004 study: Students who enrolled at a different university in first semester 2005 (%)

Influence . . .	None	A little	Mod-erate	Large	Total	n	Mean
How much was your decision to discontinue the study you were doing in first semester 2004 influenced by each of the reasons below?							
There was too much work	79.4	11.2	6.2	3.2	100.0	635	11.1
Illness - my own	91.3	3.6	2.2	3.0	100.0	629	5.6
I couldn't afford accommodation near the university	90.7	2.8	3.9	2.6	100.0	629	6.1
I couldn't afford travel costs to university	85.2	7.9	4.4	2.5	100.0	631	8.1
Study clashed with my full-time work commitments	95.1	1.2	1.3	2.4	100.0	630	3.7
The assessment methods were too inflexible	83.6	10.8	3.3	2.3	100.0	634	8.2
I was offered a good job	93.2	2.4	2.1	2.3	100.0	630	4.5
Study clashed with my part-time work commitments	89.6	5.3	2.9	2.2	100.0	631	5.9
My family could not afford to support me	87.4	5.9	4.5	2.1	100.0	630	7.1
My employer offered me more hours of work	91.5	4.6	1.8	2.1	100.0	630	4.8
I couldn't afford to pay the fees I had to upfront	90.2	5.1	2.7	2.0	100.0	630	5.5
I couldn't afford the study materials	87.4	7.4	3.5	1.8	100.0	629	6.5
I felt unsafe or insecure in the university environment	89.2	7.0	2.1	1.7	100.0	630	5.5
Illness or death - family member or friend	95.0	2.3	1.1	1.6	100.0	625	3.1
The course was too practical	87.2	8.4	3.0	1.5	100.0	634	6.2
I couldn't find suitable accommodation	93.9	2.4	2.3	1.3	100.0	629	3.7
My friends are not studying at university	91.0	5.4	2.4	1.2	100.0	631	4.6
Family members study/studied at a different univ.	91.5	4.8	2.6	1.0	100.0	631	4.4
My job was transferred to a new location	98.1	0.4	0.5	1.0	100.0	629	1.5
No one in my family had studied at university	94.8	2.4	1.8	1.0	100.0	629	3.0
My study clashed with my family commitments	92.0	4.7	2.4	0.9	100.0	630	4.1
My family wanted me to do something else	91.1	5.4	2.6	0.9	100.0	629	4.5
I had difficulties with physical access	97.2	0.9	1.1	0.9	100.0	631	1.9
I did not have a computer at home	95.3	2.1	1.7	0.8	100.0	631	2.7
I couldn't get or use study leave from my employer	95.7	2.3	1.3	0.8	100.0	630	2.4
I couldn't get access to computers at the university	90.2	6.8	2.2	0.8	100.0	631	4.5
I couldn't get the disability support I needed	98.7	0.1	0.5	0.8	100.0	628	1.1
My computer couldn't support the course software	94.2	3.8	1.4	0.6	100.0	630	2.8
My friends wanted me to do something else	92.5	5.8	1.4	0.3	100.0	630	3.2
The childcare I needed wasn't available	99.4	0.1	0.2	0.2	100.0	631	0.4
I couldn't afford the childcare I needed	99.3	0.4	0.2	0.1	100.0	630	0.4

Notes The wording of some items has been abbreviated - refer to Question 36 in the questionnaire in Appendix E for the full wording. The mean is the weighted sum of (None)*0 + (A little) * 33.33 + (Moderate) * 66.67 + (Large) * 100. Items are presented in descending order of the Large influence response which is highlighted. Based on the responses of 649 students who enrolled at a different university in first semester 2005 and who responded to at least one reason for withdrawing.

Box 12.1
Comments by reasons for discontinuing course: Students who enrolled at a different university in first semester 2005

I would have remained in the course and the university if . . .

Change of direction

- I had not changed the career I wanted.
- I actually enjoyed accounting more than I thought I would enjoy engineering.
- I had really liked the job, but through placement decided it would not be challenging or varied enough for me.
- It matched my career goals and was easier to commute to and from.
- I could have combined it with Law.
- The course in which I enrolled was what I really wanted to do. Also if I fitted into the university more and made more friends. I did not like the uni at all and would not go back there.
- I hadn't changed my goals and found I really wanted to be a teacher instead.
- It had been what I had expected from the info I gained before I enrolled (course description etc).
- I had wanted to continue on a career path to become a software engineer.
- I enjoyed the course and subjects, which I did not.
- I didn't change my mind and find something I really wanted to do instead.

University changers

- I had been at the university of my choice.
- They had a better course content and reputation.
- It was my first preference, but it was my last and I did not enjoy it very much as I felt I did not want to do it.
- I couldn't get a better offer from a more prestigious university
- The university was actually closer to my home, & if the university had a better reputation in terms of academic excellence.
- It were as prestigious as my current university, offered me better opportunities, experience and if I weren't as isolated from my social circles.
- I didn't get into my chosen course & university.
- Nothing, my original intention was to enroll in another university.
- I didn't get into the same course at another university.
- N/a. This course was a means to an ends—transfer.
- It was my first preference. I used this degree to upgrade to another university which is well known for its Business degree.

Other reasons

- If the job that paid well was in the same town or state. I moved to another university because I was offered a job in another state.
- The course was more flexible and allowed me to do a certain major.
- My husband did not get transferred with his line of work and we remained in Melbourne.
- My family & boyfriend lived up there with me.
- I was living at home.
- I had spoken to university support staff about my concerns. If I knew that I had made the right choice which I now know that I did.
- I didn't have to travel so far.
- My parents could have afforded to keep me in Sydney.
- There was more help and advice offered.
- I felt I was capable of passing all second-semester subjects without undue stress and anxiety.
- I was able to find part-time work and if it had of been closer to my family.
- I didn't get chronic fatigue

Table 12.3
Reasons for discontinuing 2004 study by type of student: Students who enrolled at a different university in first semester 2005

Type of student . . .		*School leavers* %	*Gap year* %	*Other young entrants* %	*Contin-uing student* %	*Full time workers* %	*Carers* %	*Other mature age* %	*All* %
Persons									
Change of direction	o	27.2	33.7	40.9	17.2	14.8	16.4	15.7	26.0
Academic difficulties	o	5.2	2.5	7.8	2.9	3.8	5.0	9.1	5.0
University choice	**	38.3	41.5	33.9	17.0	22.4	24.8	22.0	34.3
Dissatisfaction with course	o	4.1	2.5	2.8	5.3	0.0	0.0	0.0	3.7
Conflict with employment	o	2.3	0.0	3.8	1.7	6.5	4.5	4.2	2.5
Financial difficulties	o	1.2	2.5	0.0	1.7	0.0	5.0	9.3	1.6
Social isolation	o	5.0	7.0	11.6	3.6	0.0	0.0	4.2	5.0
Males									
Change of direction	o	22.5	19.3	34.1	14.3	0.0	32.2	14.0	21.2
Academic difficulties	o	5.7	0.0	8.2	6.3	0.0	0.0	14.8	5.6
University choice	**	40.0	66.6	39.2	15.2	54.9	0.0	40.2	38.3
Dissatisfaction with course	o	5.7	0.0	0.0	3.6	0.0	0.0	0.0	4.3
Conflict with employment	o	0.7	0.0	0.0	3.6	0.0	0.0	0.0	0.9
Financial difficulties	o	0.8	0.0	0.0	3.6	0.0	0.0	14.8	1.4
Social isolation	o	4.8	0.0	16.3	6.4	0.0	0.0	0.0	5.0
Females	o								
Change of direction	o	30.4	50.0	45.7	19.8	20.8	11.9	16.5	29.3
Academic difficulties	o	4.9	5.2	7.5	0.0	5.3	6.4	6.1	4.7
University choice	**	36.9	13.4	30.2	18.6	9.4	31.8	12.4	31.4
Dissatisfaction with course	o	3.1	5.2	4.7	6.8	0.0	0.0	0.0	3.2
Conflict with employment	o	3.3	0.0	6.5	0.0	9.1	5.8	6.3	3.5
Financial difficulties	o	1.5	5.2	0.0	0.0	0.0	6.4	6.3	1.7
Social isolation	o	5.2	14.9	8.3	1.2	0.0	0.0	6.3	4.9

Notes Values are the percent of students who did not re-enrol at any university in first semester 2004 who discontinued their course for the reason shown. Reasons were provided by the 649 students who enrolled at a different university in first semester 2005 and who answered at least one item on reasons for withdrawing. See *Notes to tables.*

Reasons measured by other scales, however, are potential causes of students changing universities or courses or both—*Dissatisfaction with course, Social isolation* and *Academic difficulties.* The items that tap these dimensions, however, are generally a fair way down the list in Table 12.1. For *Dissatisfaction with course,* for instance, the seven items average only about five percent of respondents agreeing that they had a *Large influence* on their decision. Perhaps it is only to be expected that students who have a poor experience of teaching at universities are less likely to try enrolling elsewhere.

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Table 12.4
Reasons for discontinuing 2004 study by type of student: Students who were enrolled at university in first semester 2005

Type of student . . .		*School leavers* %	*Gap year* %	*Other young entrants* %	*Contin-uing student* %	*Full time workers* %	*Carers* %	*Other mature age* %	*All* %
Persons									
Change of direction	*	2.8	2.6	2.5	0.8	0.9	0.5	0.9	2.0
Academic difficulties	o	0.5	0.2	0.5	0.1	0.2	0.1	0.5	0.4
University choice	***	3.9	3.2	2.1	0.8	1.3	0.7	1.3	2.7
Dissatisfaction with course	o	0.4	0.2	0.2	0.2	0.0	0.0	0.0	0.3
Conflict with employment	o	0.2	0.0	0.2	0.1	0.4	0.1	0.2	0.2
Financial difficulties	o	0.1	0.2	0.0	0.1	0.0	0.1	0.5	0.1
Social isolation	o	0.5	0.5	0.7	0.2	0.0	0.0	0.2	0.4
Males									
Change of direction	o	2.1	2.3	1.8	0.8	0.0	0.9	0.6	1.6
Academic difficulties	o	0.5	0.0	0.4	0.3	0.0	0.0	0.7	0.4
University choice	*	3.7	7.9	2.1	0.8	2.1	0.0	1.8	2.9
Dissatisfaction with course	o	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Conflict with employment	o	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.1
Financial difficulties	o	0.1	0.0	0.0	0.2	0.0	0.0	0.7	0.1
Social isolation	o	0.4	0.0	0.9	0.4	0.0	0.0	0.0	0.4
Females									
Change of direction	*	3.3	2.8	3.1	0.8	1.5	0.4	1.2	2.3
Academic difficulties	o	0.5	0.3	0.5	0.0	0.4	0.2	0.4	0.4
University choice	**	4.0	0.7	2.0	0.8	0.7	0.9	0.9	2.5
Dissatisfaction with course	o	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
Conflict with employment	o	0.4	0.0	0.4	0.0	0.6	0.2	0.5	0.3
Financial difficulties	o	0.2	0.3	0.0	0.0	0.0	0.2	0.5	0.1
Social isolation	o	0.6	0.8	0.6	0.1	0.0	0.0	0.5	0.4

Notes Values are the percent of students who did not re-enrol at any university in first semester 2004 who discontinued their course for the reason shown. Reasons were provided by the 649 students who enrolled at a different university in first semester 2005 and who answered at least one item on reasons for withdrawing. Meaningful comparisons are within rows. See *Notes to tables.*

The same might be said of students who had academic difficulties with their studies in 2004, although some could seek out a similar or different course at another university in the belief that it would be academically easier. But given that 71.0% of students who changed universities passed all their subjects in first semester 2004, concerns about coping with the academic work are also not particularly important reasons for discontinuing study in 2004.

The most frequently endorsed reason among those that are part of the *Social isolation* scale is *I felt lonely, isolated or unwelcome,* which was a *Large influence* on discontinuing study in 2004 for only 7.0% of students who changed universities. Again the comments reveal that some students did change universities because they were

homesick and wanted to be closer to their parents and school friends. For the overwhelming majority, however, the quality of their social life on campus was not a major influence on their decision to discontinue their study in 2004.

The major reasons students have changed university by the second year after enrolling in a Bachelor's Degree course are that they had wanted to study somewhere else—31.7% said that they had always intended to move to another university—and that they had changed their career or life goals.

Tables 12.3 shows the proportions with a high score (greater than 62.5%) on each of the seven scales identified from the 64 items for students who changed universities. The results reflect the distribution of responses to the individual items shown in Table 12.2. Only two scales have scores substantially above zero—*University choice* (34.3%) and *Change of direction* (26.0%). The other five scales have little impact on whether students move between universities. Table 12.4 shows the results as proportions of students who were enrolled in first semester 2005 and are correspondingly smaller although the relative differences among the scales are preserved.

Box 12.1 presents some of the written comments that correspond to the two main scales and the other scales. *Change of direction* is captured by the many variants of *I changed my mind about what I wanted to do*. The comments for *University changers* include ideas of moving to a university or course with a better reputation and strategies to achieve longer term career goals that may have been initially frustrated by the allocation of university places on the basis of first year results. The *Other reasons* cover a broad field of possible reasons for changing university.

Table 12.3 shows the variation in the importance of the reasons across the seven types of students. Only *University choice* is significant. As discussed in the previous sections, *School leavers* are more likely to change universities and underlying this is the core reason of *University choice*—they wanted to change universities (38.3%). *Continuing students,* who may have already changed universities, are least likely to have changed universities because of *University choice* (17.0%) while the categories corresponding to mature age students were also less likely to have changed universities because of *University choice.* Although the relationship between student type and *University choice* is significant for male and female students considered separately, there are different patterns, especially for *Full-time workers* and *Carers* and it is not as clear that *School leavers* are more likely to change courses because of *University choice.*

Because Table 12.4 is based on all enrolled students (rather than only students who changed universities) and *Change of direction* and *University choice* are the two dominant reasons for changing university, the tendency for students new to university (*School leavers, Gap year students* and *Other young entrants*) to be more likely to change university because of either of these reasons is clearer. This corresponds to the pattern reported in Table 12.1 for students to change university overall

13. Outcomes from Discontinued Study

The outcomes from incomplete study address concerns about levels of *inefficiency* or cost involved in attrition. If students move from a course in one university to a course in another university with full recognition of their completed first year study, there is little waste of government or individual resources as a consequence. If, however, they do not continue studying or move to another university or TAFE without any credit transfer, there is a possibility of wasted effort and resources—although there is often the prospect of a return to study later.

Benefits from a partially completed qualification are not necessarily restricted to further study. Students who did not enrol at a different university in 2005 or at any other educational institution may still have found the overall experience of their course useful in itself, whether or not they passed any units.

The outcomes reviewed here are necessarily short-term. Several types of outcomes are discussed:

- Levels of educational and labour force participation in April 2005.
- The extent to which their 2004 study helped with selected aspects of work, study and life.
- Students' overall evaluations of their study as *mostly negative* or *mostly positive*.
- The extent to which students had favourable study outcomes:
  - They enrolled in further study in 2005 and received full or partial credit for their study in 2004; or
  - They used their study in 2004 to gain admission to their new course.

The results in this chapter are for students who commenced a Bachelor's Degree in first semester 2004 and did not re-enrol at the same university in first semester 2005—20.6% of 2004 entrants. These students form two categories: Students who were enrolled at a different university in April 2005 (6.9% of entrants) and students who were not enrolled at university in first semester 2005 (13.7% of entrants).

13.1 Education and Labour Force Participation

The educational and labour force destinations of students are commonly taken as indicators of the extent to which people are productively engaged. Table 13.1 shows the educational and labour force participation in April 2005 of students who began an undergraduate degree in first semester 2004 and did not re-enrol at the same university in first semester 2005.

These results are mainly descriptive—it is difficult to draw inferences about short-term educational and (particularly) labour force participation as outcomes of study. Just over a third of students were in full-time work and 45.2% were studying. A group *who were not fully engaged* can be identified from the table—people who were not studying and not working full-time (23.4%).

Table 13.1
Participation in education and the labour force, April 2005: Students who did not enrol at the same university in first semester 2005 (%)

	Employed				*Not employed*		
In April 2005	*Full-time*	*Part-time*	*Total*	*Unpaid*	*Looking for work*	*Not looking for work*	*Total*
Studying	5.3	24.0	29.4	0.4	5.8	9.6	45.2
Not studying	31.4	13.2	44.6	0.5	4.0	5.7	54.8
Total	36.7	37.2	74.0	0.9	9.8	15.3	100.0

Notes Based on 1,917 cases. Missing values were imputed and hence values in this table may differ from those in other tables.

Participation in the labour force and in study is not the whole story in terms of outcomes. Some students, for instance, gave up their studies because of family responsibilities. This is clearer in Table 13.2 which shows that *Carers,* especially female carers (57.8%), had high levels of less than full engagement, presumably associated with caring for children or others.

The level of *less than full engagement* varies across categories of student type. Among several categories it approaches or exceeds 30%. It is predictably low among *Full-time workers* (5.4%) most of whom still have a full-time job and slightly below average for *School leavers* (18.5%) who have a higher rate of transition to further study and are less likely to have family responsibilities that keep them out of the labour market. Nevertheless, one in five of the entrants to university directly from school who do not re-enrol at the same university in 2005 had not moved on to further study or work by April 2005—or three or four out of 100 school leavers who started a Bachelor's Degree in 2004.

Overall female students (25.2%) tend to have higher levels of *less than full engagement* than male students (20.9%) although this varies across categories of student type. For *School leavers,* the estimates for males (20.6%) are slightly higher than for females (17.0%) but for some other student types—*Continuing students*, for instance—the gap between females and males is larger than the overall average.

Table 13.2
Neither in study nor full-time work by type of student: Students who did not re-enrol in first semester 2005

Type of student . . .	*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full-time workers*	*Carers*	*Other mature age*	*Total*
	%	*%*	*%*	*%*	*%*	*%*	*%*	*%*
Males	20.6	21.3	25.9	25.6	1.4	30.9	35.5	20.9
Females	17.0	21.1	28.3	35.1	8.5	57.8	41.3	25.2
Persons	18.5	21.2	27.3	30.9	5.4	54.1	38.4	23.4

See *Notes to tables*

Many students, particularly school leavers, who discontinued their study in 2004, said that they needed to take a *Break from study*. For older students this often meant reducing by one the number of activities in which they were involved so that they could give more attention to their job or family or both. For some younger students it may mean a delayed gap year, including the possibility of qualifying for *Youth Allowance* and form part of a strategy to return to study in the short term. Others, however, may be taking a break after a negative experience of first year university.

13.2 Aspects of Work, Study and Life

The survey included an eclectic collection of questions that attempted to tap various personal, social and vocational outcomes of study (Table 13.3). Students were asked the extent to which their study in first semester 2004 had helped them to, for instance, prepare for further study.

Several of these items attracted reasonable levels of response to the *A lot* alternative: *Preparing for further study* (21.4%); *Clarifying career objectives* (23.0%); and *Clarifying study objectives* (18.8%). Some of these responses may include an element of *well at least now I now know what I don't want to do*. At the possible cost of up to a year foregone as well as a tuition cost, it might be a fairly expensive lesson.

Short-term vocational outcomes, on the other hand, were reasonably rare: obtaining a job (1.6%); keeping a job (1.4%); and obtaining a promotion (1.0%). For some there were positive social outcomes—11.7% reported that their study had helped them to make friends. At a more general level, 7.2% reported that their study had helped them to find a purpose in life.

Table 13.3
The extent to which studies in first semester 2004 helped with selected aspects of work, study and life: Persons who did not re-enrol in the same university in first semester 2005

My study in first semester 2004 helped me to:	*Not applicable*	*Not at all*	*A little*	*A moderate amount*	*A lot*	*Total*	*n*
Prepare for further study %	19.7	13.2	25.0	20.7	21.4	100.0	1855
Clarify my career objectives %	13.7	11.9	24.9	26.6	23.0	100.0	1857
Clarify my study objectives %	15.0	14.3	27.0	24.9	18.8	100.0	1854
Obtain a job %	47.7	41.0	6.6	3.2	1.6	100.0	1840
Keep a job %	52.3	40.2	4.0	2.0	1.4	100.0	1846
Obtain a promotion %	55.8	39.9	1.8	1.6	1.0	100.0	1834
Make friends %	28.1	20.3	22.6	17.2	11.7	100.0	1845
Find a purpose in life %	29.9	30.1	21.8	10.9	7.2	100.0	1849

Notes *Persons* includes some respondents for whom information on their sex was missing.

13.3 Global Evaluation

Students who did not re-enrol at the same university in first semester 2005 were asked for an overall assessment of their study in 2004 with the responses 'Mostly positive', Mostly negative', 'Mixed' and 'Don't know'. Table 13.4 shows that the experience of two in every five (39.8%) attriters was mostly positive, with little difference between males and females. Positive evaluations (16.5%) outweighed negative by a ratio of more than two to one, while 41.3% reported a mixed response.

Table 13.4
Global evaluation of first semester 2004 study: Students who did not re-enrol at the same university in first semester 2005

Type of student	*Mostly positive*	*Mixed*	*Mostly Negative*	*Don't know*	*Total*
	%	*%*	*%*	*%*	*%*
All students who did not re-enrol at the same university in first semester 2005					
Persons	39.8	41.3	16.5	2.2	100.0
Males	39.7	40.9	17.5	1.9	100.0
Females	39.9	41.3	16.0	2.8	100.0
Students who enrolled at a different university in first semester 2005					
Persons	47.7	38.6	12.8	0.9	100.0
Males	50.5	33.7	15.3	0.5	100.0
Females	45.6	42.1	11.1	1.2	100.0
Students who were not enrolled at any university in first semester 2005					
Persons	35.8	42.7	18.3	3.2	100.0
Males	34.3	44.5	18.6	2.6	100.0
Females	36.9	40.9	18.5	3.7	100.0

There were, however, fairly substantial differences among the different types of students (Table 13.5). *School leavers* (33.0%) were least likely to give a positive evaluation while some of the other student types—*Full-time workers* (48.4%); *Carers* (58.3%); and *Other mature age* (53.7%)—were considerably more likely to provide a positive evaluation. *Carers,* in particular, appear to be more positive than other student types about their 2004 university studies in almost all the subsequent analyses.

The tendency for *School leavers* and other categories of young students to have less positive views about their university study than the categories corresponding to older students may reflect the greater emotional investment younger students have in their education than do older students. Young students are typically full-time students. They may have jobs, but these are usually part-time and arranged around study. Discontinuing their study is a greater rupture for younger students. Mature age students frequently have other aspects of their lives (work and family) to which they can return.

The difference can work at two levels. First, to discontinue their studies younger students must overcome a higher threshold of discontent with their studies than older students and

Table 13.5
Global evaluation of first semester 2004 study as *mostly positive* by student type: Students who did not re-enrol at the same university in first semester 2005

Type of student	*School leavers*	*Gap year*	*Other young entrants*	*Contin-uing student*	*Full time workers*	*Carers*	*Other mature age*	*Total*
	%	*%*	*%*	*%*	*%*	*%*	*%*	*%*
All students who did not re-enrol at the same university in first semester 2005								
Persons	33.0	35.7	40.0	41.2	48.4	58.3	53.7	39.9
Males	33.0	46.1	42.4	36.5	53.8	74.5	52.0	39.7
Females	33.0	25.4	37.8	45.0	44.7	56.3	56.2	39.9
Students who enrolled at a different university in first semester 2005								
Persons	43.9	47.0	54.2	46.4	59.6	86.2	73.5	47.7
Males	45.8	56.1	61.0	52.9	68.7	100.0	69.7	50.5
Females	42.4	36.8	48.2	40.7	56.0	82.3	75.4	45.6
Students who were not enrolled at any university in first semester 2005								
Persons	23.5	27.0	34.6	39.2	46.8	54.4	50.0	35.8
Males	23.0	38.0	34.4	29.9	52.4	70.0	49.7	34.3
Females	23.9	16.8	34.2	46.5	42.7	53.1	51.2	36.9

Notes *Persons* includes some respondents for whom information on their sex was missing.

hence self-select to be less positive about their studies. Second, discontinuation itself is a greater blow to younger students. Some of these differences are reflected in the differences in the reasons why younger and older students discontinue.

Although there is little difference between male and female students overall, some differences occur within student types. For instance, male students (53.8%) who were working full-time while studying were more likely to evaluate their 2004 study positively than were female students (44.7%), although some of the other apparent differences sometimes correspond to relatively few respondents.

Results are shown separately in Table 13.5 for students who enrolled at a different university in first semester 2005 and students who did not. Students who enrolled at another university in first semester 2005 were more likely to have a positive global assessment of their university studies in 2004 (47.7%) than were students who did not (35.8%). The 2004 study was more likely to have led to the 2005 enrolment and hence be seen as useful for students who changed university. The previous chapter suggests that the main dynamic for university change was voluntary and mainly positive—moving towards a goal rather than away from it (although given the theme of the *reputation* of the university as a reason for moving, the more positive global assessment may be a little surprising). The difference, however, may not be simply a matter of looking at the previous course through a better outcome. Students who did not move to another university also had greater academic difficulties with their 2004 studies.

Box 13.1
Selected characteristics associated with a *Mostly positive* global evaluation of their first semester study in 2004: Students who did not re-enrol at the same university in 2005

The main relationships with a *Mostly positive* assessment of first semester 2004 study were:

Overall mean 39.8%

- Students enrolled at an innovative research university (41.8), a rural university (44.3%) or a new generation university (40.8%) viewed their 2004 study more positively.
- *Older students* (56.7% of 25 to 34 year-olds and 53.8% of those 35 years or older) had a positive evaluation of their study.
- *Hours of paid employment* had no consistent effect on students' views of their study, although employers and self-employed workers (59.4%) and employees who were able to use their study leave (49.1%) had more positive views.
- Students who had been employed full-time in 2003 (49.6%) or had been caring for family or a friend (74.5%) viewed their study more positively.
- Students who had previously completed a university qualification (52.8%) or had a degree (53.3%) viewed their study more positively.
- Students who had been influenced to enrol by a careers advisor at school (29.2%), their family (35.1%), friends (32.2%) or Year 12 results (33.4%) were *less* likely to have positive views about their study while students who had been influenced by work experience (48.1%) were more likely to view their study positively.
- Students who enrolled because they liked learning (49.1%), wanted a personal challenge (50.6%) or wanted to enter a chosen career (48.7%) had more positive views of their study.
- Students caring for others, particularly pre-school age children (59.9%) were more likely to have positive views about their course.
- Students living with a spouse and no children (52.1%) or a spouse and children (64.7%) evaluated their study more positively.
- Students who had to travel more than 90 minutes to get to university (30.1%) evaluated their study *less* positively.
- Students supported by their spouse or partner (58.9%) or by another relative (66.9%) evaluated their course more positively while students supported by their parents (34.6) or savings (32.6%) had less positive views.
- Students enrolled off-campus (51.4%) evaluated their study more positively.
- *Part-time enrolment* (47.3%) was associated with a more positive evaluation.
- Students who passed all their subjects in first semester 2004 evaluated their study more positively (51.9%) while students who passed none and failed some or all of their units (9.8%) were less likely to evaluate their study positively.
- Students who had definitely wanted to enrol in their university (46.6%) or had really wanted to enrol at another university (42.3%) had a more positive evaluation.
- Students who had definitely wanted to enrol in their course (48.0%) had a more positive evaluation of their 2004 study.
- Students who discontinued because of *University choice* (50.4%) evaluated their study *more* positively, while students who discontinued because of *Dissatisfaction with course* (9.6%), *Social isolation* (10.9%), *Academic difficulties* (13.5%), *Change of direction* (26.7%) or *Financial difficulties* (27.3%) evaluated their course *less* positively.

Box 13.2
Selected characteristics associated with a *Mostly positive* global evaluation of their first semester study in 2004: Students who enrolled at a different university in 2005

The main relationships with a *Mostly positive* assessment of first semester 2004 study were:

Overall mean 47.7%

- Students enrolled at a rural university (55.1%) or a new generation university (55.9%) viewed their 2004 study more positively.
- *Older students* (64.4% of 25 to 34 year-olds and 73.8% of those older than 34 years) had a positive evaluation of their study.
- Students from the highest socioeconomic background quintile (39.7%) viewed their course less positively while students from the lowest quintile (59.6%) evaluated their course more positively.
- Students who had been employed full-time in 2003 (63.2%) or had been caring for family or a friend (70.1%) viewed their study more positively.
- Students whose highest educational attainment was Year 12 (44.0%) viewed their 2004 study less positively than did other students.
- Students who had been influenced by work experience (56.4%) were more likely to view their 2004 study positively.
- Students who enrolled because they liked learning (52.9%) or wanted a personal challenge (58.9%) had more positive views of their study.
- Students caring for others, particularly pre-school age children (78.1%) were more likely to have positive views about their course than students who were not the main care givers for anyone.
- Students living with their parents (43.9%) evaluated their study less positively.
- Students financially supported by the government (54.4%) or by a spouse or partner (80.8%) evaluated their 2004 study more positively while students supported by their parents (44.2) had less positive views.
- Students who passed all their subjects in first semester 2004 evaluated their study more positively (55.4%) while students who passed none and failed some or all of their units (6.2%) were less likely to evaluate their study positively.
- Students who had definitely wanted to enrol in their course (54.7%) had a more positive view of their 2004 study.
- Students who discontinued because of *University choice* (54.3%) evaluated their study *more* positively, while students who discontinued because of *Dissatisfaction with course* (15.4%), *Social isolation* (11.1%), *Academic difficulties* (4.8%) or *Change of direction* (33.6%) evaluated their course *less* positively.

Box 13.3
Selected characteristics associated with a *Mostly positive* global evaluation of their first semester study in 2004: Students who did not enrol at any university in 2005

The main relationships with a *Mostly positive* assessment of first semester 2004 study were:

Overall mean 35.8%

- Students enrolled at Group of 8 university (39.8%) or a regional university (40.3%) viewed their 2004 study more positively.
- *Older students* (55.0% of 25 to 34 year-olds and 50.7% of those 35 years or older) had a positive evaluation of their study.
- *Students who were working 1 to 9 hours a week(53.9%), 35 to 40 hours (44.1%) or more (44.7%)* had more positive views about their course than other students. Students who were employers and self-employed (57.2%) and employees who were able to use their study leave (49.4%) had more positive views, while students who missed classes frequently because of their work (28.2%) had less positive views.
- Students who had been employed full-time in 2003 (47.6%) or had been caring for family or a friend (75.0%) viewed their study more positively.
- Students who had previously completed a university qualification (55.0%) or had a degree (53.9%) viewed their study more positively. Students whose highest educational attainment was Year 12 (31.2%) viewed their 2004 study less positively.
- Students who had been influenced to enrol by a careers advisor at school (19.3%), their family (27.3%), friends (26.2%) or Year 12 results (22.3%) were *less* likely to have positive views about their study. Students influenced by work experience (44.5%) or current or past students (39.8%) were more likely to view their study positively.
- Students who enrolled because they liked learning (46.9%), wanted a personal challenge (44.9%) or wanted to enter a chosen career (40.0%) viewed their study more positively, while those who entered for personal gain (31.6%) had a less positive view.
- Students caring for others, especially pre-school age children (58.5%), were more likely to view their study positively than students with no caring responsibilities (31.1%)
- Students living with a spouse and no children (49.5%) or a spouse and children (62.1%) evaluated their study more positively while those who were living with their parents (26.0%) were less positive.
- Students who had to travel more than 90 minutes (22.5%) or an hour to an hour and a half (27.7%) to get to university (22.5%) evaluated their study *less* positively.
- Students supported by their spouse or partner (53.8%) or by paid employment (38.1%) evaluated their course more positively while students supported by their parents (25.5) or savings (27.5%) had less positive views.
- Part-time (46.8%) and off-campus (49.6%) students viewed their study more positively.
- Students who passed all their subjects in first semester 2004 evaluated their study more positively (49.4%) while students who passed none and failed some or all of their units (10.5%) were less likely to evaluate their study positively.
- Students who had definitely wanted to enrol at their university (40.3%) or in their course (45.8%) had a more positive evaluation.
- Students who discontinued their 2004 study because of *Dissatisfaction with course* (7.7%), *Social isolation* (10.7%), *Academic difficulties* (15.3%), *Change of direction* (20.3%) or University choice (14.2%) evaluated their course *less* positively.

Boxes 13.1, 13.2 and 13.3 provide summaries of the relationships between student and course characteristics with students describing their 2004 study as *Mostly positive.* The three boxes show results for, respectively, all students who did not re-enrol at the same university, students who enrolled at a different university and students who did not enrol at any university.

Two themes are present in these results—the age and *School leaver* theme and the academic performance theme. Many of the characteristics associated with students providing a positive evaluation of their 2004 university studies are clustered around age. Older attriters are more likely to have positive views about their 2004 studies, as are students who were caring for others; who already have a degree or some other university qualification; who were living with a spouse or partner while studying; caring for children or others, and so on. Some of the course characteristics associated with more positive evaluations also reflect age differences: part-time and off-campus enrolment, which also extend to the type of university in which students enrolled. Conversely characteristics associated with being younger—living with parents, no previous university study, financial support from parents; influence from careers advisors at school or Year 12 results—had lower levels of positive evaluation.

The theme of academic performance is separate from the age of the student but is equally influential on students' views of their course, although the direction of any influence is less clear. Students who passed all their subjects in first semester 2004 were substantially more likely to have positive views about their course than students who had not passed any and failed some or all of their subjects. It is not clear, however, whether the results helped form the evaluation or the evaluation contributed to the academic results.

Students who discontinued because of academic difficulties were also more likely to provide a negative evaluation of their studies at university in 2004—but so too were students who left because they were unhappy with the way in which the course was delivered; because they felt lonely and isolated; because they had financial difficulties or because of a change of direction.

On the other hand, students who left because they had always intended to go to another university were more likely to provide a positive evaluation—except for those who did not enrol in another university. Students who had definitely wanted to enrol in their 2004 course or university were also more likely to provide a positive global evaluation of their 2004 studies regardless of their enrolment status in 2005.

13.4 Study Outcomes

Table 13.6 shows the study outcomes for students who did not enrol at the same university in first semester 2005. The results are shown separately for students who enrolled at a new university and students who were not enrolled at university. For many students, though not the majority, there was some benefit from their studies in 2004.

For students enrolled in a new university, clearly they are all studying and are enrolled at a university. Less than half (44.6%) were enrolled in the same or a similar course, although their 2004 study helped 63.0% gain admission to their new course. Despite 44.6% being enrolled in the same or a similar course only 24.6% were granted full credit for their 2004

Table 13.6
Participation in education in April 2005 and educational outcomes: Students who did not re-enrol at the same university in first semester 2005

In April 2005	*In first semester 2005*	*Students who enrolled at a new university* %	*Students who were not enrolled at university* %	*Student who did not enrol at the same university* %
Not studying		0.0	75.1	49.7
Studying		100.0	24.9	50.3
Sector of study				
At another university		100.0	0.0	38.2
At a TAFE		0.0	15.1	7.4
Elsewhere		0.0	9.9	4.8
Studying the same or similar course		44.6	4.8	18.3
First sem 2004 study helped gain admission		63.0	2.4	23.0
Credit granted for first semester 2004				
All		24.6	2.5	10.0
Some		39.2	2.8	15.2
None		36.2	19.6	25.1
Total		100.0	100.0	100.0
(n)		659	1,258	1,917

Notes Missing values were imputed and hence values in this table may differ from those in other tables.

study towards their new study. Overall, however, 63.8% received at least some credit towards their new course. Just over a third received no credit at all.

For students not enrolled at university, a quarter (24.9%) of students was studying, 15.1% at a TAFE institute and 9.9% elsewhere. The benefits of their previous university study were less transferable outside of the higher education sector, partly because fewer were enrolled in similar courses. Of those who were studying, only 19.1% (4.8% overall) were studying in the same or a similar course and their 2004 studies helped only 9.8% (2.4% overall) gain admission to their course. Similarly only 10.0% of those studying (2.5% overall) received full credit from their 2004 studies towards their 2005 studies and only 11.4% received partial credit.

Overall, of students who did not re-enrol at the same university in first semester 2005, 50.3% were studying in April 2005 — 38.2% in university, 7.4% at a TAFE institute and 4.8% with some other educational provider. Just over a third of students enrolled for study (36.3%) were in a similar course (18.3% overall) and their 2005 studies helped 45.6% gain admission to their course (23.0% overall). Among those enrolled, 19.9% received full credit transfer, 30.2% received partial transfer, while 49.9% received no credit for their 2004 studies towards their 2005 course.

Credit transfer is a key issue in determining whether apparent attrition or movement of students between universities is frictionless or involves inefficiencies and duplication of effort. Table 13.6 shows that it is seamless for only a quarter of students who transferred to another university and for one in ten students who did not re-enrol at the same university.

14. Implications

This chapter identifies and discusses some of the implications of the main findings of this study that are of potential interest to universities, governments, policy makers and students.

When considering the findings and their implications, it is important to take account of the context within which attrition occurs. Thus the chapter first notes the main types of costs associated with attrition and who incurs them and draws on the findings of the survey to address the question '*Is there a positive side to attrition?*'.

Following this, the chapter highlights the concerns raised by the study in relation to:

- The types and levels of attrition
- Students who leave university study
- The reasons students discontinue
- The reasons some students change course
- The reasons some students change university
- Student course and university changes

The chapter then turns to the question of how the concerns highlighted by the study might be addressed, noting that two particular understandings arising from the study are potentially useful in shaping appropriate responses: complexity in the reasons for discontinuation; and the links between certain reasons for discontinuation and students' life stages.

14.1 What Are the Costs of Attrition?

Students (and their families) incur several different types of costs:

Financial Costs: A student enrolled in a Commonwealth supported university place pays an annual student contribution of between $0 and $8,170 in 2006, the amount being set by the provider. Payment can be made up-front or deferred. Compulsory repayments commence once income reaches the required threshold. The minimum repayment threshold is $38,149 in 2006-07. Students paying $500 or more up front receive a 20% discount. A student in a full-fee place pays substantially more. In addition, students incur financial costs in obtaining the books and other resources required for the study, in moving and finding new accommodation in some cases, and other day-to-day expenses such as travel costs. These costs are usually expended in the expectation of an economic return when the study is completed. However the likelihood of this return is reduced where a student only partially completes a qualification or fails to pass any subjects—and any deferred tuition debt must still be repaid.

Opportunity costs: Instead of university study, the student could have been doing something that would have been more productive for them, perhaps a different course or paid employment. In studying rather than working they incur the cost of income foregone.

Personal or social costs: Attrition is associated with some sense of personal failure. At the very least, a student has started out with a goal but not achieved it. At the worst, the student has failed and been traumatised in the process.

Governments provide financial support for undergraduate student places for many reasons including the production of a more highly qualified and skilled workforce—a major output of the higher education sector. In the case of the Australian Government the amount provided through the Commonwealth Grant Scheme alone ranges from $1,499 to $16,299 p.a. per place in 2006. For any given level of expenditure, the number of qualified graduates will be lower if attrition is higher. This is true across all fields of study but is particularly clear where qualifications are matched to occupations requiring registration, such as medicine, dentistry, nursing, teaching, accountancy and so on. Attrition thus means that the government fails to obtain the returns they seek from their investment in higher education.

If university admission requirements are appropriate, then all students entering courses have the potential to qualify for the award. If they fail to complete and thus to qualify, then that potential has not been realised—their talent has been wasted, which is a cost to the individual and to the broader community.

14.2 Is There a Positive Side to Attrition?

A central concern about attrition is that there are no or few benefits associated with discontinued study. However, this survey documents a number of positive outcomes of incomplete study. Over a third (35.8%) of students who did not enrol at university in first semester 2005 judged their 2004 study as mostly positive, compared with 18.3% who judged it as mostly negative. Various proportions claimed that their 2004 study had helped them *a lot* to:

- prepare for further study (16.3%)
- clarify their career (23.0%) or study objectives (16.2%)
- obtain a job (1.6%); keep a job (1.5%); or obtain a promotion (1.3%)
- make friends (8.5%)
- find a purpose in life (5.7%).

The issue is whether these outcomes are sufficient to offset the costs of the study.

The ability to use incomplete study towards later study is also a major consideration in mitigating any costs of movement between courses and university. This study found that nearly two-thirds (63.0%) of students who moved between universities used their 2004 study to help gain admission to their new course and of these nearly two-thirds (63.8%) received at least partial credit transfer. For students who did not enrol at university, only 2.4% used their study to gain admission to a TAFE institute or other course and only 5.3% received some level of credit transfer. While credit transfer is not always appropriate—students enrol in different courses, for instance—to the extent that it can be made available to students, any costs of attrition will be minimised.

14.3 Types and Levels of Attrition

There are different types of attrition each of which has different implications. This study examined the movement of students between their first and second years of a university undergraduate degree, although of course attrition can occur in later years.

Among *students new to the university sector* (ie excluding students transferring into their course from earlier study) who enrolled in the first year of a Bachelor's Degree in first semester 2004, by first semester 2005:

- 70.8% were studying in the same course at the same university;
- 8.3% were studying in a different course at the same university;
- 7.7% were studying at a different university; and
- 13.1% were not studying at university.

Of the 7.7% of students who were studying at a different university:

- 3.3% were studying in the same or a similar course; and
- 4.4% were studying a different course.

Of the 13.1% of students who were not studying at university:

- 1.1% had resumed study at the same university in second semester 2005;
- 5.0% intended to resume their course later (including 3.2% who had formally deferred); and
- 6.9% did not intend to return to complete their course (including 2.8% who had formally deferred). Some from this group may have intended to continue their study at another university or in the same course or both.

14.4 Students Who Leave University Study

Some 13.7% of all students who enrolled in first semester 2004 were not enrolled in first semester 2005. Setting aside the matter that a small number returned to their course in second semester and a significant minority intended to return at some later date, as at first semester 2005 these students were not enrolled at university.

Several categories of students are recognised as disadvantaged in higher education: Indigenous students, students from low socio-economic backgrounds, students from non-English speaking backgrounds, students with a disability, and students from rural and remote areas. The higher education sector monitors access, participation, success and retention for these students and universities are required to work toward improving the higher education experience of these groups. Thus, it would be of particular concern if it were found that the students who leave university study in first year were disproportionately from these groups.

Looking at the equity categories and adjusting for other background characteristics, lower socioeconomic background was associated with a higher probability of attrition, as was an English-speaking background. There appeared to be no difference in attrition between

students with a disability and other students – or between male and female students. Small numbers of Indigenous respondents to the survey made any relationship between attrition and Indigenous status undetectable. Rural background was measured as at age 15, which for some respondents was many years before their enrolment and thus any relationship may have atrophied.

The absence of any indication of higher attrition for a particular equity group does not mean that programs to minimise retention for this group are unnecessary, but might point to the success of existing programs. Higher attrition by socio-economic and language background points to areas requiring further attention.

Some other student background characteristics associated with higher attrition were:

- Students entering university through a vocational pathway rather than from school
- Students who are the main carer for a disabled or vulnerable person
- Students who take longer than an hour (and especially longer than an hour and a half) to travel to university
- Students who had not really wanted to enrol in their course
- Students who had not really wanted to enrol in their university (although if they had really wanted to enrol at *another* university, they were more likely to be continuing their studies at another university in 2005).
- Students who are enrolled part-time (independent of any other student or course characteristics).

Students who enrolled at a Group of 8 university have lower levels of attrition than students who enrolled at other universities. Part of this effect may be attributable to the movement of students between universities—6.9% of all students who commenced their course in 2005 moved between universities and there is a suspicion that this involved a drift from other universities to Group of 8 universities, though the survey provides no direct information.

Results for differences of attrition among fields of education in this report are always a little tenuous because of the number of categories involved. The results suggest that attrition is higher in courses in *Agriculture and environmental studies* and in *Engineering* and possibly lower in courses in *Commerce and management*, *Law* and *Health* (excluding *Nursing*), after allowing for other student characteristics. Further research is required to confirm these results, but they could point to areas in which universities, schools and TAFE institutes could focus their attention in improving any information they provide to students.

14.5 The Main Reasons Students Discontinue

One of the most frequently endorsed reasons for discontinuing their study in 2004 was *I changed my career goals* (21.6%), which corresponds with the broader scales tapping a change of direction (22.3%)—three in every 100 commencing students. For most students a change of career goals appears to arise when they realise there is a mismatch between

their interests and abilities, the course they have enrolled in and related careers. This mismatch raises issues of efficiency and waste and appears to indicate a need for improved careers advice, but while better career guidance is often advanced as a means of reducing attrition, this study suggests that more of the same will not do.

Several forms and sources of career and course advice were examined in the survey. These were often related to attrition, but seemingly always in a derivative fashion. If, for instance, students entering university from school had lower attrition, then having been influenced to enrol by a school careers advisor or a school teacher would also be associated with lower attrition. Invariably receiving careers advice had no independent effect on attrition. This does not necessarily mean that careers advice can have no effect on attrition, merely that in the form received by students in 2003 or 2004 it did not appear to do so.

Nearly a quarter of students (23.7%) reported that *It was difficult to balance study and work commitments* was a *Large* influence on their decision to discontinue study., There were clear indications that study leave alleviated this difficulty if students were able to use it, thus encouraging employers (e.g. through financial incentives) to offer usable study leave might assist more students. Further flexibilities by the universities in course timetabling and delivery, the submission of assessment, work placements and other aspects might also assist affected students.

Academic difficulties played an important role in the decision to discontinue of nearly three out of every 100 students—14.0% of students who did not enrol at a university in 2005 agreed that feeling stressed and anxious about their study was a *Large* influence on their decision to discontinue study. Academic difficulties were associated with discontent with the course and loneliness and thus strategies to assist these students should address all three. The variation of discontinuation of study because of academic difficulties across categories of students suggests a focus for such strategies on students with disabilities; enrolled at regional universities, enrolled part-time; or entering through a vocational pathway.

The extent to which attrition reflects the quality of instruction (or the quality of other aspects of the university) can be gauged by students' answers about whether these factors played a role in their decision to discontinue. About one in every eight (12.9%) students who did not enrol at a university in first semester 2005 said that *I didn't like the way the course was taught* had a *Large* influence on their decision to discontinue their 2004 study. This result is consistent with results from a broader scale of items that measure this dimension. The quality of instruction is only partially reflected in rates of attrition.

Whether this is a high or low level of discontent is difficult to determine. It is 1.6% of all commencing students and may need to be viewed in the context of the match between teaching styles and students. No one instructional approach meets the needs of all students and changing approaches may merely alienate other students. Nevertheless, the written comments of students point to instances of apparently poor professional conduct by lecturers. On-going monitoring of course satisfaction is imperative.

Concerns about attrition and equity are reflected in reasons for discontinuing that relate to financial difficulties. Fewer than one in ten (8.1%) of students who did not enrol at a university in first semester 2005 said that *My family could not afford to support me* had a *Large* influence on their decision to discontinue, which again corresponds to estimates from a broader scale of 8.4% of students discontinuing because of financial difficulties. Again this is just over one in every 100 commencing students. Students from lower socioeconomic backgrounds and sole parents were more likely than most other students to cite financial difficulties as an important reason for discontinuing. These results reinforce the earlier observations about the role of socioeconomic background and provide guidance for the focus of any interventions.

14.6 Students Who Change Course

Students who change courses have mostly entered university more or less directly from school. Mature age students and continuing university students are less likely to change courses.

Some of the change among courses within universities may be more apparent than real and a response to university administrative arrangements. Nevertheless, students who change their course were less likely to have wanted to be in that course in the first place. Some of the movement between courses is associated with subsequent reallocation of places one year after the initial allocation and is part of students constructing their own pathways through and into preferred undergraduate university studies. Some of the change in courses is also a response to students legitimately changing their mind about their own interests, talents and longer-term career aspirations.

14.7 Students Who Change University

The students who change universities are overwhelming entrants to university more or less directly from school. The strongest effects on whether a student changes their university are whether they wanted to be enrolled in their course and (particularly) their university to begin with. A substantial element of movement between universities is associated with students moving to a university they perceive as more prestigious, offering better career prospects, or to the course and career they now want. From the perspective of most students, it is a rational movement motivated by self-interest and maximising their own welfare.

Changing universities is not motivated mainly by issues of the quality of the teaching or other aspects of the course. About one in eight (12.9%) students reported that *I didn't like the way the course was taught* was an important influence on their decision to discontinue. Students are overwhelmingly motivated by two main concerns:

- *A change of direction*—27.1% said that *I changed my career goals* was a *Large* influence on their decision to discontinue; and
- *A change of university*—nearly a third (31.7) said that *I had always intended to move to another university* was a *Large* influence on their decision to discontinue.

Students who change university really only elicit attrition-related concerns if they do not obtain full credit for their study in 2004. To the extent that they do not, those who changed university because of a change of direction raise concerns that may be addressed by student selection and careers advice strategies. The second group, those who are intentionally creating a pathway through university and universities, raise a more subtle issue.

At least some students (it is unclear from the survey how many) who enrolled in their university in order to enter a preferred course at another university (or even their own university) intend to boost their university entrance score, which is usually calculated on the basis of Year 12 results. It is not clear that it is appropriate to use the first year of a Bachelor's Degree course at one university as a preparatory course for another. It could be argued that such students should complete a further year of secondary schooling in order to obtain the higher results and to be on a level playing field with other Year 12 applicants. If so, there is an element of cost shifting. If the student attended a government school (which is mainly funded by State and Territory governments), then the cost shifting is from the States to the Commonwealth. If the student attended a non-government school then the cost shifting is from parents to the Commonwealth Government.

14.8 Attrition-Related Concerns in Student Course and University Changes

This study found that more than 90% of students who commenced their degree in first semester 2004 were still potentially involved in university study in 2005 or later—a substantially higher estimate for first year retention than is normally provided by estimates of university or course retention that do not have access to information on the movement of students between universities and courses.

However, a low estimate of first year attrition does not necessarily signify that all is well. Various categories of student movement between courses and universities included within the estimate of retention can raise concerns commonly associated with attrition.

More than two thirds of students (71.3%) who enrolled in first semester 2004 were still enrolled at the same university in the same course in first semester 2005. From the limited perspective of the various concerns over attrition, these students represent the ideal outcome.

The 8.2% of students who enrolled in a different course at the same university are somewhat more problematic. They raise no concerns about personal failure or waste of talent of the student who transfers and only marginal concerns about course (but not university) quality. This form of transfer may, however, create *financial* costs for students and governments if the students were *not* granted full credit for their 2004 study within their new course. Otherwise it is as if they continued their enrolment in their initial course.

The survey provides no information about credit transfer for students enrolling at a different course in the same university. Universities may be more likely to recognise

study undertaken in their own institution rather than elsewhere, so that these students may fare slightly better than those who change to another university. Change of course within a university may also centre on similar courses and movement to and from double degrees. Additionally, to the extent that students change course voluntarily, they are judging that any personal cost to them is worth the change. Hence any financial attrition-related concerns for this group might be modest.

There could still be equity-related concerns, however. To the extent that students changing course do not obtain full credit transfer, they will each need to occupy a place for longer in order to complete their study. In a system where government supported places are a finite resource, the consequence is that some other students miss out on these places – a situation that might lead to a waste of their talent and a consequent cost to the broader community.

The 6.9% of all commencing students who enrolled at a different university trigger some similar attrition-related concerns. Some financial concerns are allayed if there is full credit transfer of the 2004 study but this survey found that only a quarter (24.9%) of students new to university received full credit, with 39.9% receiving partial credit and 35.2% receiving no credit . It seems reasonable to assume that there is potential to improve on these figures. Other costs to students and to government also flow from much of the movement between universities. To the extent that a student chooses to move between universities, that part of the cost might be viewed as a rational allocation of their resources, but costs around personal failure may arise from involuntary moves. Voluntary movement of students between universities is also possibly associated with the quality of teaching if students change universities because of concerns about teaching or other aspects of their course or university. And to the extent that some students take longer to complete a degree than they otherwise would (the 75.1% who did not receive full credit transfer), some students who might otherwise have obtained a place at university are excluded.

The 13.7% of all commencing students who leave university study are usually regarded as the core of attrition and raising the greatest concern. This study found though that some (1.1%), had already returned to their course by second semester 2005, some (5.2%) intended to return to their course - leaving 7.2% who did not intend to return. If returning students receive full credit for their previous studies some costs will be minimised. However these students will not be able to obtain their qualifications in the minimum time , which may give rise to concerns about efficiency.

14. 9 Responding to Attrition Concerns

Overall, there are two main findings of this study which are potentially useful in guiding universities and higher education policy makers in responding to the concerns raised above.

Firstly, the causes of, and reasons for discontinuing a university course in the first year of undergraduate study are complex. Students rarely discontinue for a single reason alone.

Rather, they are influenced by a combination of factors, which interact and compound to deter continuation.

The importance of a combination of reasons on any decision to discontinue (voluntary and often underpinning involuntary decisions) was a strong theme in the respondents' open comments to the survey. These indicated that while a student might be able to cope with family problems, work problems or financial difficulties by themselves, in combination these became overwhelming. Sometimes one problem, such as a marriage breakdown, would trigger a series of consequences—financial, employment and health—that proved fatal to successful study.

Secondly, the mix of reasons that come into effect largely relates to the students' stage of life, with different reasons more important for younger and older students.

For the younger group of students beginning university usually from school, or other study, the transition appears to be critical. This has multiple dimensions:

- Identifying and gaining entry to the course that best fits their career and personal objectives; engages their interests; and suits their capabilities so that it is challenging but also requires academic outcomes that the students view as achievable. Many young students have strongly vocational motivations and objectives and are looking for the quickest and best path to achieve their career goals.
- Identifying and gaining entry to a university that meets their needs and provides a comfortable and supportive environment, i.e. where the students feel supported and valued both academically and personally; have opportunities for social interaction with other students and staff; that offers courses and options within courses that are interesting and relevant to their goals; that is sited in a location allowing access to the students' families and friends to the degree that they seek and that requires students to spend only a limited amount of time in travelling.
- Securing access to the financial resources required to support the study, which may include all or some of financial support from family, from government sources, savings and from employment.

For the older students, beginning a university course adds another element to a list of existing commitments that must continue to be met. Thus the fit between their study and these commitments is critical. It must enable them to continue to meet their existing obligations as well as their new study requirements.

Many older students are highly focused—they know what they want from the study and they aim to enter, complete what they need to, and leave, within the shortest possible time and at the lowest possible cost. Time and costs are major factors; they do not want to 'waste' time or money on things that prove to be inadequate, inappropriate or irrelevant.

For some older students with families full-time work is not optional. Financial obligations such as mortgage payments must continue to be met. Moreover, continuation in employment does not necessarily mean that the additional costs of studying are an impost

that is easy to meet. In some cases even the additional financial burden caused by needing to meet HECS repayments can create new difficulties.

Especially for older female students, study must also fit with their commitments to caring for others, particularly young (pre-school age) children. Family continues to come first so that these students study what they can, when they can. Their options may thus be very limited to begin with, but are more so when the students meet university inflexibilities, e.g. in timetabling and assessment. Such inflexibilities are not necessarily confined to full-time study but may equally create difficulties for those enrolled part-time or externally. Particular family issues may also arise for Indigenous students and students from other cultural backgrounds where demands of time and support arise from extended family groups.

Framing appropriate responses will support and increase the likelihood of continuation. These will also support the development of policies and initiatives in higher education that do not aim directly to address discontinuation issues but that have additional or broader goals, for instance that seek to:

- Decrease the rate at which students change courses and universities.
- Improve the quality of the university experience for all students
- Increase the value that students receive for the money they invest in higher education
- Decrease inefficiencies in the allocation of government funds for higher education
- Increase equity in higher education
- Increase the life chances of all members of the community.

Complexity in the reasons for attrition

Complex issues require multi-faceted responses. As the factors that contribute to discontinuation interact and compound addressing each factor individually will have limited effect: some benefits may result, but it is likely that this approach will be inadequate to deal with the overall impact. A more holistic approach which deals with the factors collectively is more likely to yield greater results.

This might be done, for instance, by focussing attention and effort on the factors that influence discontinuation among particular student groups and attempting to decrease their collective impact, as well as their individual effect. In this approach, students in the group would become the focus of effort and meeting their needs the major objective; rather than targeting a particular cause or reason that influences students' decisions to discontinue – attempting to reduce its influence and impact.

This study suggests that such effort could productively focus, at least initially, on students in different life stages, as younger and older students tend to have some different causes and reasons for discontinuing a university course.

Younger students

Better matching of students, universities and courses would contribute perhaps substantially to reducing discontinuation among younger students, as well as opening up places that are currently taken, but unwanted, to other potential entrants and thus also reducing inefficiency in the use of public resources for higher education.

Some younger students are unclear about which university and course will best meet their goals, suit their abilities and engage their interests. Entering higher education without adequate information they make choices that they may find out later are inappropriate for their needs and objectives – and so seek to change, or discontinue. Most of the students who change course or university during or after first year are young students entering higher education mainly from school. These students are overwhelmingly motivated by two main concerns:

- *A change of direction*—27.1% said that *I changed my career goals* was a *Large* influence on their decision to discontinue; and
- *A change of university*—nearly a third (31.7%) said that *I had always intended to move to another university* was a *Large* influence on their decision to discontinue.

On the other hand, some young people are very certain about the university and course they want to enter but are unable to gain access in the first place will use first year as a stepping stone to entry, perhaps 'topping up' their Year 12 results to the required level. This is legitimate and understandable and will assist equity if it supports students from disadvantaged educational backgrounds. However it also denies a place to another student (perhaps one who is more enthusiastic about the particular university and course). There is also some cost-shifting from the school sector to higher education.

In all these instances, assisting students to make wise choices—and to gain access to their preferred university and course as early as possible—will reduce university and course change and increase equity and resource efficiency. Options might include:

- Common first years that are reasonably generalist in nature and lead into a variety of options in later years which are tailored to particular career goals.
- Providing opportunities for students to experience study in a particular university and course before they apply for entry (e.g. pre-entry programs and 'taster days').
- Improving the quality, accuracy and distribution of information about universities and courses for potential entrants, including information about the university environment including transport, accommodation and the availability of opportunities for part-time work.

Full credit transfer for previous successful study will further assist students when they do need to make a change of course or university and help to minimise associated costs.

For younger students, academic and social support also play a strong role in easing the transition to university. Thus initiatives to increase these are likely to impact on discontinuation. Options include:

- Providing induction courses over the summer break to prepare students for first year, especially for students from non-traditional backgrounds.
- Providing orientation programs, with special programs for some groups e.g. Indigenous students and rural students.

The study found also that large classes can be intimidating and lead to feelings of unimportance and isolation among new students. Many prefer smaller groups where they feel valued, are more confident of approaching staff and have more—and more consistent—opportunities to seek assistance if they need it.

Similarly, it was clear that for many new students, opportunities to interact with others, to make friends, and develop new social networks, are highly valued and sought after. In particular students seek to develop relationships with others who share interests and sometimes their backgrounds and values – though they also value meeting and learning from others with very different characteristics from themselves. Where these opportunities are not available loneliness and isolation can become serious issues that affect students' views of their university and course – even if both meet their needs in other respects. Providing improved formal and informal academic and social support is thus essential. Options include (for instance):

- Small group tuition as well as large classes
- Staff-student informal social activities
- Academic mentors for each student
- Peer support groups
- Interest groups for students, or for students and staff.

Flexibility to accommodate part-time work is also important to younger students – many of whom work throughout their study – either to support themselves or to supplement financial resources provided by family or government income support. Such flexibility might for instance involve:

- Timetabling—providing a number of different options so that students can work around classes.
- Assessment—flexibility to accommodate periods of high work demand.
- Negotiation of compulsory placements during a course so that students are not financially disadvantaged.

Older students

For older students, strategies to support continuation and reduce the costs of attrition must primarily address the difficulties these students face in balancing their work, family and study commitments, including financial commitments.

These students appear to be highly motivated to study, looking to achieve specific personal and career objectives. Strong motivation means that these students work hard to overcome obstacles and difficulties to their study, but at the same time, they seek value for the investment of their time and resources in study and will move to discontinue swiftly if they believe this value is not present.

Older students also give family needs and concerns a higher priority than study, so that when there is a clash, their study comes off second best. This is particularly so when it comes to conflicts over time and financial resources. Many are also from lower socio-economic backgrounds and thus may have limited resources they can bring to their study.

Though many enrol part-time or externally, these enrolment modes do not necessarily ease the difficulties they face due to conflicting commitments sufficiently to support continuation.

The more widespread adoption by universities of work/life balance policies for students has the potential to assist all students, but these students in particular. Such policies might usefully incorporate:

- Providing information and training to staff members to increase their understanding of the impacts of family responsibilities on study. Such training could include different cultural understandings of family responsibilities, especially as they relate to Indigenous students.
- Developing further flexibility in the delivery of courses and programs and forms of assessment to accommodate students with work and family responsibilities e.g. on-line, in off-campus mode and after hours.

Students' comments indicated that issues of balancing work and study were often connected to financial concerns, i.e. paid employment was needed to meet existing financial commitments such as mortgage repayments. Some students would have preferred not to work while studying, or to work less, but their financial commitments did not allow this. Yet participation in paid employment did not necessarily mean that these students had few financial worries. Many were concerned about the additional financial burdens that their study imposed on their families and about the level of the HECS debt they were accumulating. Concern about this debt in some cases affected course choice and compelled very early discontinuation.

Participation in paid employment meant that many of these students were required to begin making HECS repayments while they were studying. This was an issue of concern because it meant a loss of income they could ill afford. Importantly, a high proportion of older students are from lower socio-economic backgrounds. Reducing the financial burden on these students while they are studying could thus assist them to continue. Options might include:

- Deferring HECS debt repayments until after students have completed their course or withdrawn earlier.
- Providing emergency loans at very low rates of interest and with deferred repayment.
- Providing grants for the purchase of study resources.
- Providing practicum bursaries to support students who cannot maintain their employment commitments during their compulsory placements.

Part-time study is more common among older students. The survey results point to on-going higher attrition rates among part-time students and emphasise that any difficulties

experienced by part-time students in continuing with their studies are not adequately addressed by current arrangements. It may be that part-time study is inherently more difficult, or that the time required to completion is a deterrent, or that part-time study is a flag indicating that the student has other interests that compete with study. Whatever the reason, it seems clear that further effort is needed to assist part-time students to continue with their study. Some of the options already mentioned will potentially assist, but there may be a need for more targeted initiatives. One area where change is required is in relation to current arrangements for part-time equity scholarships offered by the universities. While Commonwealth-funded scholarships or bursary payments made to students studying on a full-time basis are tax exempt, income from equity scholarships offered by universities to full and part-time students is taxable.. Income from similar Commonwealth-funded equity scholarships, such as Commonwealth Learning Scholarships, is exempt under the Social Security Act and does not affect eligibility for Centrelink payments. Income from university-funded scholarships, however, is not exempt and can reduce Centrelink payments.

Issues across age-groups

There are a small number of additional issues that are less linked to stage of life and thus require a broader response:

The quality of teaching and student support services

Attrition is an indicator of the quality of a university's teaching and student support services. Students may choose to leave universities because of the poor teaching they have received; and/or because support services are inadequate to ameliorate the impact of poor teaching. The improvement of teaching and support services will continue to counter attrition for these reasons.

Travel to university

Excessive travel time creates a number of problems for students—the cost, the difficulty of fitting in part-time work, the effort, the loss of study time. This seems to be more a matter of practicality than of equity, but underlines a strong need for rapid, low-cost public transport to universities, and for concessions for students travelling on public transport.

Equity

Attrition is an equity issue. Just as entry to university is influenced by extraneous student characteristics such as the student's socioeconomic background or geographic location, so too progress through university is similarly influenced. Under this argument, attrition should be reduced because it is unfair. The rationing of university places means that a place taken by one student is denied to another. Thus when a student discontinues, there is a cost to the student who applied for but was unsuccessful in gaining that place. Calls for changes to university admission procedures might be the logical consequence.

Student income support

The availability of student income support was a *Large* influence on the enrolment of 3.3% of entrants and a *Moderate* influence on the enrolment of a further 3.1%.

Not being able to access student income support, was a *Large* influence on the decision to discontinue their 2004 study of 10.6% of students who did not enrol at any university in first semester 2005 and of 5.2% of students who changed university. From the pattern of responses it appears that few of these respondents fall into the 'wishful thinking' category of older students in full-time work or caring for children or both. The clearest effects were for students who were younger, sole parents or had entered university through a vocational pathway. There was also some association with living with a partner without children and attending a rural university.

Modifying the targeting (and perhaps the payments) of these schemes is a delicate task. At the moment, some part of attrition is associated with an inability to access student income support schemes. For some of these students, discontinuing their study is undertaken in order to earn income to become eligible for student income support under the independence criterion.

Exit procedures

According to student reports, exit procedures from universities are not well structured. For the 20.6% of students who did not re-enrol at the same university in first semester 2005, 80.9% formally withdrew from the university, but only 4.0% attended an interview. Another 1.8% were asked, but did not attend.

It can be difficult for universities to track the attendance of students. Students can simply stop attending and 19.1% did exactly that. But not only did 80.9% formally withdraw, 38.8% applied for, and were granted, intermission from their course. These procedures provide an opportunity for discussing with students the reasons for their withdrawal and any opportunities that might be available to allow them to continue studying. One in every ten (10.1%) students who discontinued their 2004 studies, for instance, intended to re-enrol but had not applied for admission. It is interesting to speculate about whether they even knew that the opportunity was available to them.

It may be that by the time many students come to formally withdraw from their course it is too late to intervene. The decision was made in reality some weeks earlier and too many classes and too much work has been missed to reverse the situation. And perhaps some students simply don't want to talk about it. Others, however, may welcome the opportunity to examine their options with someone who knows about university procedures, courses and educational opportunities more generally.

There was an undercurrent in the written comments that students felt that universities did not care about them as individuals. Some cited as evidence the lack of any concern or interest when they applied to withdraw. Perhaps universities could investigate their procedures around student exit procedures. It might almost be called a duty of care.

14.10 Concluding Remarks

What is commonly referred to as university attrition consists of many components—movement between university courses, between universities and out of university altogether. It is also dynamic. A student who has discontinued studies in one year may re-enrol the next.

Although there are costs associated with attrition, some degree of churn is inevitable. The movement of students in and out of university is motivated by many considerations, but much of it is about the uncertainties that people, especially young people, have about their interests, talents and hopes. Further elements are associated with the vagaries of life—illness and injury, family discord, loss of job—that are almost impossible to predict and difficult to insulate students against in the short term.

It is also difficult to judge whether attrition at any given time is minimised or it includes elements that can be removed. Programs to produce a more inclusive and supportive social environment, to provide academic and personal support and some financial support are in place in most universities. The attrition reported here persists despite those programs.

Complacency about attrition would be misplaced. Attrition is higher among some categories of students and is of particular concern where these students are already disadvantaged in higher education, e.g. students from low socio-economic backgrounds. Students, their families, universities and governments all continue to incur costs when students leave university study, change course or university—even if there are some mitigating factors, such as credit transfer arrangements. Efficiency concerns also persist, as does the potential to waste the talents of those students who are excluded when others occupy a place for an extended period.

References

Altonji J, 1993. 'The demand for and the return to education when education outcomes are uncertain', *Journal of Labor Economics*, 11, 48-83.

DeBrock L, Hendricks W & Koenker R, 1996. 'The economics of persistence: Graduation rates of athletes as labour market choice', *Journal of Human Resources*, 31, 513-539.

Department of Education, Science and Training (DEST), 2001. Characteristics and performance indicators of Australian higher education institutions, 2000, 01-B, Occasional paper series, Higher Education Division. http://www.dest.gov.au/NR/rdonlyres/6812B85F-8C4E-415D-9240-AF3C35AFFB77/947/characteristics00.pdf.

Lamb S, Robinson L & Davies M, 2001. *Youth Allowance and participation in education, training and work: Results from the third wave of the Youth Allowance Longitudinal Survey.* Report prepared for the Youth and Students Branch, Department of Family and Community Services. Melbourne: ACER.

Long, M. (1994) *A Study of the academic results of on-campus and off-campus students.* AGPS: Canberra.

Long M & Hayden M, 2001. *Paying their way. A Survey of Australian undergraduate university student finances, 2000.* Canberra, AVCC.

Long M, Carpenter P & Hayden M, 1995. *Graduating from higher education in the 1980s* Canberra AGPS.

Long M (1994) *A study of the academic results of on-campus and off-campus students: Comparative performance within four Australian tertiary institutions* Canberra, AGPS

Lukic T, Broadbent A & Maclachlan M, 2004. *Higher education attrition rates 1994-2002: A brief overview*, Research Note No.1, Higher Education Analysis Section, DEST. www.dest.gov.au/NR/rdonlyres/8A245011-4F59-4D99-9D97-A1AD89D0C669/1043/1.pdf

Martin Y, MacLachlan, M & Karmel T, 2001. *Undergraduate completion rates: an update*, DEST Occasional Paper Series http://www.dest.gov.au/ highered/occpaper/01f/default.htm.

McInnis C, Hartley R, Polesel J & Teese R, 2000. *Non-completion in vocational education and training and higher education*, Department of Education, Training and Youth Affairs, Research and Evaluation Branch, Canberra.

McMillan, J, 2005. *Course change and attrition from higher education,* LSAY Research Report No. 39. Australian Council for Educational Research, Camberwell.

Miller P & Win R, 2004, in Gittins R, 'Do private schools give you value for money?' *The Age,* November 24, 2004 p 19.

Moore R, 1995. Final report: *Retention rates research project,* Sheffield UK, Sheffield Hallam University.

Morgan M, Flanagan R & Kellaghan M, 2001. *A study of non-completion in undergraduate university course*, Dublin, Higher Education Authority www.hea.ie

Organisation for Economic Cooperation and Development (OECD), 2005. *Education at a glance 2005,* OECD, Paris.

Shah C & Burke G, 1996, *Student flows in Australian higher education,* EIP Series, DEST, www.dest.gov.au/archive/highered/eippubs/burkeshah/front.htm#execsum.

Shah C & Burke G, 1999. 'An undergraduate student flow model: Australian higher education', *Higher Education*, Vol.37, pp.359-75.

Tinto V (1993) *Leaving college: Rethinking the causes and cures of student attrition,* Chicago, The University of Chicago Press.

Vallerand R, Pelletier L, Blais M & Briere N, 1992. 'The academic motivation scale: A measure of intrinsic, extrinsic and amotivation in education', *Educational and Psychological Measurement,* 52 1003-1017

Vickers M, Lamb S & Hinkley J, 2003. *Student workers in high school and beyond: The effects of part-time employment on participation in education, training and work.* LSAY Research Report No. 30. Melbourne: ACER.

Walstab A, Golding B, Teese R, Charlton M & Polesel J, 2001. *Attrition and wastage in tertiary education: Report.* Canberra: Lifelong Learning Network, University of Canberra.

Notes to Tables

1. All tests of statistical significance use the log-likelihood chi-square and are two-tailed. Statistical significance is indicated by *** ($p<=0.001$); ** ($p<=0.01$);* ($p<=0.05$); and o ($p>0.05$).
2. Multivariate results (logistic regressions and calculations of scales) are calculated for data in which missing values are imputed by random matching of respondents with similar characteristics.
3. Results are weighted by re-enrolled/did not re-enrol, university, sex and full-time/part-time status to compensate for disproportionate selection and differential response rates across categories of students. Weights were normed to actual sample numbers for sub-populations when estimating statistical significance. Percentages calculated from sample counts do not correspond to weighted estimates.
4. Occasionally values for persons may not lie between the corresponding values for males and females because *persons* includes some respondents for whom information on their sex was missing.

Appendix A Supplementary Tables

Table A.1
Percent of students who were enrolled and not enrolled at university in first semester 2005 and all students, by student and course characteristics

		Males			*Females*			*Persons*		
Variable	*Category*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*
Sex	Male	100.0	100.0	100.0	---	---	---	41.3	42.7	41.5
	Female	---	---	---	100.0	100.0	100.0	58.7	57.3	58.5
Age	15-19 years	47.2	36.8	45.8	47.9	34.5	46.2	47.6	35.5	46.0
	20-24 years	34.2	29.8	33.6	30.3	25.0	29.6	31.9	27.1	31.3
	25-34 years	10.1	17.6	11.1	11.3	20.6	12.5	10.8	19.3	11.9
	35 years and over	8.5	15.9	9.5	10.4	19.9	11.7	9.6	18.2	10.8
Socio-economic background	Highest quintile	25.7	13.3	24.0	20.4	13.5	19.5	22.6	13.3	21.4
	Next quintile	23.7	21.3	23.4	19.3	16.1	18.8	21.1	18.3	20.7
	Middle quintile	21.1	22.4	21.3	19.5	21.5	19.7	20.2	22.0	20.4
	Next quintile	14.9	24.6	16.3	20.5	23.4	20.9	18.2	24.1	19.0
	Lowest quintile	14.4	18.4	15.0	20.4	25.5	21.1	17.9	22.4	18.5
Indigenous	Yes	1.0	0.7	1.0	0.9	2.1	1.0	0.9	1.5	1.0
	No	99.0	99.3	99.0	99.1	97.9	99.0	99.1	98.5	99.0
Country of birth	At least one parent Aust born	64.0	75.3	65.6	69.3	75.6	70.1	67.1	75.3	68.2
	Student Aust. born, not parents	15.1	8.7	14.2	13.2	9.8	12.8	14.0	9.3	13.4
	Parents & student born o'seas	21.0	16.0	20.3	17.5	14.7	17.1	18.9	15.3	18.4
English spoken in the home	English the only language	74.1	83.4	75.4	75.8	84.4	77.0	75.1	83.9	76.3
	English the main language	9.9	8.8	9.7	11.1	8.5	10.8	10.6	8.6	10.3
	No, but English spoken freq.	8.1	4.3	7.6	8.0	3.1	7.3	8.0	3.7	7.4
	No, English rarely/never used	8.0	3.5	7.4	5.1	3.9	4.9	6.3	3.8	5.9
Disability	Yes	6.9	9.3	7.3	7.2	8.5	7.4	7.1	8.7	7.3
	No	93.1	90.7	92.7	92.8	91.5	92.6	92.9	91.3	92.7
Remoteness	Very accessible	78.4	74.2	77.9	76.9	73.8	76.5	77.5	74.0	77.1
	Accessible	8.1	11.6	8.6	9.8	11.9	10.1	9.1	11.8	9.5
	Mod. access, (very) remote	3.9	6.7	4.3	6.1	8.4	6.4	5.2	7.7	5.5
	Living overseas	9.5	7.4	9.2	7.2	5.9	7.0	8.2	6.5	7.9
Secondary school last attended	Government	40.7	55.5	42.7	46.9	56.8	48.2	44.3	56.5	46.0
	Selective government	5.9	2.5	5.4	4.0	2.9	3.9	4.8	2.7	4.5
	Catholic	18.7	18.0	18.6	19.2	17.3	19.0	19.0	17.5	18.8
	Private/Other	34.2	22.2	32.6	29.1	22.1	28.2	31.2	22.0	30.0
	Overseas	0.6	1.7	0.7	0.8	1.0	0.8	0.7	1.3	0.8
Moved to attend university	Did not move	78.5	80.7	78.8	76.3	83.7	77.3	77.2	82.5	77.9
	Moved, didn't have to	3.0	3.4	3.1	2.9	1.9	2.8	3.0	2.5	2.9
	Moved within state	13.8	10.8	13.4	15.4	12.2	15.0	14.8	11.6	14.3
	Moved between states	3.2	4.5	3.4	4.4	2.0	4.1	3.9	3.0	3.8
	Moved from overseas	1.5	0.6	1.4	0.9	0.2	0.8	1.1	0.4	1.0
Prior univ. study	Completed	9.0	9.9	9.1	11.9	14.4	12.2	10.7	12.5	11.0
	Not completed	14.6	15.0	14.7	15.2	16.6	15.4	15.0	15.8	15.1
	None	76.4	75.1	76.2	72.8	69.0	72.3	74.3	71.6	73.9
Highest educational attainment	Degree or higher	4.6	6.1	4.8	6.0	8.5	6.3	5.4	7.7	5.7
	Diploma	12.6	16.7	13.2	12.9	20.7	13.9	12.8	18.9	13.6
	App'ship, other voc, other	10.5	21.6	12.1	10.3	20.0	11.6	10.4	20.6	11.8
	Highest secondary	69.6	51.8	67.1	68.2	46.6	65.2	68.8	48.8	66.0
	Below highest secondary	2.6	3.7	2.8	2.7	4.2	2.9	2.7	3.9	2.9

See *Notes to tables*

Table A.1—*continued*
Percent of students who were enrolled and not enrolled at university in first semester 2005 and all students, by student and course characteristics

		Males			*Females*			*Persons*		
Variable	*Category*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*
Main activity in 2003	Studying at school	60.2	47.6	58.5	56.5	40.4	54.4	58.0	43.2	56.0
	In full-time paid work	13.8	28.5	15.8	13.3	27.6	15.2	13.5	28.0	15.5
	Studying at TAFE/elsewhere	8.2	9.8	8.4	7.2	9.5	7.5	7.6	9.8	7.9
	Studying at university	11.4	6.3	10.7	13.2	5.8	12.2	12.5	6.2	11.6
	Caring for family or friend	0.6	1.3	0.7	2.7	5.1	3.0	1.8	3.4	2.0
	Other	5.8	6.4	5.9	7.1	11.6	7.7	6.6	9.4	7.0
Course enrolment influenced by	Advisor at school	10.3	12.4	10.6	10.6	7.9	10.3	10.5	9.8	10.4
	Advisor at uni/TAFE	4.3	5.1	4.5	4.9	4.6	4.9	4.7	4.8	4.7
	Advisor somewhere else	3.2	6.0	3.6	3.6	2.3	3.4	3.5	3.9	3.5
	School/TAFE teacher	14.1	15.4	14.3	16.0	14.3	15.8	15.2	14.7	15.1
	Family	45.5	37.0	44.4	46.8	35.4	45.3	46.3	36.0	44.9
	Friends	22.3	21.0	22.1	23.5	20.2	23.1	23.0	20.4	22.7
	Former or current students	17.2	11.8	16.5	18.5	13.5	17.9	18.0	12.7	17.3
	Information from university	32.2	29.4	31.8	39.8	32.3	38.8	36.6	30.9	35.9
	Managers/colleagues at work	6.6	10.9	7.2	7.6	10.1	7.9	7.2	10.6	7.6
	Year 12 results	38.3	29.2	37.1	40.0	28.4	38.5	39.3	28.4	37.8
	Student income support	6.9	5.2	6.6	6.5	4.8	6.3	6.7	5.0	6.4
	Work exp. in a field of interest	29.4	31.9	29.7	31.1	31.9	31.2	30.4	32.0	30.6
Number of influences	None	14.7	16.1	14.9	14.1	22.3	15.2	14.3	19.7	15.1
	One	24.6	28.1	25.0	20.7	26.4	21.5	22.3	27.3	23.0
	Two or three	39.2	38.0	39.0	39.8	32.6	38.9	39.6	34.8	38.9
	Four or more	21.6	17.9	21.1	25.3	18.7	24.5	23.8	18.2	23.0
Reasons for enrolling	Like learning	35.9	32.0	35.4	40.7	31.3	39.4	38.7	31.4	37.7
	Personal challenge	25.0	19.3	24.2	32.6	22.8	31.3	29.4	21.4	28.3
	Financial gain	51.9	39.0	50.1	48.9	36.1	47.2	50.1	37.5	48.4
	To enter a career of choice	63.3	46.3	61.0	74.1	52.4	71.3	69.7	49.9	67.0
Number of reasons for enrolling	None	14.2	27.5	16.0	13.1	27.3	15.0	13.6	27.5	15.5
	One	24.0	27.9	24.5	25.7	29.7	26.3	25.0	28.7	25.5
	Two	27.9	24.4	27.4	26.2	18.2	25.2	26.9	20.9	26.1
	Three	14.0	10.9	13.5	16.6	11.5	15.9	15.5	11.2	14.9
	Four	13.6	6.7	12.6	17.1	10.5	16.2	15.6	8.9	14.7
	Can't remember	6.4	2.6	5.9	1.2	2.8	1.4	3.3	2.7	3.3
Main carer for someone	No	93.3	91.1	93.0	87.3	75.5	85.8	89.8	82.0	88.8
	For pre-school children	2.7	2.3	2.6	4.7	11.4	5.6	3.8	7.7	4.4
	For primary school children	2.8	3.6	2.9	6.9	11.1	7.4	5.2	7.9	5.5
	For older children	2.2	3.6	2.4	3.8	8.9	4.5	3.1	6.6	3.6
	For others	0.8	2.8	1.1	1.8	3.6	2.1	1.4	3.3	1.7
Mainly living with	Parents	64.7	52.4	63.0	56.4	40.6	54.3	59.8	45.4	57.8
	Spouse, no children	8.2	17.3	9.4	11.1	22.1	12.5	9.9	20.2	11.3
	Spouse and children	1.7	2.5	1.8	3.3	6.7	3.8	2.7	4.9	3.0
	Children, no spouse	0.5	0.4	0.5	3.2	5.5	3.5	2.1	3.4	2.3
	Univ. college/other residence	7.8	5.3	7.5	9.5	3.6	8.7	8.8	4.3	8.2
	Other	17.0	22.1	17.7	16.5	21.5	17.2	16.7	21.8	17.4

See *Notes to tables*

Table A.1—*continued*
Percent of students who were enrolled and not enrolled at university in first semester 2005 and all students, by student and course characteristics

		Males			*Females*			*Persons*		
Variable	*Category*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*
Hours of paid work per week	Not employed	50.9	40.2	49.4	47.2	39.8	46.2	48.7	39.9	47.5
	1-9 hours	6.5	4.3	6.2	7.0	6.0	6.9	6.8	5.2	6.6
	10-19 hours	21.8	19.0	21.4	23.4	15.6	22.4	22.8	17.0	22.0
	20-34 hours	13.1	17.9	13.8	16.1	22.0	16.9	14.9	20.2	15.6
	35-40 hours	5.1	11.1	5.9	4.3	11.0	5.2	4.7	11.3	5.6
	More than 40 hours	2.6	7.4	3.3	1.9	5.6	2.4	2.2	6.3	2.8
Study leave from paid work	Not employed	50.9	39.9	49.4	47.0	40.0	46.1	48.6	40.0	47.4
	No, employer/self-employed	2.2	3.4	2.3	2.2	2.9	2.2	2.2	3.1	2.3
	No, flexible hours	20.8	24.8	21.4	25.0	25.6	25.1	23.3	25.2	23.6
	No, fixed hours	3.7	11.6	4.8	5.6	11.6	6.4	4.8	11.5	5.7
	Yes, but difficult to use	6.5	6.5	6.5	4.9	9.4	5.5	5.6	8.1	5.9
	Yes, and used it	15.9	13.9	15.6	15.2	10.5	14.6	15.5	12.2	15.1
Missed classes due to paid work	Not employed	50.7	40.1	49.2	47.0	39.7	46.0	48.5	39.9	47.3
	No, did not have to attend	2.5	7.4	3.2	3.5	9.9	4.3	3.1	9.0	3.9
	No, never	23.8	25.3	24.0	26.3	27.1	26.4	25.3	26.2	25.4
	Yes, but rarely	14.7	12.9	14.5	15.9	13.3	15.5	15.4	13.0	15.1
	Yes, sometimes	6.5	10.5	7.0	5.6	6.6	5.7	5.9	8.3	6.3
	Yes, frequently	1.8	3.7	2.1	1.8	3.4	2.0	1.8	3.6	2.0
Paid work interfered with study	Not employed	50.8	40.0	49.3	47.0	39.8	46.0	48.5	39.9	47.4
	No, not at all	15.7	16.5	15.8	15.2	16.2	15.4	15.4	16.4	15.5
	Yes, but only a little	20.0	21.3	20.1	24.4	20.7	23.9	22.6	20.8	22.3
	Yes, somewhat	10.1	10.6	10.2	10.8	14.1	11.2	10.5	12.7	10.8
	Yes, a great deal	3.5	11.6	4.6	2.7	9.2	3.5	3.0	10.2	4.0
Travel time to university	Did not travel to university	6.3	12.0	7.1	7.1	16.7	8.4	6.8	14.8	7.9
	1 - 30 minutes	47.3	43.2	46.7	47.8	41.0	46.9	47.6	42.0	46.8
	31 - 60 minutes	32.2	33.4	32.4	30.9	29.6	30.8	31.5	31.0	31.4
	60 - 90 minutes	9.7	6.0	9.2	9.9	6.9	9.5	9.8	6.7	9.4
	More than 90 minutes	4.5	5.3	4.6	4.2	5.7	4.4	4.3	5.5	4.5
Youth Allowance	Independent, full	10.6	7.6	10.2	9.4	5.4	8.8	9.9	6.3	9.4
	Independent, partial	3.8	1.8	3.5	4.3	2.5	4.1	4.1	2.2	3.8
	Dependent, full	5.0	5.2	5.1	6.1	2.9	5.7	5.7	3.9	5.4
	Dependent, partial	3.7	2.8	3.6	3.9	1.6	3.6	3.8	2.3	3.6
	No	76.9	82.5	77.6	76.4	87.6	77.8	76.6	85.3	77.8
Austudy	Full	6.8	7.5	6.9	4.1	2.4	3.9	5.2	4.5	5.1
	Partial	3.2	3.1	3.2	2.4	2.9	2.5	2.7	3.0	2.8
	No	90.1	89.4	90.0	93.4	94.7	93.6	92.0	92.5	92.1
ABSTUDY	Yes	97.7	99.1	97.9	99.1	98.7	99.0	98.5	98.9	98.6
	No	2.3	0.9	2.1	0.9	1.3	1.0	1.5	1.1	1.4
Main sources of financial support	Government income support	28.1	24.3	27.5	29.8	22.5	28.8	29.1	23.3	28.3
	Paid employment	54.9	65.0	56.3	59.7	69.0	60.9	57.7	67.3	59.0
	Spouse or partner	3.0	2.9	3.0	8.9	14.3	9.6	6.5	9.4	6.8
	Parents or guardian	52.8	34.8	50.3	52.0	31.3	49.3	52.4	32.6	49.7
	Other relatives	1.7	0.0	1.5	1.7	0.9	1.6	1.7	0.5	1.5
	Savings or sale of assets	14.5	12.5	14.2	11.5	7.7	11.0	12.7	9.7	12.3
	Commercial loans	0.5	0.2	0.4	0.2	0.8	0.3	0.3	0.5	0.3
	Loans from family/friends	1.7	1.1	1.6	1.9	1.7	1.8	1.8	1.4	1.7
	Any scholarship	3.0	0.9	2.8	5.0	1.8	4.6	4.2	1.4	3.8

See *Notes to tables*

Table A.1—*continued*
Percent of students who were enrolled and not enrolled at university in first semester 2005 and all students, by student and course characteristics

		Males			*Females*			*Persons*		
Variable	*Category*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*	*Enrol*	*notE*	*All*
Income support	Full	21.2	17.6	20.7	18.1	11.3	17.2	19.4	13.9	18.6
	Partial	8.5	6.5	8.3	9.2	5.9	8.8	8.9	6.4	8.6
	None	70.3	75.9	71.0	72.7	82.8	74.1	71.7	79.8	72.8
Type of university	Group of 8	29.2	10.8	26.7	27.2	12.7	25.3	28.0	12.0	25.9
	Technology network	19.6	24.0	20.2	17.9	22.1	18.4	18.6	23.1	19.2
	Innovative research univ.	16.1	17.7	16.3	16.9	15.8	16.7	16.6	16.5	16.5
	Rural universities	19.9	30.2	21.3	22.3	34.9	24.0	21.3	32.8	22.9
	New generation universities	15.3	17.3	15.5	15.7	14.6	15.6	15.5	15.6	15.5
Wanted to enrol at this university	Yes, definitely	68.1	57.2	66.5	69.1	62.5	68.2	68.7	60.3	67.5
	Yes, with some reservations	16.8	26.3	18.1	18.8	21.7	19.2	18.0	23.6	18.7
	No, but I didn't mind	8.9	13.1	9.5	7.5	10.8	7.9	8.1	11.7	8.6
	No, wanted another univ.	6.2	3.5	5.8	4.6	5.0	4.7	5.3	4.4	5.1
Type of enrolment	Full-time	91.5	73.2	89.0	87.4	63.2	84.2	89.1	67.3	86.1
	Part-time	8.5	26.8	11.0	12.6	36.8	15.8	10.9	32.7	13.9
Mode of enrolment	On-campus	88.9	79.4	87.6	86.4	72.7	84.6	87.4	75.5	85.8
	Off-campus	5.3	12.1	6.2	6.4	19.4	8.1	6.0	16.4	7.4
	Mixed on & off campus	5.8	8.5	6.2	7.2	7.9	7.3	6.6	8.1	6.8
Single or double degree	Single degree	80.5	89.2	81.7	85.4	89.2	85.9	83.4	89.3	84.2
	Double degree	18.2	10.4	17.2	13.8	9.0	13.1	15.6	9.5	14.8
	Don't know	0.3	0.2	0.3	0.2	1.3	0.3	0.2	0.8	0.3
	Other	0.9	0.2	0.8	0.6	0.5	0.6	0.7	0.4	0.7
Field of study	Creative arts	8.5	12.6	9.0	9.2	10.0	9.3	8.9	11.2	9.2
	Social sciences	4.9	6.0	5.0	10.4	11.3	10.6	8.1	9.0	8.3
	Humanities	8.6	7.9	8.5	12.0	12.4	12.0	10.6	10.6	10.6
	Management or commerce	19.5	15.9	19.0	14.5	15.9	14.7	16.6	15.9	16.5
	Agriculture or environ'l sci.	3.4	4.8	3.6	2.1	2.0	2.1	2.6	3.2	2.7
	Information technology	8.5	9.6	8.7	1.1	2.2	1.2	4.1	5.4	4.3
	Science	13.2	9.3	12.6	12.2	8.3	11.7	12.6	8.7	12.1
	Engineering	14.0	19.9	14.8	1.2	1.6	1.2	6.5	9.3	6.8
	Architecture or building	3.4	2.6	3.3	1.3	1.0	1.3	2.2	1.8	2.1
	Nursing	2.1	0.9	1.9	9.1	12.4	9.5	6.2	7.5	6.4
	Health	5.8	1.2	5.2	12.1	5.1	11.1	9.5	3.4	8.6
	Teacher education	4.4	6.5	4.7	10.7	13.1	11.0	8.1	10.3	8.4
	Education	0.7	0.9	0.7	1.1	1.9	1.2	0.9	1.4	1.0
	Law	3.1	1.8	2.9	3.3	2.7	3.2	3.2	2.3	3.1
Wanted to enrol in this course	Yes, definitely	67.4	59.6	66.4	68.5	62.3	67.7	68.1	61.3	67.2
	Yes, with some reservations	21.2	25.2	21.7	19.7	21.7	20.0	20.3	23.1	20.7
	No, but I didn't mind	6.1	6.8	6.2	5.7	7.1	5.9	5.9	7.0	6.0
	No, wanted another course	5.3	8.3	5.7	6.1	8.9	6.4	5.7	8.7	6.1
Credit for prior study	Yes	19.8	26.3	20.7	22.6	25.1	23.0	21.5	25.6	22.0
	No	80.2	73.7	79.3	77.4	74.9	77.0	78.5	74.4	78.0
First semester results	Passed all subjects	78.7	47.6	74.6	82.9	54.5	79.2	81.1	51.5	77.2
	Some passes, no fails	8.5	14.6	9.3	8.2	11.7	8.6	8.3	12.8	8.9
	Some passes, some fails	7.2	10.9	7.7	4.9	9.5	5.5	5.9	10.2	6.5
	No passes, some or all fails	4.6	13.0	5.7	2.1	8.9	3.0	3.1	10.6	4.1
	Withdrawals, no assessment	1.0	13.8	2.7	1.9	15.4	3.7	1.5	14.9	3.3

See *Notes to tables*

Table A.2
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: All students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng*	*Cont.*	*Chng*	*Attrit*
All persons		92.0	8.0	86.1	13.9	74.3	12.0	13.7
Sex	Male	92.2	7.8 o	86.0	14.0 o	74.1	12.0	13.9 o
	Female	91.9	8.1	86.2	13.8	74.8	12.0	13.2
Age	15-19 years	89.5	10.5 ***	82.6	17.4 ***	74.0	15.6	10.4 ***
	20-24 years	93.4	6.6	86.6	13.4	76.5	11.8	11.7
	25-34 years	95.7	4.3	95.4	4.6	74.6	3.6	21.8
	35 years and over	95.5	4.5	91.6	8.4	70.7	6.5	22.8
Socio-economic b'ground	Highest quintile	92.0	8.0 o	85.4	14.6 o	78.2	13.4	8.4 ***
	Next quintile	91.6	8.4	87.3	12.7	76.9	11.2	12.0
	Middle quintile	91.0	9.0	85.8	14.2	73.3	12.1	14.6
	Next quintile	92.6	7.4	86.8	13.2	71.9	10.9	17.2
	Lowest quintile	92.9	7.1	85.3	14.7	71.3	12.3	16.4
Indigenous	Yes	98.0	2.0 o	93.7	6.3 o	74.8	5.0	20.2 o
	No	92.0	8.0	86.0	14.0	74.5	12.1	13.4
Country of birth	One/both parents Aust born	91.9	8.1 o	86.3	13.7 *	73.3	11.7	15.1 ***
	Student Aust. born, not parents	91.9	8.1	82.8	17.2	75.0	15.5	9.5
	Parents & student born o'seas	92.9	7.1	87.9	12.1	77.9	10.7	11.3
English spoken in the home	English the only language	92.2	7.8 o	86.2	13.8 o	73.5	11.8	14.7 ***
	English the main language	92.8	7.2	85.2	14.8	75.7	13.2	11.1
	No, but English spoken freq.	88.8	11.2	87.8	12.2	82.0	11.4	6.7
	No, English rarely/never used	92.5	7.5	85.0	15.0	77.7	13.8	8.5
Disability	Yes	91.2	8.8 o	85.1	14.9 o	71.4	12.5	16.2 o
	No	92.2	7.8	86.2	13.8	74.7	11.9	13.3
Access	Very accessible	91.4	8.6 *	85.7	14.3 o	74.8	12.4	12.7 *
	Accessible	91.8	8.2	87.4	12.6	73.0	10.5	16.5
	Mod. access, (very) remote	94.9	5.1	87.8	12.2	71.6	10.0	18.4
	Living overseas	96.2	3.8	87.8	12.2	78.2	10.8	10.9
Secondary school last attended	Government	92.7	7.3 o	86.8	13.2 o	72.4	11.0	16.6 ***
	Selective government	92.0	8.0	90.5	9.5	83.2	8.7	8.1
	Catholic	90.1	9.9	85.1	14.9	74.5	13.0	12.5
	Private/Other	92.0	8.0	85.4	14.6	76.9	13.2	9.9
	Overseas	91.8	8.2	84.9	15.1	65.7	11.7	22.6
Moved to attend university	Did not move	92.2	7.8 *	86.3	13.7 o	73.9	11.7	14.4 *
	Moved, didn't have to	94.6	5.4	88.8	11.2	78.5	9.9	11.7
	Moved within state	91.7	8.3	83.1	16.9	74.0	15.0	11.0
	Moved between states	85.3	14.7	91.3	8.7	81.4	7.8	10.8
	Moved from overseas	99.2	0.8	88.4	11.6	83.9	11.0	5.1
Prior univ. study	Completed	96.1	3.9 **	89.0	11.0 o	75.2	9.3	15.5 *
	Not completed	93.7	6.3	87.6	12.4	75.2	10.6	14.2
	None	91.1	8.9	85.5	14.5	74.3	12.6	13.1
Highest educat'al attainment	Degree or higher	95.9	4.1 **	91.8	8.2 ***	74.5	6.6	18.8 ***
	Diploma	95.9	4.1	94.8	5.2	76.4	4.2	19.5
	App'ship, other voc, other	92.2	7.8	88.4	11.6	66.8	8.8	24.4
	Highest secondary	90.8	9.2	83.3	16.7	74.6	15.0	10.4
	Below highest secondary	94.1	5.9	92.1	7.9	74.3	6.3	19.3

See *Notes to tables*

Table A.2—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: All students

In first semester 2005 . . .		*Changed univ.*			*Changed course*			*Left university*		
Variable	*Category*	*Same*	*Diff*		*Cont.*	*Chng*		*Cont.*	*Chng*	*Attrit*	
Main activity in 2003	Studying at school	89.9	10.1	***	83.1	16.9	***	74.4	15.1	10.5	***
	In full-time paid work	95.1	4.9		92.3	7.7		69.5	5.8	24.7	
	Studying at TAFE/elsewhere	95.5	4.5		90.8	9.2		75.5	7.6	16.9	
	Studying at university	95.2	4.8		89.1	10.9		82.6	10.2	7.2	
	Caring for family or friend	96.6	3.4		91.5	8.5		70.4	6.6	23.1	
	Other	93.5	6.5		88.2	11.8		71.9	9.6	18.4	
Course enrolment influenced by	Advisor at school	89.0	11.0	o	82.7	17.3	*	72.4	15.1	12.5	o
	Advisor at uni/TAFE	95.2	4.8	o	89.7	10.3	o	77.4	8.9	13.7	o
	Advisor somewhere else	92.7	7.3	o	85.0	15.0	o	72.3	12.8	14.9	o
	School/TAFE teacher	90.9	9.1	o	85.3	14.7	o	74.3	12.7	13.0	o
	Family	91.4	8.6	o	84.8	15.2	*	75.8	13.6	10.7	***
	Friends	91.6	8.4	o	83.9	16.1	*	73.8	14.2	12.0	o
	Former or current students	93.6	6.4	o	87.2	12.8	o	78.7	11.6	9.8	***
	Information from university	92.7	7.3	o	84.7	15.3	o	75.0	13.5	11.5	**
	Managers/colleagues at work	91.3	8.7	o	91.6	8.4	**	74.7	6.8	18.5	**
	Year 12 results	88.8	11.2	***	81.7	18.3	***	73.6	16.4	10.0	***
	Student income support	91.5	8.5	o	84.4	15.6	o	75.7	14.0	10.3	o
	Work exp. in a field of interest	93.2	6.8	o	88.9	11.1	***	76.4	9.5	14.1	o
Number of influences	None	93.2	6.8	o	88.2	11.8	*	72.5	9.7	17.8	***
	One	91.8	8.2		88.0	12.0		73.7	10.1	16.2	
	Two or three	92.1	7.9		86.0	14.0		75.5	12.3	12.2	
	Four or more	91.2	8.8		83.2	16.8		74.2	15.0	10.8	
Reasons for enrolling	Like learning	92.7	7.3	o	86.2	13.8	o	76.4	12.2	11.4	***
	Personal challenge	92.1	7.9	o	85.4	14.6	o	76.6	13.1	10.3	***
	Financial gain	91.9	8.1	o	85.4	14.6	o	76.4	13.0	10.6	***
	To enter a career of choice	92.2	7.8	o	86.4	13.6	o	77.6	12.2	10.2	***
Number of reasons for enrolling	None	90.9	9.1	o	84.6	15.4	o	64.1	11.7	24.3	***
	One	92.5	7.5		88.0	12.0		74.5	10.1	15.4	
	Two	91.7	8.3		85.6	14.4		76.2	12.9	10.9	
	Three	91.6	8.4		85.1	14.9		76.4	13.3	10.2	
	Four	93.0	7.0		86.1	13.9		78.9	12.8	8.3	
	Can't remember	92.4	7.6		86.6	13.4		76.8	11.8	11.3	
Main carer carer for someone	No	91.5	8.5	**	85.3	14.7	***	74.6	12.9	12.5	***
	For pre-school children	97.7	2.3	**	93.1	6.9	**	70.9	5.2	23.9	***
	For primary school children	97.6	2.4	**	94.1	5.9	***	75.8	4.8	19.4	**
	For older children	96.6	3.4	o	94.8	5.2	**	71.3	3.9	24.8	***
	For others	88.2	11.8	o	84.4	15.6	o	62.0	11.5	26.6	**
Mainly living with	Parents	91.2	8.8	*	84.1	15.9	***	75.1	14.2	10.7	***
	Spouse, no children	93.5	6.5		92.3	7.7		69.8	5.8	24.4	
	Spouse and children	97.9	2.1		94.2	5.8		72.8	4.5	22.7	
	Children, no spouse	98.6	1.4		95.4	4.6		76.1	3.7	20.2	
	Univ. college or other residence	91.2	8.8		84.6	15.4		78.6	14.3	7.1	
	Other	92.7	7.3		88.0	12.0		73.0	10.0	17.1	

See *Notes to tables*

Table A.2—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: All students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng*	*Cont.*	*Chng*	*Attrit*
Hours of paid work per week	Not employed	91.9	8.1 o	85.8	14.2 *	76.0	12.6	11.4 ***
	1-9 hours	91.4	8.6	87.2	12.8	77.8	11.4	10.8
	10-19 hours	91.4	8.6	83.8	16.2	75.0	14.5	10.5
	20-34 hours	92.7	7.3	88.0	12.0	72.6	9.9	17.6
	35-40 hours	93.3	6.7	91.0	9.0	65.8	6.5	27.6
	More than 40 hours	94.4	5.6	92.5	7.5	64.0	5.2	30.8
Study leave from paid work	Not employed	91.9	8.1 o	85.8	14.2 o	76.0	12.6	11.4 ***
	No, employer/self-employed	97.1	2.9	88.3	11.7	72.2	9.6	18.1
	No, flexible hours	93.1	6.9	87.2	12.8	74.6	10.9	14.4
	No, fixed hours	93.1	6.9	88.7	11.3	64.7	8.2	27.1
	Yes, but difficult to use	91.5	8.5	86.7	13.3	70.5	10.9	18.6
	Yes, and used it	89.9	10.1	84.1	15.9	74.9	14.2	10.9
Missed classes due to paid work	Not employed	91.9	8.1 o	85.8	14.2 o	76.0	12.6	11.4 ***
	No, did not have to attend	90.9	9.1	90.2	9.8	62.0	6.7	31.3
	No, never	91.2	8.8	85.2	14.8	73.3	12.7	13.9
	Yes, but rarely	93.0	7.0	87.6	12.4	77.3	11.0	11.7
	Yes, sometimes	93.2	6.8	84.8	15.2	69.6	12.5	17.9
	Yes, frequently	96.3	3.7	91.5	8.5	69.5	6.4	24.0
Paid work interfered with study	Not employed	91.9	8.1 o	85.8	14.2 o	76.0	12.6	11.4 ***
	No, not at all	90.1	9.9	84.8	15.2	72.7	13.1	14.2
	Yes, but only a little	92.9	7.1	87.4	12.6	76.4	11.0	12.6
	Yes, somewhat	92.9	7.1	85.3	14.7	71.7	12.4	15.9
	Yes, a great deal	92.9	7.1	90.0	10.0	58.7	6.5	34.8
Travel time to university	Did not travel to university	90.9	9.1 ***	92.4	7.6 **	68.7	5.6	25.7 ***
	1 - 30 minutes	92.9	7.1	86.1	13.9	75.6	12.2	12.2
	31 - 60 minutes	92.8	7.2	85.4	14.6	73.8	12.7	13.5
	60 - 90 minutes	90.2	9.8	85.6	14.4	77.2	13.0	9.8
	More than 90 minutes	81.5	18.5	81.3	18.7	67.7	15.6	16.7
Youth Allowance	Independent, full	90.8	9.2 o	87.2	12.8 o	79.2	11.6	9.2 ***
	Independent, partial	92.6	7.4	84.2	15.8	77.5	14.5	8.0
	Dependent, full	89.9	10.1	80.3	19.7	72.4	17.8	9.8
	Dependent, partial	91.1	8.9	84.2	15.8	77.0	14.4	8.6
	No	92.3	7.7	86.6	13.4	73.6	11.4	15.0
Austudy	Full	94.3	5.7 o	88.3	11.7 o	77.7	10.3	12.0 o
	Partial	93.5	6.5	87.2	12.8	74.2	10.9	14.9
	No	91.8	8.2	85.9	14.1	74.1	12.1	13.8
ABSTUDY	Yes	91.9	8.1 o	86.0	14.0 o	74.2	12.1	13.7 o
	No	96.6	3.4	89.7	10.3	80.2	9.2	10.6
Main sources of financial support	Government income support	92.0	8.0 o	85.9	14.1 o	76.3	12.5	11.2 **
	Paid employment	92.7	7.3 o	86.7	13.3 o	73.3	11.2	15.5 ***
	Spouse or partner	94.6	5.4 o	90.6	9.4 *	73.7	7.6	18.7 *
	Parents or guardian	90.8	9.2 **	84.7	15.3 **	77.1	14.0	9.0 ***
	Other relatives	89.0	11.0 o	71.2	28.8 **	68.1	27.5	4.4 **
	Savings or sale of assets	93.8	6.2 o	81.3	18.7 **	72.6	16.7	10.8 *
	Commercial loans	91.7	8.3 o	63.1	36.9 o	49.6	29.0	21.4 o
	Loans from family/friends	93.5	6.5 o	85.8	14.2 o	76.3	12.6	11.1 o
	Any scholarship	94.2	5.8 o	91.4	8.6 *	86.9	8.2	4.9 ***

See *Notes to tables*

Table A.2—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: All students

In first semester 2005 . . .		*Changed univ.*			*Changed course*			*Left university*			
Variable	*Category*	*Same*	*Diff.*		*Cont.*	*Chng*		*Cont.*	*Chng*	*Attrit*	
Income support	Full	91.7	8.3	o	85.5	14.5	o	76.8	13.0	10.2	***
	Partial	92.0	8.0		85.0	15.0		76.4	13.4	10.2	
	None	92.1	7.9		86.4	13.6		73.4	11.6	15.0	
Type of university	Group of 8	93.9	6.1	***	86.7	13.3	***	81.2	12.4	6.3	***
	Technology network	94.5	5.5		87.4	12.6		73.1	10.5	16.4	
	Innovative research universities	90.4	9.6		79.8	20.2		68.9	17.5	13.6	
	Regional universities	91.1	8.9		87.6	12.4		70.4	10.0	19.6	
	New generation universities	88.7	11.3		88.0	12.0		75.9	10.4	13.7	
Wanted to enrol at this univ.	Yes, definitely	96.5	3.5	***	88.7	11.3	***	77.9	9.9	12.2	***
	Yes, with some reservations	87.7	12.3		82.2	17.8		68.1	14.7	17.2	
	No, but I didn't mind	80.1	19.9		78.9	21.1		64.2	17.2	18.6	
	No, really wanted another univ.	65.8	34.2		76.8	23.2		67.8	20.5	11.7	
Type of enrolment	Full-time	91.9	8.1	o	85.2	14.8	***	76.1	13.2	10.6	***
	Part-time	93.2	6.8		93.6	6.4		63.5	4.4	32.1	
Mode of enrolment	On-campus	91.9	8.1	o	85.5	14.5	***	75.2	12.8	12.0	***
	Off-campus	92.6	7.4		94.0	6.0		65.5	4.2	30.3	
	Mixed on & off campus	93.3	6.7		87.3	12.7		73.1	10.6	16.3	
Single or double degree	Single degree	91.7	8.3	o	86.3	13.7	o	73.8	11.7	14.5	***
	Double degree	93.6	6.4		85.0	15.0		77.6	13.7	8.8	
	Don't know	90.5	9.5		90.5	9.5		59.7	6.2	34.0	
	Other	98.5	1.5		82.8	17.2		76.2	15.8	8.0	
Field of study	Creative arts	93.1	6.9	o	87.0	13.0	***	72.6	10.8	16.6	***
	Social sciences	90.9	9.1		85.3	14.7		72.6	12.5	14.9	
	Humanities	88.5	11.5		79.7	20.3		68.8	17.6	13.6	
	Management or commerce	91.6	8.4		88.4	11.6		76.7	10.1	13.2	
	Agriculture or environ'l science	94.5	5.5		84.5	15.5		70.7	13.0	16.3	
	Information technology	94.2	5.8		83.0	17.0		68.7	14.1	17.2	
	Science	89.7	10.3		79.7	20.3		71.9	18.3	9.8	
	Engineering	93.5	6.5		87.1	12.9		71.0	10.5	18.5	
	Architecture or building	88.0	12.0		88.3	11.7		78.2	10.4	11.4	
	Nursing	93.0	7.0		94.3	5.7		79.2	4.8	16.1	
	Health	91.8	8.2		87.6	12.4		83.0	11.7	5.3	
	Teacher education	96.2	3.8		91.0	9.0		75.8	7.5	16.7	
	Education	97.7	2.3		81.1	18.9		65.0	15.2	19.8	
	Law	94.2	5.8		91.4	8.6		82.2	7.7	10.0	
Wanted to enrol in this course	Yes, definitely	95.3	4.7	***	92.2	7.8	***	80.7	6.9	12.5	**
	Yes, with some reservations	88.9	11.1		79.3	20.7		67.2	17.6	15.2	
	No, but I didn't mind	82.0	18.0		70.3	29.7		59.2	25.0	15.8	
	No, really wanted another course	74.2	25.8		56.3	43.7		45.4	35.3	19.3	
Credit for prior study	Yes	95.1	4.9	***	90.5	9.5	***	76.3	8.0	15.8	*
	No	91.1	8.9		84.7	15.3		73.8	13.3	12.9	
First semester results	Passed all subjects	92.9	7.1	**	87.5	12.5	***	79.7	11.4	8.9	***
	Some passes, no fails	89.7	10.3		78.6	21.4		63.5	17.3	19.2	
	Some passes, some fails	90.9	9.1		82.9	17.1		65.5	13.5	21.1	
	No passes, some or all fails	89.8	10.2		89.1	10.9		58.4	7.2	34.5	
	Withdrawals, no assessment	75.0	25.0		71.0	29.0		28.4	11.6	60.1	

See *Notes to tables*

Table A.3
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Male students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff*	*Cont.*	*Chng*	*Cont.*	*Chng*	*Attrit*
All males		92.2	7.8	86.0	14.0	74.1	12.0	13.9
Age	15-19 years	90.3	9.7 o	83.7	16.3 *	74.3	14.5	11.2 ***
	20-24 years	92.9	7.1	86.7	13.3	76.0	11.7	12.4
	25-34 years	96.6	3.4	94.0	6.0	73.3	4.7	22.0
	35 years and over	95.2	4.8	89.0	11.0	68.2	8.5	23.3
Socio-economic b'ground	Highest quintile	93.2	6.8 o	87.6	12.4 o	80.9	11.5	7.7 ***
	Next quintile	93.8	6.2	89.8	10.2	78.5	8.9	12.6
	Middle quintile	89.2	10.8	82.9	17.1	70.8	14.6	14.6
	Next quintile	92.1	7.9	87.3	12.7	69.0	10.0	20.9
	Lowest quintile	92.1	7.9	80.3	19.7	66.6	16.4	17.0
Indigenous	Yes	100.0	0.0 o	100.0	0.0 o	89.2	0.0	10.8 o
	No	92.1	7.9	85.9	14.1	73.9	12.2	13.9
Country of birth	At least one parent Aust born	92.6	7.4 o	86.4	13.6 o	72.6	11.4	16.0 **
	Student Aust. born, not parents	92.1	7.9	80.6	19.4	73.7	17.8	8.5
	Parents & student born o'seas	91.7	8.3	89.1	10.9	79.3	9.7	11.0
English spoken in the home	English the only language	92.9	7.1 o	86.3	13.7 o	73.1	11.6	15.2 *
	English the main language	92.7	7.3	82.6	17.4	72.4	15.2	12.4
	No, but English spoken freq.	86.4	13.6	88.4	11.6	81.5	10.7	7.8
	No, English rarely/never used	90.5	9.5	85.6	14.4	79.9	13.4	6.6
Disability	Yes	90.3	9.7 o	80.8	19.2 o	66.6	15.8	17.6 o
	No	92.4	7.6	86.5	13.5	74.8	11.7	13.5
Access	Very accessible	91.7	8.3 o	85.6	14.4 o	74.3	12.5	13.2 o
	Accessible	89.9	10.1	88.2	11.8	71.7	9.6	18.7
	Mod. access, (very) remote	96.1	3.9	88.6	11.4	69.5	9.0	21.5
	Living overseas	96.6	3.4	87.0	13.0	77.3	11.5	11.1
Secondary school last attended	Government	92.2	7.8 o	86.4	13.6 o	70.9	11.2	17.9 ***
	Selective government	94.0	6.0	91.3	8.7	85.4	8.1	6.4
	Catholic	91.7	8.3	86.1	13.9	74.6	12.1	13.4
	Private/Other	91.9	8.1	85.4	14.6	77.4	13.2	9.4
	Overseas	87.7	12.3	63.9	36.1	43.0	24.3	32.7
Moved to attend university	Did not move	92.4	7.6 o	86.2	13.8 o	74.0	11.8	14.2 o
	Moved, didn't have to	96.7	3.3	91.2	8.8	77.2	7.5	15.3
	Moved within state	91.9	8.1	82.6	17.4	73.5	15.4	11.1
	Moved between states	83.2	16.8	92.5	7.5	75.6	6.1	18.3
	Moved from overseas	100.0	0.0	91.2	8.8	85.3	8.3	6.5
Prior univ. study	Completed	96.5	3.5 o	87.1	12.9 o	74.1	11.0	15.0 o
	Not completed	94.1	5.9	89.1	10.9	76.7	9.3	14.0
	None	91.3	8.7	85.5	14.5	73.9	12.5	13.5
Highest educat'al attainment	Degree or higher	94.7	5.3 o	86.4	13.6 ***	70.7	11.1	18.2 ***
	Diploma	97.0	3.0	97.6	2.4	80.0	2.0	18.0
	App'ship, other voc, other	91.8	8.2	89.8	10.2	66.9	7.6	25.4
	Highest secondary	91.4	8.6	82.9	17.1	73.7	15.3	11.0
	Below highest secondary	95.8	4.2	88.7	11.3	71.8	9.2	19.0

See *Notes to tables*

Table A.3—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Male students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng.*	*Cont.*	*Chng*	*Attrit*
Main activity in 2003	Studying at school	90.5	9.5 o	83.7	16.3 *	74.2	14.5	11.3 ***
	In full-time paid work	95.5	4.5	90.2	9.8	67.7	7.4	25.0
	Studying at TAFE/elsewhere	95.2	4.8	94.2	5.8	79.0	4.8	16.2
	Studying at university	95.9	4.1	89.9	10.1	82.5	9.3	8.2
	Caring for family or friend	100.0	0.0	75.1	24.9	55.6	18.4	26.0
	Other	91.4	8.6	85.0	15.0	72.2	12.8	15.1
Course enrolment influenced by	Advisor at school	89.1	10.9 o	82.1	17.9 o	69.0	15.0	15.9 o
	Advisor at uni/TAFE	96.4	3.6 o	91.1	8.9 o	76.9	7.6	15.5 o
	Advisor somewhere else	94.4	5.6 o	79.4	20.6 o	61.3	15.9	22.8 o
	School/TAFE teacher	91.2	8.8 o	85.6	14.4 o	72.8	12.3	14.9 o
	Family	91.5	8.5 o	85.5	14.5 o	75.8	12.8	11.4 *
	Friends	91.0	9.0 o	84.9	15.1 o	74.0	13.1	12.9 o
	Former or current students	94.3	5.7 o	85.2	14.8 o	76.9	13.4	9.7 o
	Information from university	93.8	6.2 o	85.1	14.9 o	74.5	13.1	12.4 o
	Managers/colleagues at work	93.3	6.7 o	95.3	4.7 *	75.8	3.7	20.5 o
	Year 12 results	88.8	11.2 **	82.5	17.5 **	73.7	15.7	10.6 *
	Student income support	92.4	7.6 o	86.3	13.7 o	77.3	12.2	10.5 o
	Work exp. in a field of interest	94.0	6.0 o	89.5	10.5 o	76.5	8.9	14.5 o
Number of influences	None	92.3	7.7 o	86.2	13.8 o	73.2	11.8	15.0 o
	One	92.0	8.0	88.4	11.6	74.7	9.8	15.6
	Two or three	92.3	7.7	85.6	14.4	74.0	12.4	13.5
	Four or more	91.9	8.1	84.1	15.9	74.2	14.0	11.8
Reasons for enrolling	Like learning	93.5	6.5 o	88.5	11.5 o	77.4	10.1	12.6 o
	Personal challenge	92.3	7.7 o	87.2	12.8 o	77.5	11.4	11.1 o
	Financial gain	91.8	8.2 o	86.3	13.7 o	77.0	12.2	10.8 ***
	To enter a career of choice	92.1	7.9 o	85.8	14.2 o	76.8	12.7	10.5 ***
Number of reasons for enrolling	None	90.6	9.4 o	84.4	15.6 o	64.3	11.9	23.8 ***
	One	93.2	6.8	85.7	14.3	72.1	12.1	15.8
	Two	90.8	9.2	83.9	16.1	73.6	14.1	12.3
	Three	92.1	7.9	87.6	12.4	77.8	11.0	11.2
	Four	93.6	6.4	89.3	10.7	82.8	9.9	7.3
	Can't remember	94.5	5.5	89.9	10.1	84.3	9.5	6.2
Main carer for someone	No	91.9	8.1 o	85.3	14.7 o	73.8	12.7	13.5 o
	For pre-school children	98.6	1.4 o	93.8	6.2 o	82.2	5.4	12.3 o
	For primary school children	98.7	1.3 o	98.7	1.3 *	81.6	1.1	17.3 o
	For older children	98.1	1.9 o	98.1	1.9 o	77.9	1.5	20.6 o
	For others	84.8	15.2 o	71.2	28.8 o	46.0	18.7	35.3 *
Mainly living with	Parents	91.6	8.4 o	84.6	15.4 o	74.8	13.7	11.5 ***
	Spouse, no children	93.8	6.2	90.3	9.7	67.4	7.2	25.4
	Spouse and children	96.5	3.5	89.3	10.7	72.1	8.7	19.2
	Children, no spouse	100.0	0.0	100.0	0.0	88.7	0.0	11.3
	Univ. college or other residence	92.8	7.2	90.1	9.9	81.4	8.9	9.7
	Other	92.7	7.3	86.8	13.2	71.9	10.9	17.2

See *Notes to tables*

Table A.3—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Male students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng.*	*Cont.*	*Chng*	*Attrit*
Hours of paid work per week	Not employed	92.0	8.0 o	84.5	15.5 o	75.1	13.8	11.1 ***
	1-9 hours	89.8	10.2	87.1	12.9	78.8	11.7	9.5
	10-19 hours	92.0	8.0	86.6	13.4	76.1	11.8	12.1
	20-34 hours	92.4	7.6	89.0	11.0	73.2	9.1	17.7
	35-40 hours	96.5	3.5	88.7	11.3	66.1	8.4	25.5
	More than 40 hours	94.2	5.8	90.4	9.6	62.7	6.6	30.7
Study leave from paid work	Not employed	92.0	8.0 o	84.5	15.5 o	75.1	13.8	11.1 ***
	No, employer/self-employed	94.7	5.3	80.0	20.0	64.0	16.0	19.9
	No, flexible hours	93.7	6.3	88.1	11.9	74.1	10.0	15.9
	No, fixed hours	88.4	11.6	82.9	17.1	55.6	11.5	32.9
	Yes, but difficult to use	91.7	8.3	94.8	5.2	81.8	4.5	13.7
	Yes, and used it	91.4	8.6	86.2	13.8	75.7	12.1	12.2
Missed classes due to paid work	Not employed	92.0	8.0 o	84.5	15.5 o	75.1	13.8	11.1 **
	No, did not have to attend	90.7	9.3	85.3	14.7	58.2	10.1	31.7
	No, never	91.6	8.4	86.8	13.2	74.4	11.3	14.3
	Yes, but rarely	93.9	6.1	87.1	12.9	76.5	11.4	12.1
	Yes, sometimes	91.0	9.0	91.8	8.2	73.1	6.6	20.3
	Yes, frequently	100.0	0.0	95.1	4.9	71.6	3.7	24.7
Paid work interfered with study	Not employed	92.0	8.0 o	84.5	15.5 o	75.1	13.8	11.1 ***
	No, not at all	89.0	11.0	83.5	16.5	71.5	14.2	14.3
	Yes, but only a little	94.2	5.8	89.5	10.5	76.6	9.0	14.4
	Yes, somewhat	92.5	7.5	89.3	10.7	76.6	9.2	14.2
	Yes, a great deal	95.4	4.6	91.4	8.6	59.8	5.6	34.6
Travel time to university	Did not travel to university	92.4	7.6 o	94.0	6.0 o	71.9	4.6	23.5 *
	1 - 30 minutes	93.3	6.7	84.8	15.2	73.9	13.2	12.8
	31 - 60 minutes	92.5	7.5	85.4	14.6	73.2	12.5	14.3
	60 - 90 minutes	90.4	9.6	87.2	12.8	79.3	11.6	9.1
	More than 90 minutes	81.7	18.3	87.2	12.8	73.2	10.8	16.0
Youth Allowance	Independent, full	89.5	10.5 o	88.0	12.0 *	78.8	10.8	10.4 o
	Independent, partial	89.8	10.2	80.1	19.9	74.4	18.4	7.2
	Dependent, full	89.8	10.2	70.3	29.7	60.3	25.4	14.2
	Dependent, partial	92.1	7.9	87.4	12.6	77.9	11.2	10.9
	No	92.7	7.3	87.0	13.0	74.2	11.1	14.7
Austudy	Full	94.7	5.3 o	88.7	11.3 o	75.1	9.6	15.3 o
	Partial	95.5	4.5	93.5	6.5	80.7	5.6	13.7
	No	91.8	8.2	85.5	14.5	73.6	12.5	13.9
ABSTUDY	Yes	92.0	8.0 o	85.8	14.2 o	73.8	12.2	14.0 o
	No	96.3	3.7	93.4	6.6	87.9	6.2	5.9
Main sources of financial support	Government income support	91.1	8.9 o	83.9	16.1 o	73.6	14.2	12.2 o
	Paid employment	92.7	7.3 o	86.7	13.3 o	72.9	11.1	16.0 **
	Spouse or partner	94.6	5.4 o	78.3	21.7 o	67.6	18.7	13.6 o
	Parents or guardian	91.1	8.9 o	86.0	14.0 o	77.8	12.6	9.6 ***
	Other relatives	91.3	8.7 o	70.6	29.4 o	70.6	29.4	0.0 **
	Savings or sale of assets	94.8	5.2 o	79.9	20.1 *	70.2	17.6	12.1 o
	Commercial loans	100.0	0.0 o	46.5	53.5 o	43.5	50.0	6.4 o
	Loans from family/friends	95.7	4.3 o	83.2	16.8 o	75.4	15.3	9.3 o
	Any scholarship	92.5	7.5 o	93.1	6.9 o	88.8	6.6	4.6 o

See *Notes to tables*

Table A.3—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Male students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng.*	*Cont.*	*Chng*	*Attrit*
Income support	Full	91.5	8.5 o	84.3	15.7 o	74.4	13.8	11.8 o
	Partial	91.3	8.7	83.8	16.2	74.7	14.4	10.8
	None	92.5	7.5	86.8	13.2	73.9	11.3	14.8
Type of university	Group of 8	94.7	5.3 o	86.0	14.0 o	81.2	13.2	5.6 ***
	Technology network	94.7	5.3	87.3	12.7	73.0	10.6	16.5
	Innovative research universities	89.1	10.9	80.6	19.4	68.5	16.5	15.0
	Regional universities	91.2	8.8	86.9	13.1	69.9	10.5	19.7
	New generation universities	88.8	11.2	88.8	11.2	75.1	9.4	15.4
Wanted to enrol at this univ.	Yes, definitely	97.3	2.7 ***	87.9	12.1 o	77.4	10.7	11.9 **
	Yes, with some reservations	87.0	13.0	81.6	18.4	65.2	14.7	20.1
	No, but I didn't mind	83.0	17.0	85.3	14.7	69.0	11.9	19.1
	No, really wanted another univ.	62.1	37.9	79.7	20.3	73.0	18.6	8.4
Type of enrolment	Full-time	91.9	8.1 o	85.2	14.8 **	75.5	13.2	11.4 ***
	Part-time	95.3	4.7	95.4	4.6	63.3	3.0	33.7
Mode of enrolment	On-campus	92.2	7.8 o	85.5	14.5 o	74.8	12.7	12.5 **
	Off-campus	92.3	7.7	92.0	8.0	67.3	5.9	26.8
	Mixed on & off campus	92.1	7.9	88.6	11.4	71.7	9.3	19.0
Single or double degree	Single degree	91.7	8.3 o	86.3	13.7 o	73.2	11.7	15.1 *
	Double degree	94.2	5.8	86.1	13.9	78.9	12.7	8.4
	Don't know	86.8	13.2	86.8	13.2	79.1	12.0	8.9
	Other	97.1	2.9	66.7	33.3	64.9	32.3	2.8
Field of study	Creative arts	92.6	7.4 o	86.9	13.1 o	70.2	10.6	19.2 *
	Social sciences	89.1	10.9	81.8	18.2	68.3	15.2	16.5
	Humanities	90.5	9.5	78.9	21.1	68.7	18.4	12.8
	Management or commerce	90.8	9.2	90.7	9.3	80.3	8.2	11.5
	Agriculture or environ'l science	95.8	4.2	93.0	7.0	75.7	5.7	18.6
	Information technology	95.3	4.7	87.0	13.0	73.6	11.0	15.4
	Science	91.1	8.9	77.6	22.4	69.6	20.2	10.2
	Engineering	94.1	5.9	88.5	11.5	72.0	9.4	18.6
	Architecture or building	88.9	11.1	89.6	10.4	79.8	9.3	10.9
	Nursing	90.7	9.3	92.9	7.1	87.2	6.7	6.1
	Health	90.2	9.8	84.1	15.9	81.3	15.4	3.3
	Teacher education	94.8	5.2	90.9	9.1	73.4	7.4	19.2
	Education	100.0	0.0	67.9	32.1	56.1	26.5	17.5
	Law	96.0	4.0	88.8	11.2	81.4	10.3	8.3
Wanted to enrol in this course	Yes, definitely	96.0	4.0 ***	92.1	7.9 ***	80.6	6.9	12.5 o
	Yes, with some reservations	87.0	13.0	79.1	20.9	66.4	17.5	16.1
	No, but I didn't mind	84.9	15.1	68.9	31.1	58.3	26.4	15.3
	No, really wanted another course	72.6	27.4	60.1	39.9	47.9	31.8	20.3
Credit for prior study	Yes	95.0	5.0 o	89.2	10.8 o	73.6	8.9	17.5 o
	No	91.5	8.5	85.1	14.9	74.2	13.0	12.8
First semester results	Passed all subjects	93.3	6.7 o	88.0	12.0 **	80.5	11.0	8.4 ***
	Some passes, no fails	89.0	11.0	74.4	25.6	59.0	20.3	20.7
	Some passes, some fails	91.7	8.3	78.1	21.9	63.5	17.8	18.7
	No passes, some or all fails	89.7	10.3	94.7	5.3	66.0	3.7	30.3
	Withdrawals, no assessment	72.6	27.4	77.4	22.6	25.2	7.3	67.5

See *Notes to tables*

Table A.4
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Female students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*			
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng.*	*Cont.*	*Chng*	*Attrit*	p
All females		91.9	8.1	86.2	13.8	74.8	12.0	13.2	
Age	15-19 years	89.0	11.0	81.9	18.1	73.8	16.4	9.8	***
	20-24 years	93.8	6.2	86.6	13.4	77.0	11.9	11.1	
	25-34 years	95.1	4.9	96.3	3.7	75.4	2.9	21.7	
	35 years and over	95.6	4.4	93.1	6.9	72.2	5.4	22.5	
Socio-economic b'ground	Highest quintile	91.1	8.9	83.4	16.6	75.8	15.1	9.1	***
	Next quintile	89.7	10.3	85.2	14.8	75.5	13.2	11.3	
	Middle quintile	92.4	7.6	88.0	12.0	75.4	10.2	14.4	
	Next quintile	92.8	7.2	86.5	13.5	73.7	11.5	14.8	
	Lowest quintile	93.4	6.6	87.8	12.2	73.7	10.3	16.0	
Indigenous	Yes	96.3	3.7	88.8	11.2	65.3	8.3	26.4	*
	No	91.9	8.1	86.1	13.9	74.8	12.1	13.1	
Country of birth	At least one parent Aust born	91.4	8.6	86.1	13.9	73.8	11.9	14.3	*
	Student Aust. born, not parents	91.8	8.2	84.7	15.3	76.1	13.8	10.2	
	Parents & student born o'seas	93.9	6.1	86.9	13.1	77.0	11.6	11.4	
English spoken in the home	English the only language	91.7	8.3	86.1	13.9	73.7	11.9	14.4	***
	English the main language	92.9	7.1	86.8	13.2	77.8	11.9	10.3	
	No, but English spoken freq.	90.5	9.5	87.4	12.6	82.5	11.9	5.6	
	No, English rarely/never used	94.8	5.2	84.2	15.8	75.4	14.1	10.5	
Disability	Yes	91.8	8.2	88.1	11.9	74.7	10.1	15.2	
	No	92.0	8.0	86.1	13.9	74.8	12.1	13.1	
Access	Very accessible	91.2	8.8	85.9	14.1	75.2	12.4	12.4	
	Accessible	92.9	7.1	87.0	13.0	73.8	11.0	15.1	
	Mod. access, (very) remote	94.4	5.6	87.4	12.6	72.7	10.5	16.9	
	Living overseas	95.9	4.1	88.6	11.4	79.1	10.2	10.7	
Secondary school last attended	Government	93.0	7.0	87.1	12.9	73.6	10.9	15.5	**
	Selective government	90.0	10.0	89.7	10.3	81.0	9.3	9.8	
	Catholic	89.1	10.9	84.5	15.5	74.4	13.6	12.0	
	Private/Other	92.1	7.9	85.4	14.6	76.6	13.1	10.3	
	Overseas	93.9	6.1	95.8	4.2	80.5	3.5	16.0	
Moved to attend university	Did not move	92.2	7.8	86.4	13.6	74.1	11.7	14.2	**
	Moved, didn't have to	93.0	7.0	87.1	12.9	79.5	11.7	8.8	
	Moved within state	91.6	8.4	83.4	16.6	74.5	14.8	10.7	
	Moved between states	86.3	13.7	90.6	9.4	84.8	8.8	6.5	
	Moved from overseas	98.3	1.7	85.3	14.7	82.3	14.2	3.5	
Prior univ. study	Completed	95.9	4.1	90.0	10.0	76.2	8.5	15.4	
	Not completed	93.4	6.6	86.6	13.4	74.4	11.5	14.1	
	None	91.0	9.0	85.5	14.5	74.8	12.7	12.5	
Highest educat'al attainment	Degree or higher	96.5	3.5	94.8	5.2	77.3	4.3	18.4	***
	Diploma	95.1	4.9	93.0	7.0	74.1	5.6	20.3	
	App'ship, other voc, other	92.5	7.5	87.4	12.6	66.9	9.6	23.5	
	Highest secondary	90.4	9.6	83.6	16.4	75.4	14.8	9.7	
	Below highest secondary	93.0	7.0	94.4	5.6	76.0	4.5	19.5	

See *Notes to tables*

Table A.4—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Female students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng*	*Cont.*	*Chng*	*Attrit*
Main activity in 2003	Studying at school	89.5	10.5 ***	82.6	17.4 ***	74.5	15.7	9.8 ***
	In full-time paid work	94.8	5.2	93.9	6.1	71.4	4.7	24.0
	Studying at TAFE/elsewhere	95.7	4.3	88.1	11.9	73.4	9.9	16.7
	Studying at university	94.8	5.2	88.6	11.4	83.1	10.7	6.2
	Caring for family or friend	96.1	3.9	94.1	5.9	72.8	4.6	22.6
	Other	94.7	5.3	90.0	10.0	72.2	8.0	19.8
Course enrolment influenced by	Advisor at school	89.0	11.0 o	83.1	16.9 o	74.9	15.2	9.8 o
	Advisor at uni/TAFE	94.4	5.6 o	88.8	11.2 o	78.0	9.8	12.1 o
	Advisor somewhere else	91.6	8.4 o	88.4	11.6 o	80.8	10.6	8.6 o
	School/TAFE teacher	90.9	9.1 o	85.2	14.8 o	75.2	13.1	11.7 o
	Family	91.4	8.6 o	84.3	15.7 *	75.9	14.1	10.0 ***
	Friends	91.9	8.1 o	83.2	16.8 *	73.8	14.9	11.3 o
	Former or current students	93.1	6.9 o	88.5	11.5 o	79.8	10.4	9.7 *
	Information from university	92.2	7.8 o	84.5	15.5 o	75.4	13.8	10.8 **
	Managers/colleagues at work	90.0	10.0 o	89.4	10.6 o	74.6	8.9	16.6 o
	Year 12 results	88.9	11.1 ***	81.3	18.7 ***	73.5	17.0	9.5 ***
	Student income support	90.9	9.1 o	82.9	17.1 o	74.7	15.4	9.9 o
	Work exp. in a field of interest	92.7	7.3 o	88.5	11.5 *	76.6	10.0	13.4 o
Number of influences	None	93.9	6.1 o	89.7	10.3 *	72.4	8.3	19.3 ***
	One	91.7	8.3	87.6	12.4	73.4	10.3	16.2
	Two or three	92.0	8.0	86.3	13.7	76.8	12.2	11.0
	Four or more	90.8	9.2	82.6	17.4	74.3	15.6	10.1
Reasons for enrolling	Like learning	92.2	7.8 o	84.8	15.2 o	75.9	13.6	10.5 ***
	Personal challenge	92.0	8.0 o	84.5	15.5 o	76.3	14.0	9.6 ***
	Financial gain	92.1	7.9 o	84.8	15.2 o	76.2	13.7	10.1 ***
	To enter a career of choice	92.3	7.7 o	86.8	13.2 o	78.3	12.0	9.7 ***
Number of reasons for enrolling	None	91.1	8.9 o	84.8	15.2 *	64.4	11.6	24.0 ***
	One	92.0	8.0	89.6	10.4	76.2	8.9	14.9
	Two	92.4	7.6	86.7	13.3	78.5	12.0	9.5
	Three	91.4	8.6	83.7	16.3	75.7	14.7	9.6
	Four	92.6	7.4	84.3	15.7	77.1	14.4	8.5
	Can't remember	84.9	15.1	74.8	25.2	55.4	18.7	25.9
Main carer for someone	No	91.3	8.7 **	85.3	14.7 **	75.3	13.0	11.7 ***
	For pre-school children	97.3	2.7 *	92.8	7.2 *	67.5	5.2	27.2 ***
	For primary school children	97.3	2.7 **	92.8	7.2 **	74.4	5.8	19.8 **
	For older children	96.0	4.0 o	93.4	6.6 *	68.7	4.8	26.5 ***
	For others	89.3	10.7 o	88.6	11.4 o	68.0	8.7	23.3 *
Mainly living with	Parents	90.9	9.1 **	83.7	16.3 ***	75.4	14.7	9.9 ***
	Spouse, no children	93.3	6.7	93.4	6.6	71.6	5.1	23.3
	Spouse and children	98.4	1.6	95.9	4.1	73.4	3.1	23.5
	Children, no spouse	98.4	1.6	94.9	5.1	75.2	4.1	20.8
	Univ. college or other residence	90.3	9.7	81.4	18.6	76.9	17.6	5.5
	Other	92.8	7.2	88.8	11.2	74.1	9.4	16.5

See *Notes to tables*

Table A.4—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Female students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng*	*Cont.*	*Chng*	*Attrit*
Hours of paid work per week	Not employed	91.9	8.1 o	86.8	13.2 **	76.9	11.7	11.4 ***
	1-9 hours	92.5	7.5	87.3	12.7	77.2	11.2	11.6
	10-19 hours	91.1	8.9	81.9	18.1	74.4	16.4	9.2
	20-34 hours	92.9	7.1	87.5	12.5	72.4	10.3	17.2
	35-40 hours	90.7	9.3	92.8	7.2	67.0	5.2	27.8
	More than 40 hours	94.6	5.4	94.4	5.6	65.3	3.8	30.9
Study leave from paid work	Not employed	91.9	8.1 o	86.8	13.2 *	76.9	11.7	11.4 ***
	No, employer/self-employed	98.8	1.2	94.1	5.9	78.2	4.9	16.8
	No, flexible hours	92.7	7.3	86.7	13.3	75.1	11.5	13.4
	No, fixed hours	95.3	4.7	91.5	8.5	69.7	6.5	23.7
	Yes, but difficult to use	91.2	8.8	79.1	20.9	61.4	16.2	22.4
	Yes, and used it	88.9	11.1	82.5	17.5	74.7	15.9	9.5
Missed classes due to paid work	Not employed	91.9	8.1 o	86.8	13.2 *	76.9	11.7	11.4 ***
	No, did not have to attend	91.0	9.0	92.8	7.2	64.8	5.0	30.1
	No, never	91.0	9.0	84.2	15.8	72.8	13.7	13.5
	Yes, but rarely	92.4	7.6	87.9	12.1	78.0	10.7	11.3
	Yes, sometimes	95.0	5.0	79.1	20.9	67.0	17.7	15.3
	Yes, frequently	93.7	6.3	89.0	11.0	68.6	8.5	22.9
Paid work interfered with study	Not employed	91.9	8.1 o	86.8	13.2 o	76.9	11.7	11.4 ***
	No, not at all	90.9	9.1	85.7	14.3	73.8	12.3	13.9
	Yes, but only a little	92.1	7.9	86.1	13.9	76.3	12.3	11.4
	Yes, somewhat	93.1	6.9	82.7	17.3	68.9	14.4	16.6
	Yes, a great deal	90.6	9.4	88.7	11.3	58.3	7.4	34.3
Travel time to univ.	Did not travel to university	90.0	10.0 **	91.4	8.6 *	67.4	6.3	26.3 ***
	1 - 30 minutes	92.5	7.5	87.1	12.9	77.0	11.5	11.6
	31 - 60 minutes	93.0	7.0	85.4	14.6	74.5	12.8	12.7
	60 - 90 minutes	90.1	9.9	84.5	15.5	76.4	14.0	9.6
	More than 90 minutes	81.4	18.6	76.8	23.2	63.7	19.2	17.2
Youth Allowance	Independent, full	91.8	8.2 o	86.6	13.4 o	79.5	12.3	8.1 ***
	Independent, partial	94.2	5.8	86.8	13.2	79.8	12.2	8.1
	Dependent, full	90.0	10.0	86.0	14.0	80.2	13.1	6.7
	Dependent, partial	90.5	9.5	82.1	17.9	77.2	16.9	6.0
	No	92.0	8.0	86.3	13.7	73.5	11.7	14.9
Austudy	Full	93.9	6.1 o	88.0	12.0 o	80.9	11.0	8.0 o
	Partial	91.7	8.3	81.5	18.5	69.0	15.6	15.4
	No	91.8	8.2	86.3	13.7	74.7	11.9	13.4
ABSTUDY	Yes	91.8	8.2 o	86.1	13.9 o	74.7	12.1	13.2 o
	No	97.0	3.0	83.3	16.7	68.5	13.8	17.7
Main sources of financial support	Government income support	92.5	7.5 o	87.3	12.7 o	78.3	11.4	10.3 **
	Paid employment	92.7	7.3 o	86.7	13.3 o	73.8	11.3	14.9 ***
	Spouse or partner	94.6	5.4 o	93.5	6.5 ***	75.2	5.2	19.6 ***
	Parents or guardian	90.6	9.4 *	83.7	16.3 ***	76.7	15.0	8.4 ***
	Other relatives	87.3	12.7 o	71.7	28.3 *	66.4	26.2	7.4 ***
	Savings or sale of assets	92.9	7.1 o	82.6	17.4 o	74.9	15.8	9.3 *
	Commercial loans	77.8	22.2 o	90.9	9.1 o	56.4	5.6	38.0 o
	Loans from family/friends	92.0	8.0 o	87.5	12.5 o	76.8	11.0	12.2 o
	Any scholarship	94.9	5.1 o	90.7	9.3 o	86.1	8.8	5.1 ***

See *Notes to tables*

Table A.4—*continued*
Percent of students who continued, changed or discontinued their course in first semester 2005 by student and course characteristics: Female students

In first semester 2005 . . .		*Changed univ.*		*Changed course*		*Left university*		
Variable	*Category*	*Same*	*Diff.*	*Cont.*	*Chng*	*Cont.*	*Chng*	*Attrit*
Income support	Full	91.8	8.2 o	86.5	13.5 o	79.0	12.3	8.7 ***
	Partial	92.5	7.5	85.8	14.2	78.2	12.9	8.9
	None	91.8	8.2	86.1	13.9	73.4	11.9	14.8
Type of university	Group of 8	93.3	6.7 *	87.2	12.8 **	81.5	11.9	6.6 ***
	Technology network	94.3	5.7	87.5	12.5	73.7	10.5	15.8
	Innovative research universities	91.4	8.6	79.2	20.8	69.3	18.2	12.5
	Regional universities	91.0	9.0	88.0	12.0	71.1	9.7	19.2
	New generation universities	88.6	11.4	87.4	12.6	76.6	11.1	12.4
Wanted to enrol at this univ.	Yes, definitely	96.0	4.0 ***	89.3	10.7 ***	78.5	9.4	12.1 *
	Yes, with some reservations	88.1	11.9	82.6	17.4	70.3	14.8	14.9
	No, but I didn't mind	77.9	22.1	73.4	26.6	60.2	21.8	18.0
	No, really wanted another univ.	69.3	30.7	74.0	26.0	63.5	22.3	14.3
Type of enrolment	Full-time	91.9	8.1 o	85.2	14.8 ***	76.8	13.3	9.9 ***
	Part-time	92.2	7.8	92.7	7.3	64.3	5.1	30.7
Mode of enrolment	On-campus	91.7	8.3 o	85.5	14.5 **	75.7	12.9	11.4 ***
	Off-campus	92.8	7.2	95.2	4.8	65.3	3.3	31.4
	Mixed on & off campus	93.9	6.1	86.6	13.4	74.1	11.5	14.4
Single or double degree	Single degree	91.7	8.3 o	86.4	13.6 o	74.6	11.7	13.7 **
	Double degree	93.0	7.0	83.9	16.1	76.3	14.6	9.1
	Don't know	95.0	5.0	95.0	5.0	47.1	2.5	50.4
	Other	100.0	0.0	100.0	0.0	89.8	0.0	10.2
Field of study	Creative arts	93.4	6.6 o	87.1	12.9 ***	74.7	11.1	14.3 ***
	Social sciences	91.6	8.4	86.5	13.5	74.2	11.6	14.2
	Humanities	87.5	12.5	80.1	19.9	69.2	17.2	13.6
	Management or commerce	92.6	7.4	86.1	13.9	73.8	11.9	14.3
	Agriculture or environ'l science	93.0	7.0	74.8	25.2	65.1	22.0	12.9
	Information technology	88.1	11.9	60.1	39.9	45.6	30.3	24.1
	Science	88.7	11.3	81.4	18.6	73.7	16.9	9.4
	Engineering	88.8	11.2	75.2	24.8	62.0	20.5	17.5
	Architecture or building	86.5	13.5	85.8	14.2	76.4	12.7	11.0
	Nursing	93.3	6.7	94.6	5.4	78.3	4.5	17.2
	Health	92.4	7.6	88.8	11.2	83.5	10.5	6.0
	Teacher education	96.6	3.4	91.1	8.9	76.8	7.5	15.7
	Education	96.6	3.4	86.9	13.1	68.8	10.4	20.8
	Law	93.0	7.0	93.1	6.9	82.7	6.1	11.1
Wanted to enrol in this course	Yes, definitely	94.8	5.2 ***	92.2	7.8 ***	81.0	6.9	12.1 o
	Yes, with some reservations	90.4	9.6	79.4	20.6	68.0	17.7	14.3
	No, but I didn't mind	79.9	20.1	71.4	28.6	60.1	24.0	15.9
	No, really wanted another course	75.2	24.8	54.0	46.0	44.1	37.7	18.2
Credit for prior study	Yes	95.2	4.8 **	91.4	8.6 ***	78.3	7.4	14.3 o
	No	90.8	9.2	84.5	15.5	73.7	13.5	12.7
First semester results	Passed all subjects	92.7	7.3 *	87.2	12.8 **	79.2	11.7	9.1 ***
	Some passes, no fails	90.3	9.7	81.8	18.2	67.2	14.9	17.9
	Some passes, some fails	90.1	9.9	88.0	12.0	68.1	9.2	22.7
	No passes, some or all fails	89.8	10.2	80.2	19.8	48.7	12.0	39.4
	Withdrawals, no assessment	76.0	24.0	68.6	31.4	30.7	14.0	55.3

See *Notes to tables*

Table A.5
Logistic regression of attrition, change of course and change of university on student and course characteristics

		Left University	*Changed Course*	*Changed University*
Variable	*Category*	*logit*	*logit*	*logit*
Intercept		-1.450 ***	-2.504 ***	-3.299 ***
Female		-0.004 o	0.059 o	0.107 o
Age	15-19 years	---	---	---
	20-24 years	0.090 o	-0.089 o	-0.184 o
	25-34 years	-0.019 o	-0.713 o	-0.365 o
	35 years and over	-0.165 o	-0.073 o	0.033 o
Socio-economic background	Highest quintile	---	---	---
	Next quintile	0.194 o	-0.153 o	-0.063 o
	Middle quintile	0.291 o	0.071 o	0.144 o
	Next quintile	0.388 *	0.055 o	-0.095 o
	Lowest quintile	0.297 o	0.002 o	-0.355 o
Indigenous		0.359 o	-0.453 o	-0.981 o
English spoken in the home	English the only language	---	---	---
	English the main language	-0.110 o	-0.056 o	-0.388 o
	No, but English spoken freq.	-0.534 *	-0.480 *	0.181 o
	No, English rarely/never used	-0.468 o	0.088 o	-0.077 o
Disability		0.195 o	0.095 o	-0.047 o
Remoteness	Very accessible	---	---	---
	Accessible	0.050 o	0.054 o	-0.113 o
	Mod. access, (very) remote	0.270 o	0.164 o	-0.673 o
	Living overseas	-0.341 o	0.324 o	-0.598 o
Moved to attend university	Did not move	---	---	---
	Moved, didn't have to	-0.157 o	-0.034 o	-0.575 o
	Moved within state	-0.108 o	0.120 o	0.072 o
	Moved between states	0.049 o	-0.576 o	0.685 o
	Moved from overseas	-0.433 o	-0.094 o	-2.696 o
Highest educational attainment	Degree or higher	0.443 *	-0.302 o	-0.058 o
	Diploma	0.219 o	-0.909 **	-0.152 o
	App'ship, other voc, other	0.477 **	-0.349 o	0.136 o
	Highest secondary	---	---	---
	Below highest secondary	0.161 o	-0.464 o	0.318 o
Main activity in 2003	Studying at school	---	---	---
	In full-time paid work	0.007 o	-0.044 o	-0.452 o
	Studying at TAFE/elsewhere	0.000 o	0.110 o	-0.394 o
	Studying at university	-0.806 ***	-0.029 o	-0.294 o
	Caring for family or friend	-0.035 o	0.335 o	-0.398 o
	Other	-0.128 o	0.104 o	-0.163 o

See *Notes to tables*

Table A.5—*continued*
Logistic regression of attrition, change of course and change of university on student and course characteristics

		Left University	*Changed Course*	*Changed University*
Variable	*Category*	*logit*	*logit*	*logit*
Course enrolment influenced by	Advisor at school	0.097 o	0.171 o	0.222 o
	Advisor at uni/TAFE	-0.020 o	-0.408 o	-0.769 o
	Advisor somewhere else	0.177 o	0.061 o	0.136 o
	School/TAFE teacher	0.236 o	-0.050 o	0.262 o
	Family	-0.064 o	-0.017 o	-0.140 o
	Friends	0.195 o	0.111 o	-0.016 o
	Former or current students	-0.171 o	-0.183 o	-0.329 o
	Information from university	0.034 o	0.163 o	0.000 o
	Managers/colleagues at work	-0.258 o	-0.270 o	0.328 o
	Year 12 results	-0.055 o	0.179 o	0.265 o
	Student income support	0.019 o	0.091 o	0.045 o
	Work exp. in a field of interest	0.054 o	-0.216 o	-0.048 o
Reasons for enrolling	Like learning	-0.101 o	0.061 o	0.016 o
	Personal challenge	0.021 o	0.008 o	-0.100 o
	Financial gain	-0.142 o	0.000 o	-0.116 o
	To enter a career of choice	-0.571 ***	0.007 o	0.156 o
Main carer for someone	No	---	---	---
	For pre-school children	0.154 o	0.090 o	-1.081 o
	For primary school children	-0.345 o	-0.050 o	-0.871 o
	For older children	0.303 o	-0.446 o	-0.402 o
	For others	0.629 *	0.446 o	0.421 o
Mainly living with	Parents	---	---	---
	Spouse, no children	0.381 o	-0.452 o	0.649 o
	Spouse and children	0.301 o	-0.766 o	-0.254 o
	Children, no spouse	0.178 o	-0.796 o	-1.023 o
	Univ. college or other residence	-0.048 o	0.049 o	0.007 o
	Other	0.370 *	-0.177 o	0.294 o
Hours of paid work per week	Not employed	---	---	---
	1-9 hours	0.158 o	-0.003 o	0.154 o
	10-19 hours	0.029 o	0.177 o	0.215 o
	20-34 hours	0.326 *	-0.081 o	0.089 o
	35-40 hours	0.068 o	0.621 o	0.320 o
	More than 40 hours	0.079 o	0.170 o	-0.532 o
Travel time to university	Did not travel to university	-0.101 o	-0.023 o	0.497 o
	1 - 30 minutes	---	---	---
	31 - 60 minutes	0.288 *	-0.028 o	-0.110 o
	60 - 90 minutes	0.017 o	-0.215 o	-0.062 o
	More than 90 minutes	0.467 *	0.026 o	0.458 o

See *Notes to tables*

Table A.5—*continued*
Logistic regression of attrition, change of course and change of university on student and course characteristics

		Left University	*Changed Course*	*Changed University*
Variable	*Category*	*logit*	*logit*	*logit*
Main sources of financial support	Government income support	-0.064 o	0.007 o	0.320 o
	Paid employment	-0.067 o	-0.132 o	-0.296 o
	Spouse or partner	-0.363 o	0.581 o	0.186 o
	Parents or guardian	-0.269 *	-0.271 o	0.016 o
	Other relatives	-0.948 o	1.022 **	0.017 o
	Savings or sale of assets	-0.055 o	0.301 o	-0.388 o
	Commercial loans	0.219 o	2.149 *	0.312 o
	Loans from family/friends	-0.373 o	-0.514 o	-0.392 o
	Any scholarship	-0.750 *	-0.566 o	-0.359 o
Income support	Full	-0.352 o	0.044 o	-0.108 o
	Partial	-0.215 o	0.226 o	-0.069 o
	None	---	---	---
Type of university	Group of 8	---	---	---
	Technology network	0.672 ***	0.104 o	-0.222 o
	Innovative research universities	0.515 **	0.651 ***	0.247 o
	Regional universities	0.810 ***	0.111 o	0.250 o
	New generation universities	0.352 o	-0.216 o	-0.208 o
Wanted to enrol at this university	Yes, definitely	---	---	---
	Yes, with some reservations	0.338 **	0.252 o	1.235 ***
	No, but I didn't mind	0.367 *	0.287 o	1.695 ***
	No, really wanted another univ.	-0.247 o	0.293 o	2.564 ***
Full-time	Full-time	-1.004 ***	0.021 o	-0.427 o
Mode of enrolment	On-campus	---	---	---
	Off-campus	-0.046 o	-0.186 o	0.203 o
	Mixed on & off campus	0.130 o	-0.059 o	0.014 o
Double deg.		-0.226 o	0.154 o	-0.206 o
Field of study	Creative arts	---	---	---
	Social sciences	-0.308 o	0.124 o	0.385 o
	Humanities	-0.207 o	0.537 *	0.612 o
	Management or commerce	-0.352 o	-0.070 o	0.322 o
	Agriculture or environ'l science	0.232 o	0.453 o	0.137 o
	Information technology	-0.096 o	0.447 o	-0.295 o
	Science	-0.304 o	0.406 o	0.424 o
	Engineering	0.345 o	0.191 o	0.342 o
	Architecture or building	-0.196 o	-0.048 o	0.654 o
	Nursing	-0.157 o	-0.821 *	0.091 o
	Health	-0.905 ***	-0.038 o	0.278 o
	Teacher education	-0.021 o	0.086 o	-0.086 o
	Education	0.066 o	0.644 o	-1.179 o
	Law	-0.418 o	-0.358 o	0.051 o
Wanted to enrol in this course	Yes, definitely	---	---	---
	Yes, with some reservations	0.376 **	0.881 ***	0.510 **
	No, but I didn't mind	0.548 **	1.464 ***	0.957 ***
	No, really wanted another course	0.793 ***	2.001 ***	1.249 ***

See *Notes to tables*

Table A.6
Logistic regression of attrition, change of course and change of university on selected student background characteristics

		Left University	*Changed Course*	*Changed University*
Variable	*Category*	*logit*	*logit*	*logit*
Intercept		-2.377 ***	-1.559 ***	-2.300 ***
Female		-0.153 o	0.010 o	0.057 o
Age	15-19 years	---	---	---
	20-24 years	-0.091 o	-0.178 o	-0.483 **
	25-34 years	0.048 o	-0.909 **	-0.750 *
	35 years and over	0.001 o	-0.180 o	-0.584 o
Socio-economic background	Highest quintile	---	---	---
	Next quintile	0.386 *	-0.120 o	0.110 o
	Middle quintile	0.494 **	0.076 o	0.242 o
	Next quintile	0.565 ***	0.102 o	0.019 o
	Lowest quintile	0.487 **	0.244 o	0.044 o
Indigenous		0.031 o	-0.661 o	-1.147 o
English spoken in the home	English the only language	---	---	---
	English the main language	-0.244 o	-0.010 o	-0.165 o
	No, but English spoken freq.	-0.825 ***	-0.307 o	0.345 o
	No, English rarely/never used	-0.604 *	0.157 o	0.273 o
Disability		0.141 o	0.148 o	0.071 o
Remoteness	Very accessible	---	---	---
	Accessible	0.135 o	-0.122 o	-0.126 o
	Mod. access, (very) remote	0.277 o	-0.205 o	-0.775 *
	Living overseas	-0.273 o	0.316 o	-0.534 o
Moved to attend university	Did not move	---	---	---
	Moved, didn't have to	-0.370 o	-0.157 o	-0.277 o
	Moved within state	-0.395 *	0.214 o	0.113 o
	Moved between states	-0.376 o	-0.406 o	0.844 *
	Moved from overseas	-0.818 o	-0.172 o	-1.846 o
Highest educational attainment	Degree or higher	0.440 *	-0.362 o	-0.480 o
	Diploma	0.449 **	-0.908 ***	-0.285 o
	App'ship, other voc, other	0.648 ***	-0.155 o	0.163 o
	Highest secondary	---	---	---
	Below highest secondary	0.334 o	-0.544 o	0.127 o
Main carer for someone	No	---	---	---
	For pre-school children	0.149 o	0.182 o	-0.675 o
	For primary school children	-0.249 o	-0.211 o	-0.679 o
	For older children	0.056 o	-0.438 o	-0.164 o
	For others	0.655 *	0.548 o	0.778 o
Mainly living with	Parents	---	---	---
	Spouse, no children	0.591 ***	-0.338 o	0.454 o
	Spouse and children	0.516 o	-0.458 o	-0.286 o
	Children, no spouse	0.255 o	-0.758 o	-0.993 o
	Univ. college or other residence	-0.229 o	-0.087 o	-0.063 o
	Other	0.473 **	-0.129 o	0.105 o

See *Notes to tables*

Table A.7
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp.*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
All persons		22.3 o	20.7	13.9	12.1	8.4
Sex	Male	23.6 o	19.4 o	14.6 o	11.0 o	7.9 o
	Female	21.2	21.2	13.3	12.9	8.8
Age	15-19 years	34.9 ***	20.3 o	5.7 ***	11.6 o	9.4 o
	20-24 years	25.5	20.8	13.9	12.4	10.6
	25-34 years	10.4	15.7	21.5	9.2	6.0
	35 years and over	5.9	25.4	22.1	15.5	6.2
Socio-economic b'ground	Highest quintile	26.4 o	14.2 o	7.8 o	7.1 o	5.2 o
	Next quintile	26.6	25.0	14.1	13.4	9.6
	Middle quintile	17.7	21.3	12.9	12.1	7.6
	Next quintile	20.3	20.1	15.4	10.7	7.3
	Lowest quintile	23.0	20.5	16.7	15.2	11.6
Indigenous	Yes	12.0 o	26.7 o	20.6 o	9.5 o	4.4 o
	No	22.4	20.3	13.7	12.1	8.5
Country of birth	One or both parents Aust born	22.3 o	16.8 ***	14.2 o	11.5 o	9.1 o
	Student Aust. born, not parents	18.6	27.7	8.1	12.3	7.2
	Parents & student born o'seas	24.9	35.7	16.2	14.4	6.0
English spoken in the home	English the only language	21.2 ***	18.0 ***	13.3 o	11.5 o	9.1 o
	English the main language	32.6	24.3	13.2	11.4	3.3
	No, but English spoken freq.	37.5	44.1	12.9	20.9	4.6
	No, English rarely/never used	9.1	46.2	24.6	14.7	8.2
Disability	Yes	13.1 **	40.4 ***	10.8 o	16.0 o	12.2 o
	No	23.2	18.6	14.1	11.7	8.1
Access	Very accessible	24.3 o	19.1 ***	13.1 o	11.9 o	8.6 o
	Accessible	18.7	13.3	16.8	10.5	9.1
	Mod. access, (very) remote	17.3	17.3	17.6	10.5	7.4
	Living overseas	16.6	45.7	12.8	12.4	6.1
Secondary school last attended	Government	18.1 **	19.3 **	14.9 *	13.0 **	8.1 o
	Selective government	21.7	23.1	29.8	2.3	13.7
	Catholic	27.1	15.1	12.5	6.6	8.6
	Private/Other	29.2	25.4	9.1	15.3	7.1
	Overseas	12.0	47.9	21.5	12.0	13.2
Moved to attend university	Did not move	22.3 **	20.0 o	13.9 o	12.0 o	7.6 *
	Moved, didn't have to	13.1	21.9	26.0	15.2	6.3
	Moved within state	25.4	22.9	9.5	10.8	12.7
	Moved between states	13.1	26.0	17.1	13.7	10.9
	Moved from overseas	85.2	60.7	41.2	43.9	60.7
Prior univ. study	Completed	8.8 ***	11.6 **	21.5 ***	4.3 **	7.6 o
	Not completed	19.0	16.4	23.1	15.7	13.2
	None	25.4	23.1	10.7	12.8	7.5
Highest educat'al attainment	Degree or higher	9.1 ***	14.1 o	19.7 ***	4.4 o	1.8 *
	Diploma	14.7	23.5	23.1	13.4	9.1
	App'ship, other voc, other	20.6	23.6	16.2	11.5	10.9
	Highest secondary	28.3	18.5	8.2	12.5	8.1
	Below highest secondary	5.5	26.6	13.6	19.2	5.4

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Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Main activity in 2003	Studying at school	34.1 ***	21.3 *	6.0 ***	12.2 o	10.4 o
	In full-time paid work	13.4	18.3	29.6	13.6	7.1
	Studying at TAFE/elsewhere	13.7	28.6	10.3	9.1	6.2
	Studying at university	19.9	10.4	17.4	10.3	9.8
	Caring for family or friend	0.0	13.6	1.5	4.4	4.2
	Other	14.2	25.7	9.7	14.9	6.1
Course enrolment influenced by	Advisor at school	35.7 ***	33.2 ***	13.3 o	19.7 **	14.6 **
	Advisor at uni/TAFE	25.0 o	38.9 ***	14.6 o	13.5 o	14.1 o
	Advisor somewhere else	35.5 *	19.1 o	11.5 o	11.6 o	8.3 o
	School/TAFE teacher	29.2 *	31.3 ***	8.7 *	17.4 **	13.8 **
	Family	28.2 ***	27.7 ***	11.0 *	12.0 o	9.8 o
	Friends	32.1 ***	29.5 ***	13.1 o	10.7 o	7.8 o
	Former or current students	28.2 o	25.2 o	14.0 o	11.1 o	10.6 o
	Information from university	26.5 **	24.9 **	13.1 o	13.2 o	10.6 o
	Managers/colleagues at work	21.1 o	24.0 o	26.8 ***	14.8 o	5.7 o
	Year 12 results	35.7 ***	24.7 **	7.5 ***	12.5 o	10.4 o
	Student income support	20.2 o	31.6 *	14.4 o	15.3 o	16.7 *
	Work exp. in a field of interest	17.6 *	21.5 o	16.1 o	14.3 o	8.3 o
Number of influences	None	12.9 ***	9.0 ***	15.4 o	11.7 o	4.6 **
	One	19.9	16.5	14.5	11.9	5.8
	Two or three	23.5	25.3	14.1	10.8	11.9
	Four or more	33.3	29.7	10.4	15.4	8.7
Reasons for enrolling	Like learning	20.0 o	19.7 o	16.7 o	13.9 o	12.8 ***
	Personal challenge	25.7 o	29.5 ***	20.4 ***	18.1 **	12.3 **
	Financial gain	25.7 *	28.6 ***	15.8 o	16.6 ***	12.2 **
	To enter a career of choice	22.2 o	23.0 *	14.0 o	12.0 o	12.0 ***
Number of reasons for enrolling	None	23.8 o	16.8 **	11.1 **	13.1 ***	4.6 ***
	One	18.4	17.1	10.9	8.9	6.5
	Two	21.7	22.2	15.1	9.7	7.7
	Three	26.1	23.2	21.5	13.5	18.6
	Four	25.6	34.9	16.4	26.0	16.5
	Can't remember	27.6	28.0	24.7	3.0	2.4
Main carer for someone	No	26.3 ***	20.5 o	13.2 o	11.9 o	8.3 o
	For pre-school children	3.6 ***	9.7 **	12.4 o	3.5 **	6.5 o
	For primary school children	2.9 ***	25.4 o	16.8 o	16.5 o	3.3 *
	For older children	3.3 ***	27.7 o	24.2 **	19.9 *	9.6 o
	For others	3.1 ***	25.3 o	26.8 *	18.5 o	14.4 o
Mainly living with	Parents	34.6 ***	21.3 *	8.5 ***	12.9 o	8.4 *
	Spouse, no children	9.4	16.4	20.6	13.3	5.4
	Spouse and children	1.5	29.3	19.5	10.1	4.7
	Children, no spouse	6.4	34.2	19.5	16.9	16.6
	Univ. college or other residence	30.3	25.5	5.9	8.4	4.8
	Other	14.2	18.2	18.4	9.8	11.4

See *Notes to tables*

Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Hours of paid work per week	Not employed	25.3 ***	21.5 o	7.9 ***	12.5 o	9.5 o
	1-9 hours	25.0	17.5	1.0	10.6	4.4
	10-19 hours	29.9	20.9	8.7	11.7	8.9
	20-34 hours	21.9	18.6	15.2	12.4	7.8
	35-40 hours	8.6	22.2	24.5	12.2	7.9
	More than 40 hours	9.6	17.4	52.9	14.6	7.6
Study leave from paid work	Not employed	25.3 ***	21.5 **	7.9 ***	12.5 o	9.5 ***
	No, employer/self-employed	6.3	20.4	14.8	8.9	8.1
	No, flexible hours	25.9	24.4	9.4	12.9	9.7
	No, fixed hours	13.4	23.8	42.1	16.0	11.9
	Yes, but difficult to use	17.1	15.6	28.0	14.5	6.8
	Yes, and used it	24.0	11.3	4.7	5.7	0.6
Missed classes due to paid work	Not employed	25.3 ***	21.5 o	7.9 ***	12.5 o	9.5 *
	No, did not have to attend	8.4	15.2	23.2	14.2	5.7
	No, never	23.4	19.6	5.3	11.6	5.7
	Yes, but rarely	24.0	19.0	14.1	10.0	9.3
	Yes, sometimes	17.0	25.2	30.9	10.8	7.4
	Yes, frequently	30.8	29.6	71.3	19.9	23.6
Paid work interfered with study	Not employed	25.3 **	21.5 ***	7.9 ***	12.5 o	9.5 o
	No, not at all	25.7	15.5	1.7	10.1	5.5
	Yes, but only a little	23.7	13.8	5.9	9.7	7.0
	Yes, somewhat	16.9	23.1	27.2	11.3	8.8
	Yes, a great deal	12.6	35.8	52.3	19.9	12.4
Travel time to univ.	Did not travel to university	6.6 ***	17.1 o	21.5 *	12.4 o	4.6 ***
	1 - 30 minutes	22.8	21.1	12.5	10.7	6.4
	31 - 60 minutes	26.8	19.5	13.7	11.6	8.7
	60 - 90 minutes	35.1	28.6	9.5	19.2	20.5
	More than 90 minutes	19.3	23.6	12.2	16.8	17.6
Youth Allowance	Independent, full	23.9 **	28.4 o	9.1 **	11.8 o	7.4 o
	Independent, partial	32.8	16.5	9.5	12.9	14.7
	Dependent, full	39.4	13.4	4.5	13.6	7.3
	Dependent, partial	36.5	12.9	0.0	3.0	4.8
	No	20.7	20.8	15.2	12.4	8.4
Austudy	Full	23.3 *	20.4 o	9.7 o	14.7 o	7.5 o
	Partial	7.2	17.7	13.3	9.5	12.7
	No	22.8	20.8	14.0	12.0	8.3
ABSTUDY	Yes	22.6 o	20.6 o	14.0 o	12.1 o	8.5 o
	No	8.6	18.2	9.9	12.9	6.2
Main sources of financial support	Government income support	22.1 o	21.5 o	6.4 ***	11.8 o	8.1 o
	Paid employment	21.2 o	20.1 o	18.9 ***	11.7 o	8.7 o
	Spouse or partner	6.9 ***	17.7 o	11.0 o	13.9 o	4.4 o
	Parents or guardian	36.9 ***	24.1 *	4.4 ***	12.6 o	8.2 o
	Other relatives	36.2 o	29.4 o	18.1 o	18.1 o	18.1 o
	Savings or sale of assets	24.2 o	23.0 o	8.8 o	10.1 o	11.7 o
	Commercial loans	25.1 o	28.1 o	40.9 o	28.1 o	42.8 *
	Loans from family/friends	31.7 o	25.3 o	16.0 o	12.1 o	26.2 *
	Any scholarship	11.5 o	10.7 o	4.1 o	9.7 o	0.0 o

See *Notes to tables*

Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Income support	Full	27.3 o	22.2 o	7.4 **	12.4 o	7.6 o
	Partial	25.4	15.0	6.2	6.7	9.9
	None	21.2	20.9	15.6	12.5	8.4
Type of university	Group of 8	27.1 *	17.4 o	5.2 **	11.2 o	5.6 o
	Technology network	23.6	21.9	15.2	15.6	6.6
	Innovative research universities	24.5	19.3	12.9	11.8	10.6
	Regional universities	17.0	19.9	16.2	9.9	10.5
	New generation universities	25.8	24.5	15.0	12.7	6.4
Wanted to enrol at this univ.	Yes, definitely	16.6 ***	19.7 o	15.0 *	10.1 **	7.2 o
	Yes, with some reservations	28.8	21.3	10.3	18.0	10.2
	No, but I didn't mind	36.0	25.4	18.0	9.0	10.2
	No, really wanted another univ.	30.1	18.8	5.7	16.3	10.0
Type of enrolment	Full-time	28.6 ***	21.7 o	9.6 ***	11.9 o	9.9 **
	Part-time	9.7	18.7	22.5	12.5	5.3
Mode of enrolment	On-campus	24.5 ***	21.6 o	11.6 ***	11.7 o	8.9 o
	Off-campus	6.7	18.1	23.2	13.1	5.5
	Mixed on & off campus	30.5	18.2	17.7	11.4	9.1
Single or double degree	Single degree	22.7 o	21.0 o	13.8 o	12.6 o	8.3 o
	Double degree	17.4	16.7	14.8	7.1	8.3
	Don't know	41.0	31.3	15.8	25.2	22.9
	Other	15.7	17.0	0.0	0.0	0.0
Field of study	Creative arts	26.8 *	19.2 *	13.6 o	15.0 **	12.6 **
	Social sciences	21.2	19.0	14.4	9.5	8.3
	Humanities	26.8	18.8	8.6	12.9	5.3
	Management or commerce	19.2	19.3	16.8	8.0	3.8
	Agriculture or environ'l science	29.3	16.4	12.4	11.0	6.3
	Information technology	29.1	34.9	19.0	22.7	9.0
	Science	20.8	25.5	9.8	12.6	18.9
	Engineering	20.5	13.6	16.4	2.0	7.1
	Architecture or building	44.0	23.5	11.5	20.6	0.0
	Nursing	10.8	28.2	13.7	19.1	11.1
	Health	28.5	33.4	15.5	18.5	10.5
	Teacher education	20.3	16.3	11.8	11.4	7.6
	Education	12.3	14.7	12.7	4.6	0.0
	Law	19.3	15.3	17.7	17.4	7.8
Wanted to enrol in this course	Yes, definitely	14.7 ***	19.9 o	16.3 *	11.0 o	8.2 o
	Yes, with some reservations	34.1	19.6	9.9	14.0	7.3
	No, but I didn't mind	29.1	23.6	10.9	18.2	15.0
	No, really wanted another course	39.3	26.1	8.9	9.3	7.6
Credit for prior study	Yes	11.6 ***	23.0 o	23.3 ***	15.0 o	7.9 o
	No	25.6	19.4	10.6	10.9	9.1
First semester results	Passed all subjects	22.5 **	12.5 ***	11.3 ***	9.5 *	7.1 o
	Some passes, no fails	31.5	15.9	15.4	14.1	8.0
	Some passes, some fails	23.4	33.0	8.0	10.3	7.1
	No passes, some or all fails	14.2	36.7	28.3	19.8	13.9
	Withdrawals, no assessment	17.3	28.4	14.2	13.5	9.9

See *Notes to tables*

Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
All persons		8.5	24.3	10.6	10.6	7.4
Sex	Male	8.6 o	22.4 o	5.2 ***	9.5 o	5.2 **
	Female	8.6	25.7	14.6	11.6	9.2
Age	15-19 years	11.7 *	41.3 ***	1.3 ***	14.3 *	5.6 o
	20-24 years	9.1	21.8	3.5	10.3	9.1
	25-34 years	4.6	6.8	16.4	6.3	6.8
	35 years and over	6.8	12.3	35.4	9.0	9.6
Socio-economic b'ground	Highest quintile	6.2 o	33.8 **	5.2 o	9.4 o	8.7 o
	Next quintile	10.2	28.5	10.2	10.1	7.3
	Middle quintile	7.0	20.1	12.1	9.0	6.6
	Next quintile	6.8	19.8	11.9	10.6	7.7
	Lowest quintile	12.1	23.6	11.4	13.6	7.2
Indigenous	Yes	12.1 o	22.0 o	25.5 o	5.9 o	15.1 o
	No	8.6	24.2	10.4	10.8	7.4
Country of birth	One or both parents Aust born	8.5 o	26.9 ***	10.2 *	11.7 *	7.7 o
	Student Aust. born, not parents	9.2	15.5	6.5	10.1	7.4
	Parents & student born o'seas	8.3	16.0	15.5	5.4	6.1
English spoken in the home	English the only language	8.5 o	25.1 o	10.0 o	11.5 *	7.7 o
	English the main language	7.8	20.6	11.1	10.3	5.7
	No, but English spoken freq.	14.1	26.4	12.5	1.6	3.4
	No, English rarely/never used	10.3	10.3	21.5	2.3	7.1
Disability	Yes	19.5 ***	26.7 o	9.4 o	10.6 o	39.2 ***
	No	7.1	24.3	10.7	10.8	4.2
Access	Very accessible	9.0 o	26.7 **	8.7 *	10.3 o	7.4 o
	Accessible	6.3	20.0	10.8	10.1	7.3
	Mod. access, (very) remote	6.5	19.3	8.9	15.2	6.4
	Living overseas	12.1	9.4	21.8	4.0	6.3
Secondary school last attended	Government	8.7 o	22.4 o	10.4 o	9.1 o	7.3 o
	Selective government	10.1	15.3	2.1	17.7	6.5
	Catholic	5.4	22.5	10.5	12.5	5.1
	Private/Other	10.3	30.8	11.1	13.6	8.9
	Overseas	16.5	21.2	34.8	6.9	13.1
Moved to attend university	Did not move	8.7 o	24.2 o	12.3 ***	8.7 ***	6.5 *
	Moved, didn't have to	10.7	16.8	0.0	20.7	6.4
	Moved within state	4.4	27.2	1.8	23.7	8.5
	Moved between states	15.4	23.3	4.4	3.1	22.7
	Moved from overseas	16.8	0.0	22.3	22.3	22.3
Prior univ. study	Completed	4.9 o	11.3 ***	17.2 **	9.2 o	9.7 o
	Not completed	8.1	18.3	14.4	10.3	9.8
	None	9.5	27.7	8.4	11.1	6.6
Highest educat'al attainment	Degree or higher	5.4 o	12.4 ***	16.9 ***	7.4 o	10.1 o
	Diploma	6.6	13.0	21.2	10.8	7.3
	App'ship, other voc, other	7.3	17.1	14.3	10.8	6.8
	Highest secondary	10.8	34.1	4.1	11.6	7.5
	Below highest secondary	5.4	14.9	19.2	4.4	9.2

See *Notes to tables*

Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Main activity in 2003	Studying at school	12.0 ***	39.1 ***	1.2 ***	13.5 **	7.5 *
	In full-time paid work	5.0	6.2	13.9	5.8	4.9
	Studying at TAFE/elsewhere	1.7	25.3	17.2	12.9	5.3
	Studying at university	7.9	35.0	5.2	15.3	11.4
	Caring for family or friend	1.6	3.2	48.4	6.1	5.8
	Other	13.5	7.4	27.7	7.6	14.5
Course enrolment influenced by	Advisor at school	14.1 *	38.0 ***	2.5 ***	18.6 **	7.2 o
	Advisor at uni/TAFE	4.0 o	12.7 *	8.5 o	19.3 *	10.5 o
	Advisor somewhere else	2.1 o	26.8 o	6.1 o	13.2 o	10.7 o
	School/TAFE teacher	13.6 *	37.5 ***	7.6 o	22.0 ***	11.1 *
	Family	11.8 ***	33.3 ***	6.0 ***	10.9 o	8.6 o
	Friends	9.4 o	32.8 ***	4.7 ***	13.3 o	6.7 o
	Former or current students	9.0 o	28.9 o	8.4 o	12.1 o	8.0 o
	Information from university	9.8 o	30.1 **	10.8 o	14.0 *	8.5 o
	Managers/colleagues at work	5.4 o	16.7 *	13.7 o	4.7 *	8.0 o
	Year 12 results	14.1 ***	40.2 ***	2.3 ***	14.2 *	6.4 o
	Student income support	13.0 o	33.1 o	7.0 o	9.2 o	13.6 o
	Work exp. in a field of interest	8.1 o	21.6 o	14.3 **	10.3 o	7.1 o
Number of influences	None	3.3 **	12.3 ***	15.8 **	7.1 *	5.6 o
	One	9.4	21.0	10.1	8.2	7.5
	Two or three	9.1	27.2	10.6	12.5	7.5
	Four or more	11.9	36.5	5.1	13.7	8.8
Reasons for enrolling	Like learning	6.7 o	22.0 o	14.9 **	12.1 o	7.6 o
	Personal challenge	10.7 o	26.7 o	16.3 **	13.3 o	9.5 o
	Financial gain	12.4 ***	29.7 ***	12.2 o	15.1 ***	7.7 o
	To enter a career of choice	10.1 *	26.1 o	13.2 **	13.4 **	9.4 *
Number of reasons for enrolling	None	7.3 o	20.6 o	7.2 ***	6.2 **	6.4 o
	One	6.4	25.6	9.2	10.2	6.8
	Two	8.4	24.9	14.1	14.2	7.5
	Three	12.0	30.9	14.6	13.7	9.0
	Four	12.4	23.9	16.8	15.7	11.0
	Can't remember	15.7	16.9	0.0	5.6	7.4
Main carer for someone	No	9.2 o	27.2 ***	3.3 ***	10.5 o	7.3 o
	For pre-school children	4.2 o	8.0 ***	46.5 ***	7.0 o	8.9 o
	For primary school children	5.8 o	13.0 **	46.1 ***	6.8 o	6.4 o
	For older children	7.1 o	8.4 ***	44.7 ***	10.5 o	5.7 o
	For others	6.9 o	15.6 o	40.3 ***	13.7 o	13.9 o
Mainly living with	Parents	12.3 ***	34.6 ***	1.9 ***	9.1 *	6.0 o
	Spouse, no children	4.6	11.3	23.5	10.5	6.1
	Spouse and children	6.5	6.3	47.3	2.7	5.3
	Children, no spouse	7.3	16.3	50.0	18.1	8.5
	Univ. college or other residence	10.4	28.9	3.4	19.7	10.7
	Other	4.4	17.8	3.5	12.6	11.3

See *Notes to tables*

Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Hours of paid work per week	Not employed	9.5 *	22.3 ***	10.6 o	10.7 o	10.0 *
	1-9 hours	6.8	32.9	10.6	13.6	11.7
	10-19 hours	11.3	34.8	5.9	13.5	6.8
	20-34 hours	9.3	27.6	12.0	11.2	5.2
	35-40 hours	4.0	14.0	15.8	6.3	4.1
	More than 40 hours	2.8	9.5	11.1	6.4	2.4
Study leave from paid work	Not employed	9.5 o	22.3 ***	10.6 **	10.7 o	10.0 o
	No, employer/self-employed	12.5	9.0	20.1	9.4	8.2
	No, flexible hours	7.1	34.2	8.0	11.7	6.4
	No, fixed hours	8.0	15.1	15.7	14.3	6.2
	Yes, but difficult to use	13.9	18.2	15.4	12.2	5.3
	Yes, and used it	4.5	27.4	4.4	4.5	3.3
Missed classes due to paid work	Not employed	9.5 o	22.3 ***	10.6 o	10.7 *	10.0 o
	No, did not have to attend	5.2	10.7	16.7	6.2	3.2
	No, never	9.7	31.7	9.6	9.4	6.2
	Yes, but rarely	7.4	30.0	10.3	10.0	6.2
	Yes, sometimes	4.1	22.5	5.9	14.7	7.0
	Yes, frequently	11.9	13.4	17.4	24.5	3.8
Paid work interfered with study	Not employed	9.5 o	22.3 *	10.6 ***	10.7 o	10.0 o
	No, not at all	7.5	26.9	4.4	9.6	5.0
	Yes, but only a little	8.8	31.0	9.9	8.8	7.4
	Yes, somewhat	8.5	19.3	14.4	10.5	5.4
	Yes, a great deal	6.2	19.7	18.4	17.4	4.6
Travel time to univ.	Did not travel to university	3.3 **	11.6 ***	21.1 ***	6.7 *	6.3 **
	1 - 30 minutes	8.5	26.1	9.5	11.7	5.9
	31 - 60 minutes	8.7	26.1	8.1	8.5	6.1
	60 - 90 minutes	16.1	24.5	9.7	17.7	14.4
	More than 90 minutes	12.6	30.5	4.8	14.0	17.3
Youth Allowance	Independent, full	8.2 o	23.8 o	1.0 **	1.0 ***	16.3 o
	Independent, partial	2.2	23.3	3.9	0.0	7.4
	Dependent, full	11.5	34.7	5.0	0.0	4.2
	Dependent, partial	10.3	21.9	6.7	6.7	3.9
	No	8.5	23.8	11.8	12.1	7.1
Austudy	Full	16.2 o	17.2 o	6.2 o	3.0 *	12.4 o
	Partial	3.8	20.7	13.9	3.6	7.2
	No	8.3	24.5	10.6	11.3	7.1
ABSTUDY	Yes	8.4 o	24.0 o	10.7 o	10.7 o	7.3 o
	No	10.4	31.6	7.3	0.0	7.3
Main sources of financial support	Government income support	10.8 o	21.0 o	9.4 o	2.8 ***	13.0 ***
	Paid employment	7.3 *	24.6 o	9.8 o	10.4 o	5.3 ***
	Spouse or partner	6.1 o	11.4 ***	37.6 ***	10.9 o	8.2 o
	Parents or guardian	13.3 ***	38.5 ***	1.4 ***	14.9 ***	8.5 o
	Other relatives	14.5 o	59.4 o	18.1 o	18.1 o	14.9 o
	Savings or sale of assets	6.2 o	23.3 o	12.5 o	15.3 o	8.5 o
	Commercial loans	0.0 o	30.5 o	0.0 o	56.1 **	26.3 o
	Loans from family/friends	15.9 o	24.0 o	15.5 o	40.0 **	24.3 *
	Any scholarship	3.1 o	31.8 o	0.0 o	0.0 o	10.6 o

See *Notes to tables*

Table A.7—*continued*
Percent of students who discontinued their course for selected reasons: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Income support	Full	11.3 o	23.8 o	3.5 ***	1.5 ***	12.4 o
	Partial	5.2	21.8	6.5	3.8	5.8
	None	8.3	24.5	12.0	12.7	6.7
Type of university	Group of 8	10.2 o	33.4 *	10.0 o	9.3 o	10.4 o
	Technology network	10.0	25.2	11.1	9.3	6.4
	Innovative research universities	8.4	27.9	10.4	11.0	6.6
	Regional universities	7.3	21.3	9.4	13.9	8.7
	New generation universities	7.7	18.4	13.0	6.3	4.8
Wanted to enrol at this univ.	Yes, definitely	6.6 **	22.3 o	13.5 ***	9.2 o	7.5 o
	Yes, with some reservations	13.2	29.6	7.7	11.4	7.7
	No, but I didn't mind	7.0	24.0	4.2	15.5	3.7
	No, really wanted another univ.	13.1	23.1	2.8	11.0	14.3
Type of enrolment	Full-time	10.8 ***	30.0 ***	4.1 ***	13.3 ***	7.9 o
	Part-time	3.8	12.5	23.8	5.2	6.4
Mode of enrolment	On-campus	9.9 **	27.5 ***	7.8 ***	11.4 o	7.4 o
	Off-campus	4.2	11.5	22.9	7.6	6.6
	Mixed on & off campus	4.3	19.3	13.4	9.5	9.0
Single or double degree	Single degree	8.0 *	23.9 o	10.5 o	10.5 o	6.9 o
	Double degree	10.8	28.0	10.7	11.1	11.7
	Don't know	41.6	15.8	20.1	25.4	0.0
	Other	0.0	41.3	0.0	0.0	17.0
Field of study	Creative arts	11.0 o	29.4 o	5.8 ***	14.3 o	9.6 o
	Social sciences	7.3	29.0	9.9	9.0	13.9
	Humanities	10.8	27.6	11.9	7.4	7.4
	Management or commerce	4.9	21.5	12.2	6.8	4.9
	Agriculture or environ'l science	13.8	23.7	11.6	11.7	4.8
	Information technology	4.9	15.6	6.5	4.1	6.2
	Science	6.6	34.9	1.9	10.2	9.8
	Engineering	5.6	22.0	4.8	14.4	3.9
	Architecture or building	13.9	23.5	0.0	18.2	0.0
	Nursing	9.4	26.0	21.9	12.3	3.1
	Health	10.2	24.0	8.5	15.2	11.3
	Teacher education	13.1	14.8	17.8	14.1	6.4
	Education	4.6	18.7	31.4	13.7	16.1
	Law	7.8	18.5	9.1	10.2	7.9
Wanted to enrol in this course	Yes, definitely	6.5 **	20.4 ***	14.5 ***	9.1 *	6.9 o
	Yes, with some reservations	8.7	27.7	5.4	13.1	8.3
	No, but I didn't mind	16.8	36.2	2.5	18.9	6.2
	No, really wanted another course	14.8	32.3	3.8	7.9	8.9
Credit for prior study	Yes	5.3 *	16.7 ***	17.2 ***	8.8 o	7.3 o
	No	8.9	26.6	8.4	11.3	7.7
First semester results	Passed all subjects	6.6 o	22.9 ***	11.4 ***	9.3 o	5.3 o
	Some passes, no fails	8.4	23.4	10.1	13.4	9.3
	Some passes, some fails	9.6	36.0	1.7	8.2	6.5
	No passes, some or all fails	11.2	33.4	4.9	16.0	10.2
	Withdrawals, no assessment	12.1	12.3	16.7	10.2	10.7

See *Notes to tables*

Table A.8
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-1.612 **	-3.961 ***	-5.688 ***	-3.143 ***	-4.963 ***
Female		0.064 o	0.230 o	-0.005 o	0.196 o	0.194 o
Age	15-19 years	---	---	---	---	---
	20-24 years	-0.026 o	0.418 o	0.141 o	0.275 o	0.069 o
	25-34 years	-0.364 o	0.554 o	0.441 o	0.055 o	-0.833 o
	35 years and over	-0.530 o	0.896 o	0.536 o	0.159 o	-1.035 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.116 o	0.451 o	0.383 o	0.796 *	0.899 o
	Middle quintile	-0.247 o	0.226 o	0.069 o	0.589 o	0.594 o
	Next quintile	-0.035 o	0.136 o	0.380 o	0.374 o	0.435 o
	Lowest quintile	0.214 o	0.355 o	0.615 o	0.950 *	1.130 *
Indigenous		-0.288 o	-0.359 o	0.062 o	-1.458 o	-1.672 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	0.315 o	-0.208 o	-0.505 o	-0.344 o	-1.774 *
	No, but English spoken freq.	0.787 o	1.274 **	-0.802 o	0.654 o	-1.848 o
	No, English rarely/never used	-0.836 o	0.477 o	0.886 o	-0.198 o	0.675 o
Disability		-0.722 *	1.315 ***	0.143 o	0.071 o	0.710 o
Access	Very accessible	---	---	---	---	---
	Accessible	0.246 o	0.055 o	0.280 o	0.469 o	0.165 o
	Mod. access, (very) remote	-0.218 o	-0.131 o	0.860 *	0.057 o	-0.489 o
	Living overseas	0.747 o	1.213 ***	-1.023 o	0.171 o	-0.357 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	-0.486 o	0.401 o	1.232 o	-0.016 o	-0.890 o
	Moved within state	0.236 o	0.487 o	0.073 o	0.062 o	0.734 o
	Moved between states	-0.391 o	0.611 o	0.728 o	0.535 o	0.379 o
	Moved from overseas	5.832 *	1.894 o	2.915 *	1.348 o	4.946 **
Highest educat'al attainment	Degree or higher	-0.276 o	-0.366 o	0.142 o	-1.119 o	-2.139 *
	Diploma	0.173 o	-0.007 o	0.276 o	0.003 o	0.241 o
	App'ship, other voc, other	0.254 o	0.508 *	0.087 o	-0.466 o	0.596 o
	Highest secondary	---	---	---	---	---
	Below highest secondary	-1.121 o	-0.034 o	-0.540 o	0.124 o	-1.189 o

See *Notes to tables*

Table A.8—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Main activity in 2003	Studying at school	---	---	---	---	---
	In full-time paid work	-0.071 o	-0.128 o	1.213 *	0.570 o	-0.324 o
	Studying at TAFE/elsewhere	-0.606 o	0.164 o	0.351 o	-0.514 o	-0.879 o
	Studying at university	-0.199 o	-0.930 o	1.272 *	-0.171 o	-0.178 o
	Caring for family or friend	-13.770 o	-0.145 o	-1.566 o	-0.844 o	0.034 o
	Other	0.298 o	0.524 o	0.650 o	0.233 o	-0.020 o
Course enrolment influenced by	Advisor at school	0.196 o	0.444 o	1.200 **	0.576 o	0.016 o
	Advisor at uni/TAFE	0.146 o	0.875 *	-0.939 o	-0.239 o	0.881 o
	Advisor somewhere else	0.433 o	-0.717 o	-0.225 o	-0.258 o	-0.350 o
	School/TAFE teacher	-0.179 o	0.445 o	-0.656 o	0.646 *	0.588 o
	Family	-0.147 o	0.315 o	0.223 o	-0.161 o	0.178 o
	Friends	0.220 o	0.366 o	0.065 o	-0.275 o	-0.521 o
	Former or current students	0.014 o	-0.398 o	0.150 o	-0.403 o	0.156 o
	Information from university	0.308 o	0.291 o	0.182 o	0.212 o	-0.087 o
	Managers/colleagues at work	0.596 o	0.012 o	0.293 o	0.185 o	-0.513 o
	Year 12 results	0.305 o	0.036 o	-0.346 o	-0.427 o	-0.007 o
	Student income support	-0.634 o	0.583 o	0.833 o	0.463 o	1.659 **
	Work exp. in a field of interest	-0.233 o	0.015 o	-0.039 o	0.387 o	-0.467 o
Reasons for enrolling	Like learning	-0.186 o	-0.692 **	-0.103 o	-0.035 o	0.651 *
	Personal challenge	0.579 *	0.740 **	0.672 *	0.787 **	0.173 o
	Financial gain	-0.027 o	0.583 **	0.674 **	0.703 **	0.515 o
	To enter a career of choice	0.005 o	0.039 o	-0.111 o	-0.381 o	1.233 ***
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.641 o	-1.537 ***	-0.690 o	-1.639 **	-0.697 o
	For primary school children	-0.729 o	0.050 o	0.176 o	0.562 o	-2.028 *
	For older children	-0.430 o	-0.306 o	-0.170 o	0.313 o	0.177 o
	For others	-0.587 o	-0.051 o	0.569 o	0.012 o	0.943 o
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.591 o	-0.156 o	0.058 o	-0.277 o	0.578 o
	Spouse and children	-1.937 o	1.215 *	0.404 o	-1.043 o	0.484 o
	Children, no spouse	0.251 o	1.175 o	0.921 o	-0.372 o	3.463 ***
	Univ. college or other residence	-0.261 o	0.119 o	0.415 o	-0.320 o	-1.013 o
	Other	-0.673 *	-0.274 o	0.242 o	-0.387 o	0.421 o
Hours of paid work per week	Not employed	---	---	---	---	---
	1-9 hours	0.173 o	-0.085 o	-2.457 o	0.247 o	-1.178 o
	10-19 hours	0.035 o	0.007 o	-0.446 o	0.057 o	-0.647 o
	20-34 hours	-0.275 o	0.005 o	-0.010 o	0.292 o	-0.655 o
	35-40 hours	-0.559 o	0.404 o	-0.148 o	-0.056 o	0.166 o
	More than 40 hours	-0.128 o	0.606 o	1.511 ***	0.798 o	0.403 o
Travel time to univ.	Did not travel to university	-0.690 o	-0.348 o	-0.940 o	-0.054 o	-1.088 o
	1 - 30 minutes	---	---	---	---	---
	31 - 60 minutes	-0.040 o	-0.143 o	0.307 o	0.087 o	0.627 o
	60 - 90 minutes	0.382 o	0.340 o	0.038 o	0.831 *	1.677 ***
	More than 90 minutes	-0.801 *	0.057 o	0.615 o	0.502 o	1.685 ***

See *Notes to tables*

Table A.8—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Main sources of financial support	Government income support	-0.314o	-0.502o	-1.370*	0.055o	-0.987o
	Paid employment	0.030o	0.141o	2.022***	-0.425o	0.458o
	Spouse or partner	-0.278o	-0.274o	-0.094o	0.639o	-0.241o
	Parents or guardian	0.429*	0.391o	-0.841*	0.004o	-1.018**
	Other relatives	-0.259o	-0.582o	1.010o	0.121o	0.072o
	Savings or sale of assets	0.010o	-0.010o	-0.141o	-0.293o	0.017o
	Commercial loans	0.165o	0.743o	0.744o	1.430o	1.435o
	Loans from family/friends	0.231o	-0.741o	0.633o	-0.301o	1.448o
	Any scholarship	-0.701o	-1.623o	-1.906o	-0.639o	-17.436o
Income support	Full	0.755o	0.312o	0.826o	-0.138o	-0.397o
	Partial	0.584o	-0.401o	-0.554o	-1.202o	-0.164o
	None	---	---	---	---	---
Type of university	Group of 8	---	---	---	---	---
	Technology network	0.030o	0.275o	1.095*	0.395o	0.223o
	Innovative research universities	-0.246o	0.105o	1.017o	-0.046o	1.115*
	Regional universities	-0.334o	0.374o	0.973o	-0.272o	1.356*
	New generation universities	0.094o	0.432o	0.607o	0.100o	-0.117o
Wanted to enrol at this univ.	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.282o	0.029o	0.003o	0.709**	0.571o
	No, but I didn't mind	0.513o	0.021o	0.722o	-0.290o	0.295o
	No, really wanted another univ.	0.371o	-0.765o	-0.785o	0.959*	0.580o
Full-time	Full-time	0.132o	0.460o	0.343o	-0.011o	0.245o
Mode of enrolment	On-campus	---	---	---	---	---
	Off-campus	0.614o	0.329o	0.578o	0.310o	0.640o
	Mixed on & off campus	0.745*	-0.120o	0.173o	-0.344o	0.379o
Dble deg.		-0.569o	-0.201o	0.143o	-0.915*	0.288o
Field of study	Creative arts	---	---	---	---	---
	Social sciences	-0.043o	0.048o	-0.746o	-0.652o	-0.784o
	Humanities	0.250o	0.020o	-1.306**	-0.146o	-1.142o
	Management or commerce	-0.184o	-0.127o	-0.770o	-0.840o	-1.524**
	Agriculture or environ'l science	0.490o	-0.189o	-0.337o	-0.539o	-0.371o
	Information technology	0.290o	0.690o	-0.265o	0.769o	-0.055o
	Science	-0.711*	0.465o	-0.224o	0.090o	0.701o
	Engineering	-0.497o	-0.517o	-0.584o	-2.587**	-0.647o
	Architecture or building	0.443o	0.481o	-0.356o	0.781o	-14.806o
	Nursing	-0.828o	0.372o	-1.042*	0.275o	-0.308o
	Health	0.502o	0.447o	-1.239o	0.044o	-0.679o
	Teacher education	0.231o	-0.319o	-1.258**	-0.142o	-0.849o
	Education	0.081o	-0.051o	-0.828o	-0.752o	-15.508o
	Law	0.270o	-0.332o	-1.101o	0.684o	-0.381o
Wanted to enrol in this course	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.710***	-0.064o	-0.502o	0.259o	-0.682o
	No, but I didn't mind	-0.069o	0.052o	0.365o	0.889*	0.668o
	No, really wanted another course	0.747*	0.361o	-0.178o	-0.364o	-0.990o

See *Notes to tables*

Table A.8—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-4.583 ***	-0.541 o	-3.432 **	-5.453 ***	-4.565 ***
Female		-0.140 o	0.302 o	0.657 o	-0.074 o	0.774 *
Age	15-19 years	---	---	---	---	---
	20-24 years	0.364 o	-0.333 o	-1.171 o	0.536 o	0.936 *
	25-34 years	0.379 o	-0.237 o	-1.044 o	-0.376 o	1.124 o
	35 years and over	0.478 o	0.749 o	0.494 o	-0.276 o	1.546 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.912 *	-0.112 o	0.099 o	0.245 o	-0.513 o
	Middle quintile	0.758 o	-0.370 o	-0.722 o	0.213 o	-0.503 o
	Next quintile	0.541 o	-0.494 o	-0.618 o	0.503 o	-0.360 o
	Lowest quintile	1.573 ***	-0.159 o	-1.258 o	0.952 *	-0.630 o
Indigenous		0.219 o	-0.161 o	2.231 o	0.932 o	0.768 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	-0.118 o	0.072 o	0.326 o	0.034 o	-0.102 o
	No, but English spoken freq.	0.107 o	0.014 o	1.939 *	-1.972 o	-0.844 o
	No, English rarely/never used	0.021 o	0.131 o	0.909 o	-0.885 o	-0.425 o
Disability		1.034 **	0.461 o	-0.274 o	0.256 o	3.103 ***
Access	Very accessible	---	---	---	---	---
	Accessible	-0.082 o	-0.010 o	0.409 o	-0.464 o	-0.282 o
	Mod. access, (very) remote	-0.811 o	0.117 o	0.658 o	-0.347 o	-0.292 o
	Living overseas	0.841 o	-0.741 o	-1.878 **	-1.712 o	-1.364 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	0.078 o	-0.447 o	-16.158 o	0.420 o	-1.344 o
	Moved within state	-1.171 o	0.151 o	-1.800 o	0.979 *	-0.168 o
	Moved between states	1.006 o	0.267 o	-2.018 o	-1.662 o	1.332 o
	Moved from overseas	0.081 o	-12.773 o	3.023 o	2.319 o	-0.525 o
Highest educat'al attainment	Degree or higher	-0.479 o	-0.128 o	-0.149 o	0.322 o	0.178 o
	Diploma	0.108 o	-0.289 o	0.754 o	0.191 o	0.501 o
	App'ship, other voc, other	-0.221 o	-0.168 o	0.634 o	0.272 o	0.042 o
	Highest secondary	---	---	---	---	---
	Below highest secondary	-1.111 o	-0.499 o	0.240 o	-0.991 o	-0.676 o
Main activity in 2003	Studying at school	---	---	---	---	---
	In full-time paid work	0.184 o	-2.156 ***	0.811 o	-0.387 o	-1.071 o
	Studying at TAFE/elsewhere	-1.971 *	-0.110 o	1.407 o	0.200 o	-1.884 *
	Studying at university	-0.291 o	0.212 o	-0.374 o	0.240 o	-0.612 o
	Caring for family or friend	-1.955 o	-2.471 *	2.104 o	0.247 o	-2.080 o
	Other	0.543 o	-1.910 ***	1.989 o	0.071 o	-0.328 o

See *Notes to tables*

Table A.8—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Course enrolment influenced by	Advisor at school	0.162 o	0.051 o	0.339 o	-0.060 o	-0.374 o
	Advisor at uni/TAFE	-1.020 o	-1.096 *	-0.292 o	1.389 **	0.153 o
	Advisor somewhere else	-1.961 o	0.806 o	-1.050 o	-0.798 o	0.895 o
	School/TAFE teacher	0.266 o	0.166 o	0.797 o	1.355 ***	0.658 o
	Family	0.281 o	0.080 o	0.323 o	-0.787 *	0.447 o
	Friends	-0.204 o	0.032 o	-0.862 o	0.216 o	-0.124 o
	Former or current students	-0.297 o	-0.308 o	0.343 o	-0.099 o	0.478 o
	Information from university	0.166 o	0.261 o	0.257 o	0.431 o	-0.115 o
	Managers/colleagues at work	0.034 o	0.376 o	-0.376 o	-0.761 o	0.900 o
	Year 12 results	0.336 o	0.288 o	-0.007 o	0.030 o	-0.443 o
	Student income support	0.176 o	0.562 o	0.158 o	0.503 o	-0.222 o
	Work exp. in a field of interest	0.231 o	0.046 o	-0.140 o	-0.111 o	-0.049 o
Reasons for enrolling	Like learning	-0.540 o	-0.337 o	0.504 o	-0.059 o	-0.678 o
	Personal challenge	0.450 o	0.209 o	0.240 o	0.515 o	0.338 o
	Financial gain	0.554 o	0.320 o	0.374 o	0.461 o	-0.147 o
	To enter a career of choice	0.351 o	-0.030 o	0.591 o	0.530 o	0.763 *
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.628 o	-0.453 o	1.530 ***	-1.015 o	0.454 o
	For primary school children	0.201 o	0.316 o	0.318 o	-1.044 o	-0.317 o
	For older children	-0.043 o	-1.256 o	0.251 o	0.241 o	-0.865 o
	For others	-0.543 o	0.044 o	2.503 ***	1.183 o	1.520 *
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.304 o	-0.286 o	1.443 *	1.870 ***	0.422 o
	Spouse and children	0.189 o	-0.483 o	2.057 *	0.806 o	0.017 o
	Children, no spouse	-0.399 o	0.032 o	2.221 *	4.113 ***	0.229 o
	Univ. college or other residence	0.359 o	-0.554 o	3.064 *	0.915 o	0.667 o
	Other	-0.661 o	-0.495 o	-0.575 o	1.495 **	0.708 o
Hours of paid work per week	Not employed	---	---	---	---	---
	1-9 hours	-0.505 o	0.551 o	-0.978 o	-0.078 o	0.053 o
	10-19 hours	0.079 o	0.414 o	-0.362 o	0.294 o	-0.047 o
	20-34 hours	0.681 o	0.645 *	0.204 o	-0.221 o	-0.359 o
	35-40 hours	0.248 o	1.218 **	-0.285 o	-0.421 o	-0.221 o
	More than 40 hours	-0.326 o	0.732 o	-1.170 o	-0.655 o	-1.938 o
Travel time to univ.	Did not travel to university	-1.449 o	-0.869 o	-0.472 o	-1.061 o	-0.101 o
	1 - 30 minutes	---	---	---	---	---
	31 - 60 minutes	-0.090 o	-0.186 o	-0.269 o	-0.180 o	0.113 o
	60 - 90 minutes	0.340 o	-0.468 o	0.053 o	0.188 o	1.129 *
	More than 90 minutes	0.270 o	-0.145 o	-0.177 o	0.585 o	1.206 *

See *Notes to tables*

Table A.8—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Main sources of financial support	Government income support	0.859o	-0.253o	-0.361o	-1.874**	0.386o
	Paid employment	-0.337o	-0.066o	0.352o	-0.005o	-0.387o
	Spouse or partner	0.409o	-0.326o	-0.165o	-0.054o	0.692o
	Parents or guardian	0.534o	0.171o	-0.087o	0.213o	0.606o
	Other relatives	0.808o	2.083o	-0.490o	-1.517o	0.108o
	Savings or sale of assets	-0.490o	0.182o	1.213*	-0.180o	-0.540o
	Commercial loans	-12.781o	0.087o	-17.501o	3.267*	2.058o
	Loans from family/friends	0.930o	-0.913o	1.452o	1.742*	1.423o
	Any scholarship	-1.471o	0.356o	-21.821o	-14.442o	-0.160o
Income support	Full	-0.666o	0.112o	0.544o	-2.384*	0.065o
	Partial	-1.655*	-0.167o	0.443o	-1.585o	-0.448o
	None	---	---	---	---	---
Type of university	Group of 8	---	---	---	---	---
	Technology network	0.178o	-0.298o	-0.752o	0.019o	0.341o
	Innovative research universities	-0.292o	0.082o	-0.376o	0.608o	0.416o
	Regional universities	-0.007o	-0.265o	-1.377*	0.673o	0.849o
	New generation universities	-0.240o	-0.658*	0.106o	-0.022o	-0.320o
Wanted to enrol at this univ.	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.485o	0.082o	-0.112o	0.410o	-0.030o
	No, but I didn't mind	-0.401o	-0.255o	-0.827o	0.588o	-1.248o
	No, really wanted another univ.	0.014o	-0.548o	-1.719o	-0.230o	-0.118o
Full-time	Full-time	0.885o	0.070o	-1.896***	1.193**	-0.157o
Mode of enrolment	On-campus	---	---	---	---	---
	Off-campus	1.054o	1.028o	0.686o	0.881o	0.044o
	Mixed on & off campus	-1.065o	-0.142o	0.646o	-0.111o	0.405o
Dble deg.		0.541o	0.293o	0.107o	0.508o	0.671o
Field of study	Creative arts	---	---	---	---	---
	Social sciences	-0.623o	0.370o	-1.155o	-0.130o	0.255o
	Humanities	-0.247o	-0.204o	-0.802o	-0.361o	-0.727o
	Management or commerce	-0.924o	-0.291o	0.120o	-0.460o	-0.584o
	Agriculture or environ'l science	0.721o	-0.152o	0.160o	-0.063o	-1.074o
	Information technology	-0.620o	-0.451o	0.320o	-1.174o	0.511o
	Science	-1.015o	0.101o	-0.402o	-0.506o	-0.053o
	Engineering	-0.966o	-0.358o	0.367o	0.589o	-0.435o
	Architecture or building	0.137o	-0.702o	-14.299o	0.968o	-13.573o
	Nursing	0.231o	0.362o	-0.822o	0.236o	-1.448o
	Health	-0.408o	-0.535o	-1.242o	-0.058o	-1.155o
	Teacher education	0.158o	-0.421o	0.340o	0.402o	-1.127o
	Education	-0.967o	-0.171o	0.702o	0.137o	0.098o
	Law	-0.389o	-0.756o	-3.039*	-0.619o	-0.274o
Wanted to enrol in this course	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	-0.034o	-0.049o	-0.166o	0.387o	0.239o
	No, but I didn't mind	0.890o	0.159o	-0.305o	0.987*	0.174o
	No, really wanted another course	0.882*	0.216o	0.004o	0.030o	0.579o

See *Notes to tables*

Table A.9
Logistic regression of selected reasons for discontinuing the course on student background characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-0.650 **	-2.092 ***	-3.258 ***	-2.690 ***	-3.099 ***
Female		0.064 o	0.237 o	-0.188 o	0.290 o	0.100 o
Age	15-19 years	---	---	---	---	---
	20-24 years	-0.287 o	0.038 o	0.735 **	0.212 o	-0.005 o
	25-34 years	-0.732 *	-0.081 o	0.985 **	0.124 o	-0.887 o
	35 years and over	-0.987 *	0.217 o	0.972 *	0.415 o	-1.081 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.141 o	0.491 o	0.603 o	0.685 o	0.894 *
	Middle quintile	-0.116 o	0.314 o	0.307 o	0.513 o	0.587 o
	Next quintile	0.101 o	0.336 o	0.469 o	0.318 o	0.530 o
	Lowest quintile	0.299 o	0.388 o	0.596 o	0.802 *	1.021 *
Indigenous		0.113 o	0.269 o	-0.041 o	-0.951 o	-1.099 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	0.512 *	0.056 o	-0.072 o	-0.095 o	-1.135 *
	No, but English spoken freq.	0.810 *	1.313 ***	-0.093 o	0.751 o	-1.125 o
	No, English rarely/never used	-0.763 o	0.934 *	1.056 *	0.250 o	0.163 o
Disability		-0.521 o	1.220 ***	-0.403 o	0.319 o	0.540 o
Access	Very accessible	---	---	---	---	---
	Accessible	0.027 o	-0.127 o	0.154 o	0.136 o	0.190 o
	Mod. access, (very) remote	-0.349 o	-0.007 o	0.460 o	0.104 o	-0.237 o
	Living overseas	0.781 o	1.083 ***	-1.326 **	-0.160 o	-0.249 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	-0.305 o	0.229 o	0.805 o	0.649 o	-0.158 o
	Moved within state	0.399 o	0.522 o	-0.337 o	0.263 o	0.387 o
	Moved between states	-0.130 o	0.371 o	0.007 o	0.537 o	0.199 o
	Moved from overseas	4.768 *	1.646 o	1.367 o	2.064 *	4.167 ***
Highest educat'al attainment	Degree or higher	-0.545 o	-0.751 o	0.327 o	-1.224 *	-1.691 o
	Diploma	-0.028 o	0.208 o	0.522 *	-0.068 o	0.287 o
	App'ship, other voc, other	0.147 o	0.402 o	0.213 o	-0.190 o	0.334 o
	Highest secondary	---	---	---	---	---
	Below highest secondary	-1.228 o	0.003 o	-0.200 o	0.152 o	-0.609 o
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-1.102 o	-1.428 ***	-0.719 o	-1.297 *	-0.180 o
	For primary school children	-0.723 o	0.021 o	-0.401 o	0.315 o	-1.433 *
	For older children	-0.424 o	-0.375 o	0.296 o	0.313 o	0.528 o
	For others	-0.858 o	-0.007 o	0.792 *	0.364 o	1.220 *
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.929 **	-0.517 o	0.500 o	-0.051 o	0.068 o
	Spouse and children	-2.242 o	0.749 o	0.594 o	-0.496 o	0.409 o
	Children, no spouse	-0.279 o	0.624 o	0.553 o	-0.202 o	2.048 **
	Univ. college or other residence	-0.383 o	-0.063 o	-0.281 o	-0.872 o	-1.039 o
	Other	-0.946 ***	-0.575 *	0.482 o	-0.560 o	0.385 o

See *Notes to tables*

Table A.9—*continued*
Logistic regression of selected reasons for discontinuing the course on student background characteristics: Students who did not enrol at any university in first semester 2005

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-2.616 ***	-0.184 o	-4.879 ***	-2.400 ***	-3.482 ***
Female		0.138 o	0.298 *	0.879 **	0.110 o	0.738 **
Age	15-19 years	---	---	---	---	---
	20-24 years	-0.209 o	-0.774 ***	0.409 o	-0.389 o	0.380 o
	25-34 years	-0.413 o	-1.714 ***	1.128 o	-1.248 **	0.058 o
	35 years and over	-0.077 o	-0.688 o	2.586 ***	-1.043 *	0.646 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.602 o	-0.035 o	0.228 o	0.262 o	-0.521 o
	Middle quintile	0.378 o	-0.332 o	-0.288 o	0.058 o	-0.682 o
	Next quintile	0.412 o	-0.401 o	-0.620 o	0.286 o	-0.212 o
	Lowest quintile	1.222 **	-0.185 o	-0.881 o	0.438 o	-0.316 o
Indigenous		0.662 o	0.458 o	0.303 o	-0.791 o	0.789 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	-0.249 o	-0.109 o	0.205 o	-0.006 o	-0.212 o
	No, but English spoken freq.	0.642 o	0.017 o	1.110 o	-1.930 o	-0.823 o
	No, English rarely/never used	0.210 o	-0.308 o	0.591 o	-1.264 o	-0.250 o
Disability		1.345 ***	0.362 o	-0.120 o	0.148 o	2.806 ***
Access	Very accessible	---	---	---	---	---
	Accessible	-0.101 o	-0.202 o	0.190 o	-0.331 o	-0.046 o
	Mod. access, (very) remote	-0.185 o	-0.032 o	0.790 o	-0.112 o	0.020 o
	Living overseas	0.722 o	-0.549 o	-1.009 *	-0.819 o	-0.765 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	0.361 o	-0.377 o	-15.246 o	0.931 o	-0.524 o
	Moved within state	-0.672 o	0.218 o	-2.223 **	0.891 **	0.001 o
	Moved between states	1.033 o	0.389 o	-0.966 o	-1.169 o	1.476 *
	Moved from overseas	0.908 o	-11.798 o	1.568 o	1.679 o	0.112 o
Highest educat'al attainment	Degree or higher	-0.503 o	-0.284 o	-0.226 o	-0.033 o	0.044 o
	Diploma	-0.298 o	-0.343 o	0.458 o	0.266 o	-0.121 o
	App'ship, other voc, other	-0.129 o	-0.321 o	0.400 o	0.096 o	-0.258 o
	Highest secondary	---	---	---	---	---
	Below highest secondary	-1.115 o	-0.453 o	0.080 o	-1.011 o	-0.308 o
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.351 o	-0.462 o	1.454 ***	-0.402 o	0.605 o
	For primary school children	0.070 o	0.273 o	0.377 o	-0.376 o	0.055 o
	For older children	-0.076 o	-0.953 o	-0.301 o	0.147 o	-0.983 o
	For others	0.061 o	0.109 o	1.706 **	0.584 o	1.338 *
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-1.029 *	-0.414 o	1.203 *	0.871 *	-0.261 o
	Spouse and children	-0.588 o	-0.829 o	1.666 **	-0.175 o	-0.391 o
	Children, no spouse	-0.707 o	0.231 o	1.670 *	2.033 **	-0.182 o
	Univ. college or other residence	-0.094 o	-0.575 o	2.243 *	0.227 o	0.267 o
	Other	-1.162 *	-0.489 o	-0.366 o	0.397 o	0.267 o

See *Notes to tables*

Table A.10
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp.*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
All persons		3.0	2.8	1.8	1.6	1.1
Sex	Male	3.2 o	2.6 o	2.0 o	1.5 o	1.1 o
	Female	2.7	2.7	1.7	1.7	1.1
Age	15-19 years	3.6 *	2.1 **	0.6 ***	1.2 *	1.0 o
	20-24 years	2.9	2.4	1.6	1.4	1.2
	25-34 years	2.2	3.3	4.6	2.0	1.3
	35 years and over	1.3	5.6	4.8	3.4	1.3
Socio-economic b'ground	Highest quintile	2.2 o	1.2 *	0.7 **	0.6 *	0.4 o
	Next quintile	3.1	3.0	1.7	1.6	1.1
	Middle quintile	2.5	3.0	1.8	1.7	1.1
	Next quintile	3.4	3.4	2.6	1.8	1.2
	Lowest quintile	3.6	3.2	2.6	2.4	1.8
Indigenous	Yes	2.4 o	5.4 o	4.2 o	1.9 o	0.9 o
	No	2.9	2.7	1.8	1.6	1.1
Country of birth	One or both parents Aust born	3.3 o	2.5 o	2.1 *	1.7 o	1.3 o
	Student Aust. born, not parents	1.7	2.5	0.7	1.1	0.7
	Parents & student born o'seas	2.7	3.8	1.7	1.6	0.6
English spoken in the home	English the only language	3.1 o	2.6 o	1.9 o	1.7 o	1.3 o
	English the main language	3.5	2.6	1.4	1.2	0.4
	No, but English spoken freq.	2.4	2.8	0.8	1.3	0.3
	No, English rarely/never used	0.7	3.7	2.0	1.2	0.7
Disability	Yes	2.0 o	6.3 ***	1.7 o	2.5 o	1.9 o
	No	3.0	2.4	1.8	1.5	1.1
Access	Very accessible	3.0 o	2.4 o	1.6 o	1.5 o	1.1 o
	Accessible	3.0	2.1	2.7	1.7	1.5
	Mod. access, (very) remote	3.1	3.1	3.1	1.9	1.3
	Living overseas	1.7	4.7	1.3	1.3	0.6
Secondary school last attended	Government	2.9 o	3.1 o	2.4 *	2.1 *	1.3 o
	Selective government	1.7	1.8	2.3	0.2	1.1
	Catholic	3.3	1.8	1.5	0.8	1.0
	Private/Other	2.8	2.5	0.9	1.5	0.7
	Overseas	2.5	9.9	4.4	2.5	2.7
Moved to attend university	Did not move	3.1 o	2.8 o	2.0 o	1.7 o	1.1 o
	Moved, didn't have to	1.5	2.5	2.9	1.7	0.7
	Moved within state	2.7	2.5	1.0	1.2	1.4
	Moved between states	1.4	2.8	1.9	1.5	1.2
	Moved from overseas	4.3	3.1	2.1	2.2	3.1
Prior univ. study	Completed	1.3 *	1.7 o	3.2 **	0.6 o	1.1 o
	Not completed	2.6	2.3	3.2	2.2	1.8
	None	3.3	3.0	1.4	1.7	1.0
Highest educat'al attainment	Degree or higher	1.6 *	2.5 ***	3.6 ***	0.8 *	0.3 *
	Diploma	2.8	4.4	4.3	2.5	1.7
	App'ship, other voc, other	5.0	5.7	3.9	2.8	2.6
	Highest secondary	2.9	1.9	0.8	1.3	0.8
	Below highest secondary	1.0	4.6	2.4	3.3	0.9

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Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Main activity in 2003	Studying at school	3.5 *	2.2 ***	0.6 ***	1.3 **	1.1 o
	In full-time paid work	3.2	4.4	7.1	3.3	1.7
	Studying at TAFE/elsewhere	2.3	4.7	1.7	1.5	1.0
	Studying at university	1.4	0.7	1.2	0.7	0.7
	Caring for family or friend	0.0	3.1	0.3	1.0	1.0
	Other	2.5	4.5	1.7	2.6	1.1
Course enrolment influenced by	Advisor at school	4.4 o	4.1 *	1.6 o	2.4 o	1.8 o
	Advisor at uni/TAFE	3.3 o	5.2 *	1.9 o	1.8 o	1.9 o
	Advisor somewhere else	5.3 o	2.9 o	1.7 o	1.7 o	1.2 o
	School/TAFE teacher	3.7 o	4.0 *	1.1 o	2.2 o	1.8 o
	Family	3.0 o	2.9 o	1.1 **	1.3 o	1.0 o
	Friends	3.8 o	3.5 o	1.5 o	1.3 o	0.9 o
	Former or current students	2.7 o	2.4 o	1.4 o	1.1 o	1.0 o
	Information from university	2.9 o	2.7 o	1.4 o	1.5 o	1.2 o
	Managers/colleagues at work	3.8 o	4.3 o	4.8 ***	2.7 o	1.0 o
	Year 12 results	3.5 o	2.4 o	0.7 ***	1.2 o	1.0 o
	Student income support	2.0 o	3.2 o	1.5 o	1.6 o	1.7 o
	Work exp. in a field of interest	2.4 o	2.9 o	2.2 o	2.0 o	1.1 o
Number of influences	None	2.3 o	1.6 o	2.7 o	2.0 o	0.8 o
	One	3.1	2.6	2.3	1.9	0.9
	Two or three	2.8	3.0	1.7	1.3	1.4
	Four or more	3.5	3.1	1.1	1.6	0.9
Reasons for enrolling	Like learning	2.2 *	2.2 o	1.8 o	1.5 o	1.4 o
	Personal challenge	2.6 o	2.9 o	2.0 o	1.8 o	1.2 o
	Financial gain	2.7 o	3.0 o	1.6 o	1.7 o	1.3 o
	To enter a career of choice	2.2 ***	2.3 **	1.4 **	1.2 **	1.2 o
Number of reasons for enrolling	None	5.7 **	4.0 o	2.7 o	3.1 *	1.1 o
	One	2.8	2.6	1.6	1.3	1.0
	Two	2.3	2.3	1.6	1.0	0.8
	Three	2.6	2.3	2.1	1.3	1.9
	Four	2.1	2.8	1.3	2.1	1.3
	Can't remember	3.0	3.1	2.7	0.3	0.3
Main carer for someone	No	3.2 ***	2.5 *	1.6 **	1.5 *	1.0 o
	For pre-school children	0.8 *	2.3 o	2.9 o	0.8 o	1.5 o
	For primary school children	0.5 **	4.8 o	3.2 o	3.1 o	0.6 o
	For older children	0.8 o	6.9 **	6.0 **	4.9 **	2.4 o
	For others	0.8 o	6.4 o	6.8 *	4.7 o	3.7 o
Mainly living with	Parents	3.6 *	2.2 **	0.9 ***	1.4 *	0.9 o
	Spouse, no children	2.2	3.9	4.9	3.2	1.3
	Spouse and children	0.3	6.6	4.4	2.3	1.1
	Children, no spouse	1.3	6.8	3.9	3.4	3.3
	Univ. college or other residence	2.1	1.8	0.4	0.6	0.3
	Other	2.3	3.0	3.0	1.6	1.8

See *Notes to tables*

Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Hours of paid work per week	Not employed	2.8 o	2.4 *	0.9 ***	1.4 o	1.0 o
	1-9 hours	2.6	1.8	0.1	1.1	0.5
	10-19 hours	3.1	2.1	0.9	1.2	0.9
	20-34 hours	3.8	3.2	2.6	2.1	1.3
	35-40 hours	2.4	6.1	6.7	3.3	2.2
	More than 40 hours	2.9	5.2	15.8	4.4	2.3
Study leave from paid work	Not employed	2.8 o	2.4 **	0.9 ***	1.4 **	1.0 **
	No, employer/self-employed	1.1	3.6	2.6	1.6	1.4
	No, flexible hours	3.7	3.5	1.3	1.8	1.4
	No, fixed hours	3.6	6.3	11.2	4.3	3.2
	Yes, but difficult to use	3.2	2.9	5.2	2.7	1.3
	Yes, and used it	2.5	1.2	0.5	0.6	0.1
Missed classes due to paid work	Not employed	2.8 o	2.4 o	0.9 ***	1.4 *	1.0 o
	No, did not have to attend	2.6	4.7	7.2	4.4	1.8
	No, never	3.2	2.7	0.7	1.6	0.8
	Yes, but rarely	2.8	2.2	1.6	1.2	1.1
	Yes, sometimes	2.9	4.3	5.3	1.9	1.3
	Yes, frequently	7.4	7.1	17.1	4.8	5.7
Paid work interfered with study	Not employed	2.8 o	2.4 ***	0.9 ***	1.4 ***	1.0 *
	No, not at all	3.6	2.2	0.2	1.4	0.8
	Yes, but only a little	2.9	1.7	0.7	1.2	0.9
	Yes, somewhat	2.6	3.6	4.2	1.8	1.4
	Yes, a great deal	4.3	12.4	18.1	6.9	4.3
Travel time to univ.	Did not travel to university	1.6 o	4.3 o	5.4 ***	3.1 o	1.2 o
	1 - 30 minutes	2.7	2.5	1.5	1.3	0.8
	31 - 60 minutes	3.6	2.6	1.8	1.5	1.2
	60 - 90 minutes	3.4	2.8	0.9	1.9	2.0
	More than 90 minutes	3.2	3.9	2.0	2.8	2.9
Youth Allowance	Independent, full	2.1 o	2.4 o	0.8 **	1.0 o	0.6 o
	Independent, partial	2.6	1.3	0.8	1.0	1.2
	Dependent, full	3.8	1.3	0.4	1.3	0.7
	Dependent, partial	3.0	1.1	0.0	0.2	0.4
	No	3.0	3.0	2.2	1.8	1.2
Austudy	Full	2.7 o	2.4 o	1.1 o	1.7 o	0.9 o
	Partial	1.1	2.6	2.0	1.4	1.9
	No	3.1	2.8	1.9	1.6	1.1
ABSTUDY	Yes	3.0 o	2.8 o	1.9 o	1.6 o	1.1 o
	No	0.9	1.9	1.1	1.4	0.7
Main sources of financial support	Government income support	2.4 o	2.3 o	0.7 ***	1.3 o	0.9 o
	Paid employment	3.2 o	3.1 o	2.9 ***	1.8 o	1.3 o
	Spouse or partner	1.3 *	3.3 o	2.0 o	2.6 o	0.8 o
	Parents or guardian	3.2 o	2.1 **	0.4 ***	1.1 **	0.7 *
	Other relatives	1.4 o	1.1 o	0.7 o	0.7 o	0.7 o
	Savings or sale of assets	2.5 o	2.4 o	0.9 o	1.0 o	1.2 o
	Commercial loans	4.9 o	5.5 o	7.9 o	5.5 o	8.3 o
	Loans from family/friends	3.4 o	2.7 o	1.7 o	1.3 o	2.8 o
	Any scholarship	0.5 *	0.4 *	0.2 *	0.4 o	0.0 o

See *Notes to tables*

Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Income support	Full	2.7 o	2.2 o	0.7 ***	1.2 o	0.7 o
	Partial	2.5	1.5	0.6	0.7	1.0
	None	3.1	3.1	2.3	1.8	1.2
Type of university	Group of 8	1.7 *	1.1 ***	0.3 ***	0.7 *	0.3 **
	Technology network	3.8	3.5	2.4	2.5	1.1
	Innovative research universities	3.3	2.6	1.7	1.6	1.4
	Regional universities	3.2	3.8	3.1	1.9	2.0
	New generation universities	3.5	3.3	2.0	1.7	0.9
Wanted to enrol at this univ.	Yes, definitely	2.0 ***	2.3 *	1.8 o	1.2 **	0.9 o
	Yes, with some reservations	4.9	3.6	1.7	3.0	1.7
	No, but I didn't mind	6.5	4.6	3.2	1.6	1.8
	No, really wanted another univ.	3.5	2.2	0.7	1.9	1.2
Type of enrolment	Full-time	3.0 o	2.2 ***	1.0 ***	1.2 ***	1.0 o
	Part-time	3.1	5.9	7.1	3.9	1.7
Mode of enrolment	On-campus	2.9 o	2.5 *	1.4 ***	1.4 *	1.1 o
	Off-campus	1.9	5.2	6.7	3.8	1.6
	Mixed on & off campus	4.9	2.9	2.8	1.8	1.5
Single or double degree	Single degree	3.2 *	3.0 *	2.0 o	1.8 *	1.2 o
	Double degree	1.5	1.4	1.3	0.6	0.7
	Don't know	14.0	10.6	5.4	8.6	7.8
	Other	1.3	1.4	0.0	0.0	0.0
Field of study	Creative arts	4.4 o	3.1 o	2.2 o	2.4 o	2.1 o
	Social sciences	3.1	2.8	2.1	1.4	1.2
	Humanities	3.6	2.5	1.2	1.7	0.7
	Management or commerce	2.4	2.5	2.1	1.0	0.5
	Agriculture or environ'l science	4.8	2.7	2.0	1.8	1.0
	Information technology	4.9	5.8	3.2	3.8	1.5
	Science	2.0	2.5	1.0	1.2	1.9
	Engineering	3.5	2.3	2.8	0.4	1.2
	Architecture or building	5.0	2.7	1.3	2.3	0.0
	Nursing	1.7	4.3	2.1	2.9	1.7
	Health	1.4	1.7	0.8	0.9	0.5
	Teacher education	3.3	2.7	1.9	1.9	1.2
	Education	2.4	2.9	2.5	0.9	0.0
	Law	1.9	1.5	1.8	1.7	0.8
Wanted to enrol in this course	Yes, definitely	1.8 ***	2.4 o	2.0 o	1.3 o	1.0 o
	Yes, with some reservations	5.1	2.9	1.5	2.1	1.1
	No, but I didn't mind	4.4	3.6	1.7	2.8	2.3
	No, really wanted another course	7.6	5.0	1.7	1.8	1.5
Credit for prior study	Yes	1.8 *	3.5 o	3.6 ***	2.3 o	1.2 o
	No	3.3	2.5	1.4	1.4	1.2
First semester results	Passed all subjects	1.9 ***	1.1 ***	1.0 ***	0.8 ***	0.6 ***
	Some passes, no fails	6.0	3.0	2.9	2.7	1.5
	Some passes, some fails	4.9	6.9	1.7	2.1	1.5
	No passes, some or all fails	4.9	12.7	9.8	6.8	4.8
	Withdrawals, no assessment	10.4	17.0	8.5	8.1	6.0

See *Notes to tables*

Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
All persons		1.1	3.1	1.4	1.4	0.9
Sex	Male	1.2 o	3.0 o	0.7 ***	1.2 o	0.7 o
	Female	1.1	3.2	1.8	1.4	1.1
Age	15-19 years	1.2 o	4.2 **	0.1 ***	1.4 o	0.6 *
	20-24 years	1.0	2.5	0.4	1.1	1.0
	25-34 years	1.0	1.4	3.3	1.3	1.4
	35 years and over	1.5	2.5	7.2	1.8	1.9
Socio-economic b'ground	Highest quintile	0.5 o	2.8 o	0.4 *	0.8 o	0.7 o
	Next quintile	1.2	3.3	1.2	1.1	0.8
	Middle quintile	1.0	2.8	1.7	1.2	0.9
	Next quintile	1.1	3.2	1.9	1.7	1.2
	Lowest quintile	1.9	3.6	1.7	2.1	1.1
Indigenous	Yes	2.4 o	3.8 o	4.2 o	0.9 o	2.6 o
	No	1.1	3.1	1.3	1.4	0.9
Country of birth	One or both parents Aust born	1.3 o	3.9 ***	1.5 o	1.7 *	1.1 o
	Student Aust. born, not parents	0.8	1.4	0.6	0.9	0.7
	Parents & student born o'seas	0.9	1.6	1.6	0.5	0.6
English spoken in the home	English the only language	1.2 o	3.5 **	1.4 o	1.6 **	1.1 o
	English the main language	0.8	2.2	1.2	1.1	0.6
	No, but English spoken freq.	0.9	1.5	0.7	0.1	0.2
	No, English rarely/never used	0.8	0.7	1.4	0.2	0.5
Disability	Yes	3.1 **	4.0 o	1.4 o	1.6 o	6.1 ***
	No	0.9	3.1	1.3	1.4	0.5
Access	Very accessible	1.1 o	3.3 *	1.1 o	1.3 o	0.9 o
	Accessible	1.0	3.1	1.7	1.5	1.1
	Mod. access, (very) remote	1.2	3.2	1.5	2.6	1.1
	Living overseas	1.3	0.9	2.0	0.4	0.6
Secondary school last attended	Government	1.4 o	3.5 o	1.6 o	1.4 o	1.1 o
	Selective government	0.8	1.2	0.2	1.3	0.5
	Catholic	0.7	2.7	1.2	1.5	0.6
	Private/Other	1.0	2.9	1.0	1.3	0.8
	Overseas	3.4	4.2	6.8	1.3	2.6
Moved to attend university	Did not move	1.2 o	3.3 o	1.7 **	1.2 o	0.9 o
	Moved, didn't have to	1.2	1.9	0.0	2.1	0.7
	Moved within state	0.5	2.9	0.2	2.5	0.9
	Moved between states	1.7	2.4	0.5	0.3	2.4
	Moved from overseas	0.9	0.0	0.9	0.9	0.9
Prior univ. study	Completed	0.7 o	1.6 *	2.4 *	1.3 o	1.4 o
	Not completed	1.1	2.4	1.9	1.3	1.3
	None	1.2	3.5	1.0	1.4	0.8
Highest educat'al attainment	Degree or higher	1.0 o	2.1 o	2.9 ***	1.3 o	1.7 o
	Diploma	1.2	2.4	3.9	2.0	1.3
	App'ship, other voc, other	1.8	4.0	3.3	2.5	1.6
	Highest secondary	1.1	3.4	0.4	1.1	0.8
	Below highest secondary	0.9	2.3	2.9	0.7	1.4

See *Notes to tables*

Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Main activity in 2003	Studying at school	1.2 o	4.0 ***	0.1 ***	1.4 o	0.8 o
	In full-time paid work	1.2	1.4	3.2	1.3	1.1
	Studying at TAFE/elsewhere	0.3	3.9	2.6	2.0	0.8
	Studying at university	0.5	2.4	0.3	1.0	0.8
	Caring for family or friend	0.4	0.7	11.0	1.4	1.3
	Other	2.4	1.2	4.5	1.2	2.4
Course enrolment influenced by	Advisor at school	1.8 o	4.7 o	0.3 *	2.3 o	0.9 o
	Advisor at uni/TAFE	0.5 o	1.7 o	1.1 o	2.4 o	1.3 o
	Advisor somewhere else	0.3 o	3.9 o	0.9 o	1.9 o	1.5 o
	School/TAFE teacher	1.7 o	4.7 *	0.9 o	2.7 **	1.4 o
	Family	1.2 o	3.4 o	0.6 ***	1.1 o	0.9 o
	Friends	1.1 o	3.8 o	0.5 **	1.5 o	0.8 o
	Former or current students	0.9 o	2.8 o	0.8 o	1.1 o	0.8 o
	Information from university	1.1 o	3.3 o	1.2 o	1.5 o	0.9 o
	Managers/colleagues at work	1.0 o	2.9 o	2.4 o	0.8 o	1.4 o
	Year 12 results	1.4 o	3.9 *	0.2 ***	1.3 o	0.6 o
	Student income support	1.3 o	3.4 o	0.7 o	0.9 o	1.3 o
	Work exp. in a field of interest	1.1 o	2.9 o	1.9 o	1.4 o	0.9 o
Number of influences	None	0.6 o	2.1 o	2.7 **	1.2 o	0.9 o
	One	1.5	3.2	1.5	1.2	1.1
	Two or three	1.1	3.2	1.2	1.4	0.9
	Four or more	1.2	3.8	0.5	1.4	0.9
Reasons for enrolling	Like learning	0.7 o	2.3 *	1.6 o	1.3 o	0.8 o
	Personal challenge	1.1 o	2.5 o	1.5 o	1.2 o	0.9 o
	Financial gain	1.3 o	3.0 o	1.2 o	1.5 o	0.8 o
	To enter a career of choice	1.0 o	2.5 ***	1.2 o	1.2 o	0.9 o
Number of reasons for enrolling	None	1.8 o	4.8 *	1.6 o	1.4 o	1.5 o
	One	1.0	3.8	1.4	1.5	1.0
	Two	0.9	2.6	1.4	1.4	0.7
	Three	1.2	3.0	1.4	1.3	0.9
	Four	1.0	1.7	1.2	1.1	0.8
	Can't remember	1.7	1.8	0.0	0.6	0.8
Main carer for someone	No	1.1 o	3.3 o	0.4 ***	1.2 o	0.9 o
	For pre-school children	1.0 o	1.9 o	10.6 ***	1.6 o	2.0 o
	For primary school children	1.1 o	2.3 o	8.6 ***	1.3 o	1.2 o
	For older children	1.8 o	1.9 o	10.4 ***	2.4 o	1.3 o
	For others	1.7 o	3.8 o	9.4 ***	3.3 o	3.3 o
Mainly living with	Parents	1.3 o	3.6 o	0.2 ***	0.9 *	0.6 o
	Spouse, no children	1.1	2.5	5.3	2.3	1.4
	Spouse and children	1.5	1.4	10.4	0.6	1.1
	Children, no spouse	1.4	3.0	9.7	3.5	1.5
	Univ. college or other residence	0.7	2.0	0.2	1.3	0.7
	Other	0.7	2.8	0.5	1.9	1.8

See *Notes to tables*

Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Hours of paid work per week	Not employed	1.0 o	2.4 o	1.1 **	1.1 o	1.1 o
	1-9 hours	0.7	3.4	1.0	1.3	1.2
	10-19 hours	1.2	3.5	0.6	1.4	0.7
	20-34 hours	1.6	4.6	2.0	1.9	0.9
	35-40 hours	1.1	3.5	4.1	1.6	1.0
	More than 40 hours	0.8	2.8	3.2	1.9	0.7
Study leave from paid work	Not employed	1.0 o	2.4 *	1.1 **	1.1 *	1.1 o
	No, employer/self-employed	2.2	1.5	3.2	1.5	1.4
	No, flexible hours	1.0	4.7	1.1	1.6	0.9
	No, fixed hours	2.1	3.8	3.9	3.6	1.5
	Yes, but difficult to use	2.6	3.3	2.8	2.2	1.0
	Yes, and used it	0.5	2.8	0.4	0.5	0.3
Missed classes due to paid work	Not employed	1.0 o	2.4 o	1.1 *	1.1 o	1.1 o
	No, did not have to attend	1.6	3.1	4.9	1.8	0.9
	No, never	1.3	4.2	1.3	1.2	0.8
	Yes, but rarely	0.9	3.3	1.2	1.1	0.7
	Yes, sometimes	0.7	3.7	1.0	2.4	1.1
	Yes, frequently	2.9	3.1	4.1	5.8	0.9
Paid work interfered with study	Not employed	1.0 o	2.4 *	1.1 ***	1.1 **	1.1 o
	No, not at all	1.1	3.7	0.6	1.3	0.7
	Yes, but only a little	1.1	3.7	1.2	1.0	0.9
	Yes, somewhat	1.3	2.8	2.1	1.5	0.8
	Yes, a great deal	2.2	6.3	6.1	5.6	1.5
Travel time to univ.	Did not travel to university	0.8 o	2.8 o	5.0 ***	1.6 o	1.5 o
	1 - 30 minutes	1.0	3.0	1.1	1.3	0.7
	31 - 60 minutes	1.2	3.4	1.0	1.1	0.8
	60 - 90 minutes	1.6	2.3	0.9	1.6	1.3
	More than 90 minutes	2.1	5.0	0.8	2.3	2.9
Youth Allowance	Independent, full	0.7 o	2.0 o	0.1 **	0.1 ***	1.3 o
	Independent, partial	0.2	1.8	0.3	0.0	0.6
	Dependent, full	1.1	3.4	0.5	0.0	0.4
	Dependent, partial	0.9	1.8	0.5	0.5	0.3
	No	1.3	3.4	1.7	1.7	1.0
Austudy	Full	1.9 o	2.0 o	0.7 o	0.3 o	1.4 o
	Partial	0.6	3.0	2.0	0.5	1.0
	No	1.1	3.2	1.4	1.5	0.9
ABSTUDY	Yes	1.1 o	3.1 o	1.4 o	1.4 o	0.9 o
	No	1.1	2.7	0.6	0.0	0.6
Main sources of financial support	Government income support	1.2 o	2.2 *	1.0 o	0.3 ***	1.4 o
	Paid employment	1.1 o	3.6 *	1.4 o	1.5 o	0.8 o
	Spouse or partner	1.1 o	2.0 o	6.7 ***	1.9 o	1.4 o
	Parents or guardian	1.2 o	3.3 o	0.1 ***	1.3 o	0.7 o
	Other relatives	0.6 o	2.3 o	0.7 o	0.7 o	0.6 o
	Savings or sale of assets	0.6 o	2.3 o	1.2 o	1.5 o	0.8 o
	Commercial loans	0.0 o	5.9 o	0.0 o	10.9 *	5.1 o
	Loans from family/friends	1.7 o	2.5 o	1.6 o	4.2 o	2.6 o
	Any scholarship	0.1 o	1.3 o	0.0 *	0.0 *	0.4 o

See *Notes to tables*

Table A.10—*continued*
Percent of students who discontinued their course for selected reasons: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*%*	*%*	*%*	*%*	*%*
Income support	Full	1.1 o	2.3 o	0.3 **	0.1 ***	1.2 o
	Partial	0.5	2.1	0.6	0.4	0.6
	None	1.2	3.5	1.7	1.8	0.9
Type of university	Group of 8	0.6 o	2.0 *	0.6 o	0.5 **	0.6 o
	Technology network	1.6	3.9	1.7	1.4	1.0
	Innovative research universities	1.1	3.7	1.4	1.5	0.9
	Regional universities	1.4	4.0	1.7	2.5	1.6
	New generation universities	1.0	2.3	1.7	0.8	0.6
Wanted to enrol at this univ.	Yes, definitely	0.8 *	2.6 **	1.5 o	1.1 o	0.9 o
	Yes, with some reservations	2.2	4.8	1.3	1.8	1.2
	No, but I didn't mind	1.3	4.3	0.8	2.7	0.7
	No, really wanted another univ.	1.5	2.6	0.3	1.2	1.7
Type of enrolment	Full-time	1.1 o	3.0 o	0.4 ***	1.3 o	0.8 *
	Part-time	1.2	3.7	7.2	1.6	1.9
Mode of enrolment	On-campus	1.2 o	3.2 o	0.9 ***	1.3 o	0.8 o
	Off-campus	1.2	3.2	6.3	2.1	1.8
	Mixed on & off campus	0.7	3.0	2.1	1.5	1.4
Single or double degree	Single degree	1.1 o	3.3 o	1.4 o	1.4 o	0.9 o
	Double degree	0.9	2.4	0.9	0.9	1.0
	Don't know	14.2	5.4	6.2	7.8	0.0
	Other	0.0	3.3	0.0	0.0	1.4
Field of study	Creative arts	1.8 o	4.7 o	0.9 **	2.2 o	1.5 o
	Social sciences	1.1	4.1	1.4	1.3	2.0
	Humanities	1.4	3.6	1.5	0.9	1.0
	Management or commerce	0.6	2.6	1.5	0.8	0.6
	Agriculture or environ'l science	2.3	3.8	1.9	1.8	0.8
	Information technology	0.8	2.6	1.1	0.7	1.0
	Science	0.6	3.3	0.2	1.0	0.9
	Engineering	1.0	3.8	0.8	2.4	0.7
	Architecture or building	1.6	2.7	0.0	2.0	0.0
	Nursing	1.4	3.7	3.2	1.8	0.4
	Health	0.5	1.2	0.4	0.7	0.6
	Teacher education	2.1	2.4	2.8	2.2	1.0
	Education	0.9	3.4	5.7	2.5	3.0
	Law	0.8	1.8	0.9	1.0	0.8
Wanted to enrol in this course	Yes, definitely	0.8 **	2.4 ***	1.7 *	1.0 o	0.8 o
	Yes, with some reservations	1.3	4.1	0.8	1.9	1.2
	No, but I didn't mind	2.5	5.4	0.4	2.7	0.9
	No, really wanted another course	2.8	6.1	0.7	1.5	1.7
Credit for prior study	Yes	0.8 o	2.4 o	2.5 **	1.3 o	1.0 o
	No	1.1	3.3	1.0	1.4	1.0
First semester results	Passed all subjects	0.6 ***	1.9 ***	1.0 ***	0.8 ***	0.4 ***
	Some passes, no fails	1.6	4.4	1.9	2.4	1.7
	Some passes, some fails	2.0	7.5	0.3	1.7	1.3
	No passes, some or all fails	3.9	11.0	1.6	5.2	3.3
	Withdrawals, no assessment	7.3	7.1	9.7	5.9	6.1

See *Notes to tables*

Table A.11
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-3.476 ***	-5.226 ***	-6.643 ***	-4.725 ***	-6.949 ***
Female		-0.058 o	0.108 o	-0.009 o	0.063 o	0.078 o
Age	15-19 years	---	---	---	---	---
	20-24 years	0.069 o	0.286 o	0.588 o	0.369 o	0.522 o
	25-34 years	-0.233 o	0.424 o	0.715 o	0.061 o	-0.090 o
	35 years and over	-0.590 o	0.623 o	0.514 o	-0.057 o	-0.803 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.199 o	0.764 *	0.513 o	0.762 o	1.146 o
	Middle quintile	-0.008 o	0.643 o	0.316 o	0.719 o	0.864 o
	Next quintile	0.330 o	0.624 o	0.472 o	0.610 o	0.855 o
	Lowest quintile	0.465 o	0.674 o	0.585 o	0.925 o	1.261 *
Indigenous		0.162 o	0.256 o	0.619 o	-0.056 o	-0.431 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	0.055 o	-0.063 o	-0.131 o	-0.148 o	-1.259 o
	No, but English spoken freq.	-0.209 o	0.139 o	-0.160 o	-0.057 o	-1.876 o
	No, English rarely/never used	-1.563 *	-0.129 o	0.618 o	-0.152 o	-0.488 o
Disability		-0.242 o	0.907 **	0.128 o	0.215 o	0.613 o
Access	Very accessible	---	---	---	---	---
	Accessible	0.278 o	0.106 o	0.221 o	0.391 o	0.154 o
	Mod. access, (very) remote	0.352 o	0.238 o	0.774 o	0.455 o	0.045 o
	Living overseas	0.009 o	0.370 o	-1.304 o	-0.425 o	-0.956 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	-0.580 o	-0.038 o	1.021 o	0.300 o	-0.090 o
	Moved within state	0.040 o	0.259 o	0.417 o	0.126 o	0.448 o
	Moved between states	-0.327 o	0.615 o	0.882 o	0.675 o	0.447 o
	Moved from overseas	1.217 o	0.251 o	2.362 o	1.204 o	2.911 *
Highest educat'al attainment	Degree or higher	0.132 o	0.398 o	0.508 o	-0.730 o	-0.693 o
	Diploma	0.442 o	0.304 o	0.165 o	0.147 o	0.776 o
	App'ship, other voc, other	0.611 *	0.777 **	0.365 o	0.083 o	1.044 *
	Highest secondary	---	---	---	---	---
	Below highest secondary	-0.494 o	0.159 o	-0.495 o	0.152 o	-0.435 o
Main activity in 2003	Studying at school	---	---	---	---	---
	In full-time paid work	0.099 o	-0.059 o	0.562 o	0.427 o	-0.694 o
	Studying at TAFE/elsewhere	-0.582 o	0.063 o	-0.007 o	-0.640 o	-1.524 o
	Studying at university	-0.662 o	-1.449 *	-0.126 o	-0.828 o	-0.972 o
	Caring for family or friend	-12.58 o	-0.171 o	-2.154 o	-1.221 o	-1.181 o
	Other	-0.074 o	0.212 o	-0.100 o	-0.040 o	-0.620 o

See *Notes to tables*

Table A.11—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Course enrolment influenced by	Advisor at school	0.275o	0.418o	0.963o	0.713o	0.482o
	Advisor at uni/TAFE	0.011o	0.403o	-0.095o	-0.060o	0.874o
	Advisor somewhere else	0.589o	-0.304o	-0.200o	0.053o	-0.209o
	School/TAFE teacher	0.080o	0.476o	0.005o	0.628o	0.704o
	Family	-0.200o	0.274o	-0.008o	-0.134o	0.056o
	Friends	0.424o	0.344o	0.357o	-0.199o	-0.184o
	Former or current students	-0.083o	-0.386o	-0.256o	-0.441o	-0.025o
	Information from university	0.191o	0.252o	0.040o	0.164o	0.123o
	Managers/colleagues at work	0.372o	-0.123o	0.074o	-0.293o	-0.503o
	Year 12 results	0.118o	0.096o	-0.299o	-0.249o	-0.084o
	Student income support	-0.139o	0.440o	0.707o	0.395o	0.984o
	Work exp. in a field of interest	-0.176o	-0.046o	-0.014o	0.268o	-0.048o
Reasons for enrolling	Like learning	-0.153o	-0.588*	-0.022o	-0.009o	0.485o
	Personal challenge	0.237o	0.431o	0.503o	0.478o	-0.052o
	Financial gain	-0.073o	0.358o	0.263o	0.590o	0.305o
	To enter a career of choice	-0.650**	-0.443o	-0.567o	-0.883**	0.259o
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.664o	-1.117o	-0.477o	-0.932o	-0.004o
	For primary school children	-0.691o	-0.346o	0.215o	0.154o	-0.684o
	For older children	-0.296o	0.180o	0.348o	0.553o	0.666o
	For others	-0.101o	0.285o	1.111o	0.580o	1.231o
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.031o	0.102o	0.340o	0.095o	0.809o
	Spouse and children	-1.263o	0.955o	0.634o	-0.194o	0.967o
	Children, no spouse	0.316o	0.971o	0.878o	0.026o	2.129*
	Univ. college or other residence	-0.209o	-0.082o	0.064o	-0.761o	-0.829o
	Other	-0.362o	-0.015o	0.420o	-0.163o	0.860o
Hours of paid work per week	Not employed	---	---	---	---	---
	1-9 hours	0.036o	0.003o	-2.066o	0.202o	-1.111o
	10-19 hours	0.021o	0.002o	-0.299o	0.068o	-0.369o
	20-34 hours	0.223o	0.122o	0.069o	0.264o	-0.368o
	35-40 hours	-0.577o	0.392o	0.034o	0.111o	0.310o
	More than 40 hours	-0.466o	0.617o	1.052*	0.473o	-0.051o
Travel time to univ.	Did not travel to university	-0.601o	-0.335o	-0.496o	0.173o	-0.340o
	1 - 30 minutes	---	---	---	---	---
	31 - 60 minutes	0.374o	0.231o	0.700*	0.465o	0.703o
	60 - 90 minutes	0.331o	0.231o	0.243o	0.727o	1.634**
	More than 90 minutes	-0.004o	0.456o	1.017o	0.820o	1.677**

See *Notes to tables*

Table A.11—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Main sources of financial support	Government income support	-0.234 o	-0.202 o	-1.080 o	-0.013 o	-0.716 o
	Paid employment	-0.099 o	0.149 o	1.188 *	-0.296 o	0.248 o
	Spouse or partner	-0.276 o	-0.361 o	-0.273 o	0.247 o	-0.428 o
	Parents or guardian	0.132 o	0.047 o	-0.960 *	-0.229 o	-0.850 *
	Other relatives	-1.134 o	-0.950 o	0.105 o	-0.788 o	-0.948 o
	Savings or sale of assets	-0.100 o	-0.046 o	-0.553 o	-0.319 o	-0.148 o
	Commercial loans	0.617 o	-0.514 o	0.752 o	0.859 o	0.659 o
	Loans from family/friends	-0.142 o	-0.377 o	0.092 o	-0.571 o	0.597 o
	Any scholarship	-1.383 o	-1.886 o	-1.964 o	-1.354 o	-15.259 o
Income support	Full	0.107 o	-0.276 o	-0.350 o	-0.528 o	-0.781 o
	Partial	0.109 o	-0.526 o	-0.822 o	-0.940 o	-0.423 o
	None	---	---	---	---	---
Type of university	Group of 8	---	---	---	---	---
	Technology network	0.732 *	0.731 o	1.380 *	0.792 o	1.006 o
	Innovative research universities	0.493 o	0.516 o	1.234 o	0.398 o	1.380 *
	Regional universities	0.648 o	0.856 *	1.495 *	0.347 o	1.743 **
	New generation universities	0.441 o	0.495 o	1.172 o	0.189 o	0.569 o
Wanted to enrol at this univ.	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.501 *	0.364 o	0.070 o	0.904 **	0.623 o
	No, but I didn't mind	0.751 **	0.418 o	0.690 o	0.112 o	0.550 o
	No, really wanted another univ.	-0.077 o	-0.649 o	-1.561 o	-0.113 o	-0.172 o
Full-time	Full-time	-0.817 *	-0.660 *	-0.475 o	-0.744 o	-0.353 o
Mode of enrolment	On-campus	---	---	---	---	---
	Off-campus	0.100 o	0.021 o	0.333 o	0.271 o	0.059 o
	Mixed on & off campus	0.679 *	-0.132 o	0.414 o	-0.094 o	0.233 o
Dble deg.		-0.763 *	-0.302 o	0.258 o	-0.729 o	-0.051 o
Field of study	Creative arts	---	---	---	---	---
	Social sciences	-0.218 o	-0.246 o	-0.749 o	-0.632 o	-0.712 o
	Humanities	0.003 o	-0.230 o	-0.996 o	-0.273 o	-1.225 o
	Management or commerce	-0.528 o	-0.492 o	-0.747 o	-1.093 *	-1.646 *
	Agriculture or environ'l science	0.381 o	-0.094 o	-0.170 o	-0.399 o	-0.229 o
	Information technology	-0.129 o	0.308 o	-0.221 o	0.406 o	-0.080 o
	Science	-0.639 o	0.096 o	-0.448 o	-0.359 o	0.285 o
	Engineering	0.014 o	-0.164 o	-0.245 o	-1.943 o	-0.369 o
	Architecture or building	0.509 o	0.209 o	-0.650 o	0.172 o	-14.659 o
	Nursing	-0.875 o	0.097 o	-0.728 o	0.057 o	-0.266 o
	Health	-0.836 o	-0.447 o	-1.100 o	-0.707 o	-1.181 o
	Teacher education	0.257 o	-0.179 o	-0.899 o	-0.183 o	-0.874 o
	Education	-0.501 o	-0.211 o	-0.658 o	-1.015 o	-16.227 o
	Law	0.152 o	-0.715 o	-1.126 o	0.178 o	-1.385 o
Wanted to enrol in this course	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.841 ***	0.110 o	0.215 o	0.416 o	-0.042 o
	No, but I didn't mind	0.578 o	0.402 o	0.357 o	0.880 o	1.018 o
	No, really wanted another course	1.245 ***	0.725 *	0.719 o	0.425 o	0.099 o

See *Notes to tables*

Table A.11—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-6.192 ***	-2.583 ***	-5.813 ***	-6.077 ***	-5.690 ***
Female		-0.217 o	0.067 o	0.675 o	0.095 o	0.568 o
Age	15-19 years	---	---	---	---	---
	20-24 years	0.288 o	-0.237 o	-0.080 o	0.410 o	0.881 o
	25-34 years	0.157 o	-0.715 o	-0.040 o	-0.180 o	1.161 o
	35 years and over	0.331 o	-0.217 o	0.773 o	-0.365 o	1.684 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.828 o	0.133 o	0.988 o	0.349 o	0.113 o
	Middle quintile	0.707 o	-0.081 o	0.521 o	0.278 o	0.030 o
	Next quintile	0.564 o	0.047 o	0.317 o	0.648 o	0.211 o
	Lowest quintile	1.428 *	0.233 o	0.053 o	0.843 o	-0.004 o
Indigenous		0.234 o	0.378 o	0.741 o	-0.500 o	-0.304 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	-0.335 o	-0.290 o	0.463 o	0.120 o	-0.232 o
	No, but English spoken freq.	-0.369 o	-0.624 o	0.652 o	-2.321 o	-1.941 o
	No, English rarely/never used	-0.706 o	-1.195 o	0.439 o	-2.334 o	-0.710 o
Disability		1.248 **	0.278 o	-0.029 o	0.365 o	0.000 ***
Access	Very accessible	---	---	---	---	---
	Accessible	0.231 o	-0.068 o	0.148 o	-0.112 o	0.174 o
	Mod. access, (very) remote	0.219 o	0.337 o	0.502 o	0.285 o	-0.210 o
	Living overseas	0.631 o	-0.512 o	-1.041 o	-1.305 o	-0.873 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	-0.273 o	-0.555 o	-15.030 o	0.628 o	-0.339 o
	Moved within state	-0.961 o	-0.071 o	-0.653 o	0.713 o	-0.052 o
	Moved between states	0.787 o	-0.013 o	-0.258 o	-1.210 o	0.825 o
	Moved from overseas	-0.318 o	-11.439 o	1.568 o	1.108 o	-0.126 o
Highest educat'al attainment	Degree or higher	0.291 o	0.334 o	0.262 o	0.917 o	0.470 o
	Diploma	0.470 o	0.055 o	0.579 o	0.860 o	0.596 o
	App'ship, other voc, other	0.429 o	0.238 o	0.595 o	0.926 *	0.426 o
	Highest secondary	---	---	---	---	---
	Below highest secondary	-0.741 o	0.035 o	-0.271 o	-0.571 o	-0.092 o
Main activity in 2003	Studying at school	---	---	---	---	---
	In full-time paid work	0.448 o	-1.543 **	0.725 o	-0.654 o	-0.699 o
	Studying at TAFE/elsewhere	-1.577 o	0.019 o	1.083 o	-0.076 o	-1.398 o
	Studying at university	-0.801 o	-0.448 o	-1.214 o	-0.577 o	-0.935 o
	Caring for family or friend	-1.647 o	-2.132 o	1.194 o	-1.007 o	-1.412 o
	Other	0.610 o	-1.527 *	1.237 o	-0.847 o	-0.054 o

See *Notes to tables*

Table A.11—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Course enrolment influenced by	Advisor at school	0.345 o	0.078 o	0.346 o	0.417 o	-0.054 o
	Advisor at uni/TAFE	-1.071 o	-0.921 o	-0.373 o	0.670 o	0.284 o
	Advisor somewhere else	-1.021 o	0.348 o	-0.059 o	0.215 o	0.279 o
	School/TAFE teacher	0.516 o	0.346 o	1.011 o	0.997 **	0.665 o
	Family	0.127 o	0.057 o	-0.074 o	-0.626 o	0.310 o
	Friends	-0.019 o	0.267 o	-0.830 o	0.451 o	-0.245 o
	Former or current students	-0.253 o	-0.192 o	-0.043 o	-0.392 o	0.022 o
	Information from university	0.136 o	0.188 o	0.020 o	0.416 o	0.119 o
	Managers/colleagues at work	-0.277 o	-0.122 o	-0.477 o	-0.867 o	0.326 o
	Year 12 results	0.255 o	0.049 o	-0.124 o	0.118 o	-0.485 o
	Student income support	0.469 o	0.554 o	-0.084 o	1.008 o	0.191 o
	Work exp. in a field of interest	0.052 o	0.039 o	0.037 o	-0.024 o	-0.121 o
Reasons for enrolling	Like learning	-0.576 o	-0.261 o	0.031 o	0.069 o	-0.420 o
	Personal challenge	0.228 o	0.001 o	0.497 o	-0.208 o	0.219 o
	Financial gain	0.530 o	0.068 o	0.103 o	0.518 o	-0.152 o
	To enter a career of choice	-0.354 o	-0.605 **	-0.101 o	-0.340 o	-0.024 o
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.116 o	0.013 o	1.075 **	-0.063 o	0.482 o
	For primary school children	-0.100 o	0.241 o	-0.002 o	-0.248 o	-0.097 o
	For older children	-0.010 o	-0.470 o	0.503 o	0.195 o	-0.153 o
	For others	0.917 o	0.647 o	1.409 *	1.120 o	1.201 o
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.327 o	0.164 o	1.540 *	1.478 *	0.095 o
	Spouse and children	0.264 o	-0.381 o	1.871 *	0.356 o	-0.292 o
	Children, no spouse	-0.480 o	0.449 o	2.000 *	2.897 **	-0.668 o
	Univ. college or other residence	-0.097 o	-0.276 o	1.386 o	0.061 o	0.136 o
	Other	-0.688 o	0.135 o	0.107 o	1.378 *	0.708 o
Hours of paid work per week	Not employed	---	---	---	---	---
	1-9 hours	-0.247 o	0.395 o	0.692 o	0.142 o	0.238 o
	10-19 hours	0.300 o	0.286 o	0.354 o	0.078 o	-0.076 o
	20-34 hours	0.646 o	0.604 *	0.317 o	-0.125 o	-0.117 o
	35-40 hours	0.223 o	0.632 o	0.080 o	-0.159 o	-0.209 o
	More than 40 hours	-0.412 o	0.182 o	-0.731 o	-0.623 o	-1.395 o
Travel time to univ.	Did not travel to university	-0.941 o	-0.502 o	-0.619 o	-0.847 o	-0.234 o
	1 - 30 minutes	---	---	---	---	---
	31 - 60 minutes	0.133 o	0.122 o	0.160 o	0.016 o	0.312 o
	60 - 90 minutes	0.404 o	-0.207 o	0.367 o	0.748 o	1.089 o
	More than 90 minutes	0.439 o	0.317 o	0.714 o	0.800 o	1.660 **

See *Notes to tables*

Table A.11—*continued*
Logistic regression of selected reasons for discontinuing the course on student and course characteristics: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Main sources of financial support	Government income support	0.639o	-0.346o	-0.398o	-1.855*	0.703o
	Paid employment	-0.266o	-0.040o	-0.018o	-0.130o	-0.328o
	Spouse or partner	-0.162o	-0.205o	-0.338o	0.086o	0.144o
	Parents or guardian	0.274o	-0.024o	-0.706o	-0.193o	0.117o
	Other relatives	-0.928o	-0.309o	-1.277o	-1.579o	-0.431o
	Savings or sale of assets	-0.601o	-0.192o	0.642o	-0.114o	-0.353o
	Commercial loans	-13.187o	0.625o	-16.010o	1.209o	0.708o
	Loans from family/friends	0.174o	-0.659o	1.181o	0.765o	1.002o
	Any scholarship	-2.074o	-0.710o	-15.842o	-14.721o	-0.784o
Income support	Full	-0.668o	-0.045o	-0.004o	-2.323o	-0.463o
	Partial	-1.313o	0.014o	0.700o	-1.615o	-0.994o
	None	---	---	---	---	---
Type of university	Group of 8	---	---	---	---	---
	Technology network	0.719o	0.684*	-0.320o	0.516o	0.353o
	Innovative research universities	0.272o	0.633o	-0.469o	0.863o	0.150o
	Regional universities	0.655o	0.742*	-0.813o	1.230*	0.801o
	New generation universities	-0.056o	0.015o	-0.191o	0.020o	-0.076o
Wanted to enrol at this univ.	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.937*	0.401o	0.265o	0.350o	0.216o
	No, but I didn't mind	0.062o	0.213o	-0.113o	0.642o	-0.436o
	No, really wanted another univ.	-0.056o	-0.313o	-1.404o	-0.161o	0.550o
Full-time	Full-time	-0.079o	-1.007**	-1.864***	0.102o	-0.678o
Mode of enrolment	On-campus	---	---	---	---	---
	Off-campus	0.410o	0.371o	0.517o	0.583o	0.039o
	Mixed on & off campus	-0.960o	-0.004o	0.239o	0.031o	0.198o
Dble deg.		0.105o	-0.144o	0.536o	-0.002o	0.250o
Field of study	Creative arts	---	---	---	---	---
	Social sciences	-0.403o	-0.077o	-0.482o	-0.675o	0.119o
	Humanities	0.049o	-0.115o	-0.591o	-0.867o	-0.479o
	Management or commerce	-1.078o	-0.587o	-0.293o	-1.306*	-0.684o
	Agriculture or environ'l science	0.748o	0.230o	0.645o	0.100o	-0.523o
	Information technology	-1.103o	-0.435o	-0.847o	-1.231o	-0.038o
	Science	-0.892o	-0.150o	-1.170o	-0.780o	-0.127o
	Engineering	-0.433o	-0.087o	0.304o	0.493o	0.079o
	Architecture or building	0.477o	-0.288o	-16.408o	0.543o	-13.114o
	Nursing	-0.026o	0.069o	-0.678o	-0.161o	-1.504o
	Health	-1.097o	-1.322*	-1.184o	-1.061o	-0.589o
	Teacher education	0.598o	-0.290o	-0.298o	-0.103o	-0.582o
	Education	-0.077o	-0.120o	0.588o	-0.586o	0.570o
	Law	-0.329o	-0.633o	-1.635o	-1.226o	-0.450o
Wanted to enrol in this course	Yes, definitely	---	---	---	---	---
	Yes, with some reservations	0.244o	0.296o	0.045o	0.624o	0.550o
	No, but I didn't mind	1.170*	0.557o	-0.249o	1.171*	0.615o
	No, really wanted another course	1.245*	0.750*	0.446o	0.663o	0.925o

See *Notes to tables*

Table A.12
Logistic regression of selected reasons for discontinuing the course on student background characteristics: All students

Reason for discontinuing . . .		*Change of Direction*	*Academic Difficulties*	*Conflict with Emp*	*Dissatisfied with Course*	*Financial Difficulties*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-3.485 ***	-4.661 ***	-5.715 ***	-5.179 ***	-5.490 ***
Female		-0.163 o	-0.017 o	-0.285 o	0.049 o	-0.063 o
Age	15-19 years	---	---	---	---	---
	20-24 years	-0.242 o	-0.046 o	0.592 o	0.153 o	-0.093 o
	25-34 years	-0.538 o	-0.002 o	1.010 *	0.131 o	-0.721 o
	35 years and over	-0.814 o	0.175 o	0.948 o	0.288 o	-0.938 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.444 o	0.837 *	0.852 o	0.935 o	1.034 o
	Middle quintile	0.265 o	0.776 *	0.730 o	0.909 o	0.917 o
	Next quintile	0.601 *	0.750 *	0.801 o	0.736 o	0.930 o
	Lowest quintile	0.659 *	0.709 o	0.880 o	1.087 *	1.350 *
Indigenous		-0.244 o	0.292 o	0.213 o	-0.257 o	-0.438 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	0.022 o	-0.053 o	-0.117 o	-0.282 o	-1.333 o
	No, but English spoken freq.	-0.442 o	0.047 o	-0.406 o	-0.145 o	-1.586 o
	No, English rarely/never used	-1.513 *	-0.062 o	0.527 o	-0.374 o	-0.666 o
Disability		-0.225 o	0.868 ***	-0.316 o	0.339 o	0.527 o
Access	Very accessible	---	---	---	---	---
	Accessible	0.180 o	0.118 o	0.219 o	0.304 o	0.133 o
	Mod. access, (very) remote	0.150 o	0.209 o	0.449 o	0.284 o	-0.086 o
	Living overseas	0.060 o	0.390 o	-1.359 *	-0.420 o	-0.996 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	-0.623 o	-0.031 o	0.256 o	0.234 o	-0.519 o
	Moved within state	-0.038 o	0.024 o	-0.494 o	-0.106 o	0.068 o
	Moved between states	-0.509 o	0.180 o	-0.059 o	0.335 o	0.158 o
	Moved from overseas	0.809 o	0.060 o	0.439 o	1.158 o	2.366 *
Highest educat'al attainment	Degree or higher	-0.048 o	0.050 o	0.568 o	-0.660 o	-1.004 o
	Diploma	0.364 o	0.524 o	0.767 *	0.369 o	0.653 o
	App'ship, other voc, other	0.783 **	0.875 **	0.688 *	0.376 o	0.954 *
	Highest secondary	---	---	---	---	---
	Below highest secondary	-0.475 o	0.315 o	-0.045 o	0.389 o	-0.174 o
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.826 o	-0.957 o	-0.588 o	-1.020 o	0.048 o
	For primary school children	-0.818 o	-0.214 o	-0.513 o	0.056 o	-0.949 o
	For older children	-0.432 o	-0.056 o	0.263 o	0.501 o	0.276 o
	For others	-0.001 o	0.391 o	1.100 *	0.773 o	1.420 *
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.140 o	0.186 o	0.915 *	0.466 o	0.558 o
	Spouse and children	-1.355 o	0.923 o	0.976 o	0.024 o	0.739 o
	Children, no spouse	0.026 o	0.695 o	0.702 o	0.076 o	1.465 o
	Univ. college or other residence	-0.590 o	-0.318 o	-0.587 o	-1.063 o	-1.218 o
	Other	-0.413 o	-0.057 o	0.769 *	-0.145 o	0.585 o

See *Notes to tables*

Table A.12
Logistic regression of selected reasons for discontinuing the course on student background characteristics: All students

Reason for discontinuing . . .		*Social Isolation*	*Break from Study*	*Family Commitments*	*Access to Inc. Sup.*	*Illness*
Variable	*Category*	*Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Intercept		-5.149 ***	-3.168 ***	-7.492 ***	-4.844 ***	-5.578 ***
Female		-0.117 o	0.046 o	0.682 o	-0.054 o	0.426 o
Age	15-19 years	---	---	---	---	---
	20-24 years	-0.124 o	-0.615 **	0.647 o	-0.590 o	0.381 o
	25-34 years	-0.374 o	-1.516 **	1.248 o	-1.407 *	0.415 o
	35 years and over	-0.173 o	-0.822 o	1.874 *	-1.226 o	1.017 o
Socio-economic b'ground	Highest quintile	---	---	---	---	---
	Next quintile	0.957 o	0.255 o	0.569 o	0.400 o	0.138 o
	Middle quintile	0.761 o	0.117 o	0.387 o	0.389 o	0.102 o
	Next quintile	0.855 o	0.231 o	0.123 o	0.645 o	0.321 o
	Lowest quintile	1.523 **	0.325 o	-0.015 o	0.783 o	0.186 o
Indigenous		0.615 o	0.258 o	0.349 o	-0.948 o	0.465 o
English spoken in the home	English the only language	---	---	---	---	---
	English the main language	-0.554 o	-0.521 o	0.252 o	-0.301 o	-0.509 o
	No, but English spoken freq.	-0.596 o	-1.003 *	0.194 o	-2.682 o	-1.779 o
	No, English rarely/never used	-0.748 o	-1.470 o	0.388 o	-2.024 o	-0.606 o
Disability		1.263 ***	0.347 o	-0.021 o	0.184 o	0.000 ***
Access	Very accessible	---	---	---	---	---
	Accessible	0.267 o	0.009 o	0.226 o	-0.211 o	0.123 o
	Mod. access, (very) remote	0.206 o	0.278 o	0.356 o	0.074 o	-0.121 o
	Living overseas	0.554 o	-0.402 o	-0.697 o	-1.010 o	-0.455 o
Moved to attend university	Did not move	---	---	---	---	---
	Moved, didn't have to	0.163 o	-0.463 o	-13.490 o	0.442 o	-0.435 o
	Moved within state	-0.930 o	-0.232 o	-1.341 o	0.522 o	0.015 o
	Moved between states	0.734 o	-0.232 o	-0.642 o	-1.364 o	0.896 o
	Moved from overseas	0.095 o	-12.028 o	0.554 o	0.855 o	0.478 o
Highest educat'al attainment	Degree or higher	-0.014 o	0.183 o	0.138 o	0.499 o	0.459 o
	Diploma	0.058 o	0.256 o	0.561 o	0.876 *	0.251 o
	App'ship, other voc, other	0.375 o	0.410 o	0.683 o	0.808 *	0.396 o
	Highest secondary	---	---	---	---	---
	Below highest secondary	-0.455 o	-0.009 o	-0.127 o	-0.572 o	0.019 o
Main carer for someone	No	---	---	---	---	---
	For pre-school children	-0.114 o	-0.143 o	0.931 **	-0.078 o	0.628 o
	For primary school children	-0.006 o	0.174 o	0.192 o	-0.261 o	0.020 o
	For older children	0.192 o	-0.636 o	0.250 o	-0.001 o	-0.540 o
	For others	0.584 o	0.595 o	1.180 *	1.044 o	1.434 *
Mainly living with	Parents	---	---	---	---	---
	Spouse, no children	-0.430 o	0.167 o	1.736 *	1.290 *	-0.166 o
	Spouse and children	-0.148 o	-0.267 o	1.948 *	0.242 o	-0.580 o
	Children, no spouse	-0.440 o	0.385 o	1.703 *	1.843 *	-0.361 o
	Univ. college or other residence	-0.429 o	-0.516 o	0.976 o	0.011 o	-0.176 o
	Other	-0.722 o	0.066 o	0.437 o	0.662 o	0.474 o

See *Notes to tables*

Appendix B Scales of Reasons for Discontinuing

This appendix briefly describes the constructions of the scales of reasons for students discontinuing their course. The scales are discussed in Chapter 9 and elsewhere in this report. The scales were constructed using the responses of students who did not enrol at the same university in first semester 2005.

The scales are derived from students' responses to 64 items in which they were asked to indicate the extent to which their decision to discontinue their study was influenced by each of 64 reasons. The reasons and the distribution of responses across the categories *None*, *A little*, *Moderate* and *Large* are displayed in Table B.1. That table is based on the responses of students who did not enrol at the same university in 2005. The items are ordered by the size of their mean, a value which summarises the patterns of responses by scoring *None* as zero, *A little* as 33.3, *Moderate* as 66.67 and *Large* as 100.

Many of the items are related. For instance, a student who indicated that *I was offered a place in a course I preferred* was a large influence on their decision to withdraw is also likely to state that *I wanted to study somewhere else* was a large influence. The responses to the many items in Table B.1 can be summarised into a fewer number of scales each of which combines students' responses to several items. Apart from the practical advantage of focusing the analysis, such scales often have higher reliability and clearer meaning than individual items—they capture the common element across the items of which they are composed.

Table B.2 shows the result of a joint principal component and item analysis of the 64 items. Seven scales were identified and these included 38 items, most of which were among the items with greater influence on students' decisions. One important item, however, did not fit within any of the scales—*My study clashed with my family commitments.* This is referred to in later discussion, somewhat loosely, as an eighth scale, even though it is a single item.

Table B.2 shows correlation coefficients for each scale and for each item. The correlation coefficients for the scales are Cronbach's alpha coefficients, a measure of the overall reliability of the scale. The values are mainly around 0.8 or higher which is adequate for survey research. The correlation coefficients next to each item are between the item and the scale excluding that item. Items with higher coefficients are more important within the scale.

Table B.2 also includes the mean value for the scale, which is simply the mean of the items included in the scale. The scales are presented in descending size of their mean. There is a sense in which the mean of the scale reflects the relative importance of the scale in terms of its influence on withdrawing from the course—that *Change of direction* with a mean of 32.7 was an important reason for more students than *Social isolation* with a mean of 12.2.

Table B.1
Reasons for discontinuing 2004 study: Students who did not re-enrol at the same university in 2005 (%)

Influence . . .	None	A little	Mod-erate	Large	Total	Mean	n	Miss-ing
How much was your decision to discontinue the study you were doing in first semester 2004 influenced by each of the reasons below?								
I found something I'd like to do better	48.7	10.1	15.4	25.8	100.0	39.3	1,803	5.9
I changed my career goals	53.6	12.2	10.6	23.5	100.0	34.6	1,801	6.1
I found a better path to my career goals	56.4	8.6	12.9	22.0	100.0	33.4	1,807	5.7
I wanted to study somewhere else	59.8	9.3	9.5	21.4	100.0	30.8	1,831	4.5
The course or program wasn't what I expected	52.8	17.3	14.7	15.2	100.0	30.6	1,828	4.6
Difficult to balance study & work commitments	58.0	14.1	10.4	17.5	100.0	29.0	1,818	5.2
The subjects weren't as interesting as I expected	54.0	17.7	15.3	13.0	100.0	28.9	1,825	4.8
I needed a break from study	60.4	11.2	10.6	17.8	100.0	28.5	1,827	4.7
Course would not help me achieve my career goals	59.2	12.8	11.7	16.4	100.0	28.3	1,825	4.8
I didn't like the way the course was taught	55.4	17.8	13.6	13.2	100.0	28.0	1,824	4.9
I was offered a place in a course I preferred	71.0	2.9	5.1	21.0	100.0	25.3	1,800	6.1
I felt stressed and anxious about my study	62.2	14.4	11.9	11.5	100.0	24.1	1,813	5.4
I couldn't study the subjects I wanted	65.8	13.0	8.3	12.9	100.0	22.7	1,826	4.7
I didn't get enough help from academic staff	62.0	17.4	11.2	9.4	100.0	22.6	1,820	5.1
I had trouble finding out things I needed to know	62.1	17.4	12.6	7.8	100.0	21.9	1,827	4.7
I didn't feel adequately prepared	63.2	18.3	10.3	8.2	100.0	21.0	1,834	4.3
I felt that I couldn't cope with the work as well as the other students could	65.8	14.7	12.0	7.4	100.0	20.2	1,832	4.4
The course was too theoretical	67.1	14.4	9.4	9.1	100.0	20.1	1,824	4.9
There was too much work	64.6	17.1	12.4	5.9	100.0	19.7	1,830	4.5
The work was harder than I expected	65.1	17.2	11.4	6.2	100.0	19.4	1,826	4.7
I always intended to move to another university	74.4	6.8	6.6	12.2	100.0	18.8	1,822	5.0
The course timetable didn't suit me	68.4	15.5	8.9	7.2	100.0	18.2	1,826	4.7
I had trouble getting the study resources I needed	68.5	18.3	8.2	5.0	100.0	16.4	1,811	5.5
I felt that I didn't fit in at university	71.1	14.9	7.4	6.7	100.0	16.4	1,834	4.3
I needed help and didn't know who to ask	72.8	13.1	7.7	6.5	100.0	15.9	1,813	5.4
I felt lonely, isolated or unwelcome	74.3	11.9	7.4	6.4	100.0	15.2	1,832	4.4
I couldn't get government income support	78.3	6.4	6.5	8.7	100.0	15.2	1,810	5.6
I couldn't afford the study materials I needed	74.1	13.0	7.9	5.1	100.0	14.6	1,813	5.4
My study clashed with my family commitments	80.5	7.0	5.2	7.3	100.0	13.0	1,813	5.4
I couldn't afford the fees I had to pay up-front	78.6	9.6	6.2	5.6	100.0	12.9	1,813	5.4
My study clashed with my full-time work	84.3	3.0	3.9	8.8	100.0	12.3	1,802	6.0
My family could not afford to support me	80.8	7.4	5.8	6.0	100.0	12.3	1,812	5.5

Cont /-

Table B.1 - ***continued***
Reasons for discontinuing 2004 study: Students who did not re-enrol at the same university in 2005 (%)

Influence . . .	None	A little	Mod-erate	Large	Total	Mean	n	Miss-ing
How much was your decision to discontinue the study you were doing in first semester 2004 influenced by each of the reasons below?								
The assessment methods were too inflexible	76.7	13.9	5.3	4.1	100.0	12.2	1,823	4.9
I felt different from the other students	78.9	10.3	6.6	4.2	100.0	11.9	1,804	5.9
I couldn't afford the travel costs to university	79.4	11.0	5.7	3.9	100.0	11.3	1,810	5.6
I was offered a good job	84.8	4.3	4.0	6.8	100.0	10.9	1,802	6.0
The course didn't challenge me enough	80.6	10.0	5.4	4.0	100.0	10.9	1,823	4.9
I had trouble making friends	81.7	9.1	5.2	4.0	100.0	10.5	1,807	5.7
My study clashed with my part-time work	82.9	7.4	5.1	4.6	100.0	10.4	1,802	6.0
My employer offered me more hours of work	83.3	7.4	5.0	4.2	100.0	10.0	1,802	6.0
The university was not prestigious enough	84.5	6.7	4.5	4.2	100.0	9.4	1,826	4.7
Illness - my own	87.1	3.5	3.5	5.9	100.0	9.4	1,811	5.5
I felt I was not treated fairly at university	87.1	6.4	2.8	3.7	100.0	7.7	1,821	5.0
I couldn't afford accommodation near the uni	89.0	3.5	3.3	4.1	100.0	7.5	1,810	5.6
I couldn't get/use study leave from my employer	88.4	4.5	3.6	3.5	100.0	7.4	1,809	5.6
My friends were at another university	87.4	7.0	3.7	2.0	100.0	6.7	1,807	5.7
I felt unsafe or insecure in the uni environment	88.5	6.6	3.0	1.9	100.0	6.1	1,803	5.9
I couldn't get access to computers at university	88.3	7.3	2.7	1.6	100.0	5.8	1,804	5.9
Illness or death-family member or friend	91.8	2.6	2.1	3.5	100.0	5.8	1,804	5.9
No-one in my family has studied at university	90.5	4.5	2.6	2.4	100.0	5.6	1,812	5.5
I did not have a computer at home	91.7	3.4	2.8	2.1	100.0	5.1	1,810	5.6
My friends are not studying at university	90.3	5.7	2.4	1.6	100.0	5.1	1,807	5.7
My computer couldn't support the course software	90.5	5.5	2.4	1.6	100.0	5.0	1,803	5.9
The course was too practical	89.7	7.0	2.4	0.9	100.0	4.8	1,819	5.1
My family wanted me to do something else	92.9	3.9	1.9	1.2	100.0	3.8	1,807	5.7
I couldn't find suitable accommodation	94.3	2.4	1.8	1.5	100.0	3.4	1,808	5.7
I moved with my family to another location	96.3	0.4	0.7	2.7	100.0	3.2	1,812	5.5
Family members study/studied at a different uni	95.1	2.7	1.4	0.7	100.0	2.6	1,809	5.6
The childcare I needed wasn't available	96.4	1.4	1.0	1.2	100.0	2.3	1,809	5.6
My job was transferred to a new location	97.1	0.8	0.7	1.4	100.0	2.1	1,803	5.9
I had difficulties with physical access	97.1	1.1	1.0	0.8	100.0	1.8	1,809	5.6
I couldn't afford the childcare I needed	97.2	1.0	0.9	0.9	100.0	1.8	1,808	5.7
My friends wanted me to do something else	96.0	2.9	0.9	0.2	100.0	1.7	1,806	5.8
I couldn't get the disability support I needed	97.8	0.9	0.7	0.6	100.0	1.3	1,804	5.9

Notes The wording of some items has been abbreviated - refer to Question 36 in the questionnaire in Appendix E for the full wording. The mean is the weighted sum of (None)*0 + (A little) * 0.33 + (Moderate) * 0.67 + (Large) * 1.0. Items are presented in descending order of the mean. Based on the responses of 1,917 students who did not re-enrol at the same university in first semester 2005.

Table B.2
Scales of reasons for discontinuing 2004 study: Students who did not re-enrol at the same university in 2005 (%)

Scales/items	Mean	Correlation
Scale 1 - Change of direction	***32.7***	***0.82***
15 The subjects weren't as interesting as I expected	29.3	0.50
18 The course wasn't what I expected	30.9	0.51
23 I discovered that the course would not help me achieve my career goals	28.3	0.58
40 I found something I'd like to do better	39.7	0.66
41 I found a better path to my career goals	33.3	0.62
42 I changed my career goals	34.9	0.62
Scale 2 - Academic difficulties	***21.4***	***0.87***
1 I didn't feel adequately prepared	21.6	0.69
2 I felt that I couldn't cope with the work as well as the other students could	20.8	0.78
3 The work was harder than I expected	19.8	0.74
4 There was too much work	20.5	0.73
59 I felt stressed and anxious about my study	24.3	0.55
Scale 3- University choice	***21.1***	***0.79***
7 The university was not prestigious enough	30.8	0.47
8 I wanted to study somewhere else	30.8	0.72
9 I always intended to move to another university	18.8	0.70
43 I was offered a place in a course I preferred	25.3	0.56
Scale 4- Dissatisfaction with courses	***18.8***	***0.84***
10 I felt I was not treated fairly at university	7.9	0.45
14 I didn't like the way the course was taught	28.4	0.63
17 The assessment methods were too inflexible	12.8	0.61
19 The course was too theoretical	20.4	0.50
21 I had trouble finding out things I needed to know	22.3	0.70
22 I didn't get enough help from academic staff	22.8	0.73
24 I had trouble getting the study resources I needed	16.8	0.53
Scale 5 - Conflict with employment	***16.9***	***0.79***
32 I couldn't get/use study leave from my employer	7.4	0.55
34 Difficult to balance study and work commitments	29.4	0.68
36 My employer offered me more hours of work	10.5	0.49
37 My study clashed with my part-time work	10.6	---
38 My study clashed with my full-time work	12.2	0.75
Scale 6 - Financial difficulties	***12.5***	***0.84***
51 I couldn't afford the study materials I needed	14.9	0.69
52 I couldn't afford the travel costs to university	11.4	0.66
53 I couldn't afford the fees I had to pay up-front	13.2	0.65
54 I couldn't get government income support	15.2	0.52
55 I couldn't afford accommodation near the university	7.7	0.58
56 My family could not afford to support me	12.5	0.63
Scale 7 - Social isolation	***12.2***	***0.87***
6 I felt that I didn't fit in at university	16.7	0.67
11 I felt lonely, isolated or unwelcome	15.4	0.74
46 I had trouble making friends	10.5	0.73
47 I felt different from the other students	12.1	0.72
49 I felt unsafe or insecure in the university environment	6.2	0.61

Notes Correlations in bold are Cronbach's alpha for the scale. Other correlations are for the item with the scale excluding item. Based on the responses of 1,869 students who did not re-enrol at the same university in first semester 2005 and who gave at least one reason. Values have been imputed for missing responses and hence mean values may differ slightly from those shown in Table 3.1. Items 37 & 38 are combined.

Table B.3
Scales of reasons for discontinuing 2004 study: Students who did not re-enrol at the same university in 2005 (%)

Scales/items	S1	S2	S3	S4	S5	S6	S7	I60
Scale 1 - Change of direction	1.00	0.14	0.28	0.39	-0.09	0.01	0.07	0.22
Scale 2- Academic difficulties	**	1.00	-0.19	0.48	0.24	0.30	0.39	0.16
Scale 3- University choice	**	**	1.00	-0.04	-0.23	-0.10	0.07	-0.20
Scale 4 - Dissatisfaction with course	**	**	o	1.00	0.20	0.37	0.45	0.05
Scale 5 - Conflict with employment	**	**	**	**	1.00	0.35	0.07	0.32
Scale 6 - Financial difficulties	**	**	**	**	**	1.00	0.21	0.15
Scale 7 - Social isolation	**	**	**	**	**	**	1.00	0.00
Item 60 - Family commitments	**	**	**	*	**	**	o	1.00

Notes Based on the responses of 1,869 students who did not re-enrol at the same university in first semester 2005 and who gave at least one reason. Values have been imputed for missing responses. Correlations are shown in the upper right triangle. In the lower left triangle, ** indicates statistically significant at 0.01, * indicates statistically significant at 0.05 and o indicates not statistically significant at 0.05.

The means of items and hence of the scales partly reflect the wording of the items. Extreme items, such as *I felt unsafe or insecure in the university environment* will not be large influences on the decisions of many students and hence will have low means to some extent regardless of the relative importance of social isolation as a reason for withdrawing. Nevertheless the relative sizes of the means of the scales are indicative of the relative importance of the scales as reasons students withdrew from their courses.

A student can have more than one reason for withdrawing from their course. For instance, a student could have both academic difficulties and feel socially isolated. Table B.3 shows the correlations among the scales. Most have slight to modest positive relationships. *University choice* is an exception because it has several mainly small negative relations with other scales. There are also several larger relationships:

- Students dissatisfied with their course were also likely to have academic difficulties (0.48);
- Students dissatisfied with their course were also likely to be socially isolated (0.45);
- Students having academic difficulties were also likely to be socially isolated (0.39);
- Students changing direction were also likely to be dissatisfied with their course (0.39);
- Students having financial difficulties were also likely to be dissatisfied with their course (0.37); and
- Students experiencing a conflict between study and employment were also likely to have financial difficulties (0.35).

The main nexus is between academic difficulties; students' dissatisfaction with their course and social isolation at university.

Appendix C Socioeconomic Status

Several measures were combined to form an index of socioeconomic status using principal component analysis:

- Parents' occupation when the respondent was aged 15.
- Parents' formal educational qualifications.
- Whether the respondent was the first person from their immediate family to attend university.
- Deciles of postcode of home address at age 15 coded to ATO income data.
- Deciles of postcode of home address at age 15 coded to ABS SEIFA Index of Economic Resources.

Estimates were derived for any respondent who had at least one valid response for any of these measures. Missing values were imputed. The variables were coded as:

Parents' occupation Respondents were asked 'what work' their mother and father (and guardian) did when the respondent was 15 years old (Q63). If information on the father was missing and present for a guardian, father was coded to guardian. Otherwise if information on mother was missing, mother was coded to guardian. Fifteen mutually exclusive responses were available and values for mother and father were entered as 14 dummy variables separately for mothers and fathers.

Parents' education Respondents were asked to indicate their mothers' and fathers' formal educational qualifications (Q56). Eleven non-mutually exclusive responses were available and were entered as 11 dummy variables for each of the mother and father.

First in the family Respondents were asked if they were the first person in their immediate family (parents, guardians, brothers, sisters) to attend university. The response was entered as a single dummy variable (yes=1, no=2).

SEIFA The Australian Bureau of Statistics (ABS) provides Socio-Economic Indicators for Areas (SEIFA). *The Index of Economic Resources* calculated from 2001 Census data incorporates measures relating to the income, expenditure and assets of families, such as family income, rent paid, mortgage repayments, and dwelling size. Students were allocated to population-normed deciles on this index based on their postcode at age 15. The deciles were entered as nine dummy variables. The measure reflects the status of the postcode in 2001, which may differ from its status when the respondent was 15 years-old.

Australian Taxation Office postcode data The Australian Taxation Office (ATO) publishes annual data on mean taxable income in a postcode. Respondents were allocated to population-normed deciles based on their postcode at age 15. The deciles were entered as nine dummy variables. The measure reflects the status of the postcode in 2003, which may differ from its status when the respondent was 15 years-old.

Table C.1 shows the factor coefficients for the model. They are broadly consistent with expectations. Scores from the corresponding factor scale were divided into quintiles.

Table C.1
Factor coefficients for socioeconomic status index: All students

SEIFA Economic Resources Index		**ATO mean taxable income**	
Popn decile 1 (Lowest) omitted	---	Popn decile 1 (Lowest) omitted	---
Popn decile2	0.17	Popn decile2	0.17
Popn decile3	0.13	Popn decile3	0.17
Popn decile4	0.14	Popn decile4	0.13
Popn decile5	0.12	Popn decile5	0.10
Popn decile6	0.10	Popn decile6	0.08
Popn decile7	0.01	Popn decile7	-0.01
Popn decile8	-0.04	Popn decile8	-0.11
Popn decile9	-0.21	Popn decile9	-0.16
Popn decile10 (Highest)	-0.41	Popn decile10 (Highest)	-0.43
Father's formal educ. attainments		**Mother's formal educ. attainments**	
None	0.14	None	0.14
Some/completed primary school	0.16	Some/completed primary school	0.14
Incomplete secondary school	0.54	Incomplete secondary school	0.55
Highest level of secondary school	-0.25	Highest level of secondary school	-0.24
No post school qualification	0.21	No post school qualification	0.23
A university degree or higher	-0.71	A university degree or higher	-0.63
A diploma or its equivalent	-0.12	A diploma or its equivalent	-0.15
A trade or apprenticeship qualification	0.33	A trade or apprenticeship qualification	0.15
A vocational certificate	0.05	A vocational certificate	0.09
Another qualification	0.01	Another qualification	0.01
Don't know	0.12	Don't know	0.10
First in the family to attend univ.	-0.60		
Father's occupation		**Mother's occupation**	
Manager or administrator	-0.10	Manager or administrator	-0.03
Professional	-0.60	Professional	-0.55
Technician or associate professional	-0.01	Technician or associate professional	-0.01
Tradesperson	0.39	Tradesperson	0.07
Advanced clerical or service worker	0.03	Advanced clerical or service worker	0.09
Intermediate clerical or sales	0.05	Intermediate clerical or sales	0.12
Intermediate production or transport	0.17	Intermediate production or transport	0.07
Elementary clerical sales or service	0.04	Elementary clerical sales or service	0.17
Labourer or related worker	0.24	Labourer or related worker	0.24
Full-time home duties	-0.01	Full-time home duties	0.14
Unemployed	0.06	Unemployed	0.10
Retired	-0.01	Retired	-0.01
Not working (excl unemp. or retired)	0.07	Not working (excl unemp. or retired)	0.02
Deceased	0.03	Deceased	0.04
Don't know/Not applicable (omitted)	---	Don't know/Not applicable (omitted)	---

Notes Negative scores indicate higher socioeconomic status. *First in the family* is coded yes (1), no (2). The eigenvalue of the corresponding factor scale was 4.05

Appendix D Glossary of Variables

The meaning of most of the variables shown in the tables can be read directly from the Questionnaire (Appendix E). This glossary describes those variables where the meaning may not be obvious from the questionnaire. The enrolment outcomes are described in Chapter 7 and the coding of reasons for discontinuing study in Appendix B.

Student type See Chapter 4.

Age Age at 1 July 2004—the year of enrolment.

Socioeconomic background See Appendix C.

Country of birth At least one parent born in Australia includes students who may have been born overseas.

Remoteness The Accessibility/Remoteness Index of Australia (ARIA) is used loosely as a measure of rurality. More precisely, ARIA measures remoteness and access to goods and services of any location in Australia. It uses road distance as a proxy for remoteness and the population size of a town or city ('a service centre') as a proxy for the availability of services. ARIA was merged with the postcodes of the home of respondents *when they were 15 years old.* Hence it is a measure of their location of origin, not their present location. For mature age students in particular, there may be a gap between their usual present location and their location of origin. Although an index, ARIA is mainly used in the form of its five classifications of postcodes: Highly accessible; Accessible; Moderately accessible; Remote; and Very remote. The last three are combined. Persons living overseas at age 15 are classified separately.

Moved to attend university The category *Moved from overseas* should not be interpreted as corresponding to recent migration. It appears to include people returning to Australia after overseas travel.

Highest educational attainment The variable combines responses to Q56 and Q15 and Q14. The latter two questions were used to define 'Degree or higher'. Other categories were defined from responses to Q56. The high level of responses for *A university degree or higher* suggested that some respondents misunderstood the question and endorsed this response because they had enrolled in a degree.

Main activity in 2003 The variable is derived from Q13 in the following order: *School* is school or taking a year off after Year 12; In full-time paid work; Studying at TAFE or Studying elsewhere (ie, not school, TAFE or university); Studying at university; Caring for a family member or friend; *Other* is not previously classified. The order of classification is fundamental to the allocation of respondents. Some students were both at school and studying at university, TAFE or elsewhere. School was taken as the defining characteristic. University and school usually corresponded to some form of university outreach or accelerated learning program while TAFE and elsewhere included VET-in-Schools programs.

Course enrolment influenced by Based on Q12. Each category was entered separately so that percentages could sum to more than 100. Corresponds to a *Moderate* or *Large* influence. Responses to *Work experience in a field of interest to you* do not reflect the

influence of school-based work experience programs. They include a majority of respondents who are referring to their full- or part-time work. *Your Year 12 results* was frequently endorsed by students whose wanted to enrol in another course but whose Year 12 results did not allow them to enrol.

Number of influences The number of *Moderate* or *Large* influence responses in Q12. Since the majority of the influences listed in Q12 apply to younger people, this variable tends to correlate with age.

Reasons for enrolling Based on responses to Q11. See Chapter 5. A score on any scale greater than or equal to 62.5 scored a one. The four reasons are not mutually exclusive and were entered separately. Only the *I enrolled because (eg) I like learning* category is shown in the tables. Values for the corresponding category *I did not enrol because (eg) I like learning* (scored 0 to 62.5 on the scale) could have been shown in the tables but are not.

Main carer for someone Based on Q61. The *main carer* variable is coded differently in different contexts. In most percentage tables it is a set of mutually exclusive categories coded in order: Under school age; primary school age; A sick or vulnerable friend or relative, a person with a disability or other; secondary school age or older children; or none. The order of coding is important. In the multivariate tables, the responses for the individual codes are entered as separate dummy variables with *No* the omitted category. The related Q60 *Do you have any financially dependent children living with you?* was answered by some respondents in regard to their (eg) siblings and does not necessarily reflect parent-child relationships.

Mainly living with Based on Q28. The variable was constructed as a set of mutually exclusive categories from the possible non-mutually exclusive responses. The coding was in the following order: Partner, no children; Partner and children; Children, no partner; College or other residence; Parents; Any other response. The frequency of responses to *College or other residence* suggests that some students interpreted this response as *any other residence* rather than as the intended *other university residence*. Nevertheless, in the main the pattern of responses is consistent with expectations of students living in a university college.

Travel time to university Based on Q29. The response *I did not travel to university* is mainly given by student studying off-campus, although some students *living at university colleges* also gave this response.

Main sources of financial support Based on Q22 only. The categories are not mutually exclusive. Government and non-government scholarships are combined—it was not always clear that students could distinguish government and university scholarships or sometimes even other private trust arrangements.

Income support A combination of responses to Youth Allowance and Austudy.

Type of university *Group of 8* includes The University of Melbourne, The University of Sydney, and The University of Western Australia; *the Australian Technology Network* includes Curtin University of Technology, the University of South Australia and Swinburne University of Technology (although Swinburne in not a member of the ATN, it is benchmarked against that group of universities); *Innovative research*

universities includes Griffith University and Macquarie University; *Regional universities* include Charles Darwin University, Deakin University, James Cook University and the University of Southern Queensland; and *New generation universities* include the University of Canberra and the University of Western Sydney.

Field of study Q7 asked for two main fields of study (to cover double degree students). The response to the first degree was used and if missing replaced with the response for the second degree. Students were not necessarily always clear about the concept of *double degree* and some responded twice while (apparently) enrolled in a second degree. The categories follow the new ABS classification of field of study (now used by DEST). Piloting suggested that these categories were not always intuitively obvious to students. The order of categories and examples provided endeavoured to minimise any misunderstanding. A substantial number of students wrote their field in the space provided for *Other* and (as with all questions) these responses were back coded to the available categories. *Education* (excluding Teacher education) was a residual category.

First semester results Three features complicate the interpretation of responses to this question. First, there are three possible outcomes for each unit—pass, fail and withdrawal (not assessed). Second, enrolment in more than one unit meant that there were many possible combinations. Third, failure and withdraw cannot necessarily be interpreted as an inability to cope academically. The responses to Q30, which are not mutually exclusive, were coded in the following order: *Passed all subjects* if responded to *I passed all my subjects or units* and no other response; *No passes, some or all fails* if responded to *I failed all subjects or units; Passed some, failed none* if responded to *I passed all my subjects or units* or *I passed some subjects or units* and did not mark either response mentioning failures; *Some passes, some fails* if responded to either response mentioning passing and either response mentioning failure; *No passes, some or all fails* (again) if endorsed either response mentioning failure and neither mentioning passes; *Withdraws, no assessment* if at least one response and not coded elsewhere. Semester one results were used because many students had left before second semester.

Appendix E Questionnaire