



Socioeconomic Background and Higher Education Participation:

An analysis of school students' aspirations and expectations

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The research that provided the data for this report was carried out in 1999 for the former Higher Education Council (HEC) by the Centre for the Study of Higher Education (CSHE) and the Youth Research Centre (YRC) of the University of Melbourne.

The Higher Education Council had responsibility at the time for advising government on the impact of higher education funding decisions on the access, participation, and retention of designated equity groups in higher education. The research conducted for the HEC focused principally on senior school students living in rural or isolated areas and their attitudes towards going on to university. The report from this study, *Rural and Isolated School Students and their Higher Education Choices*, included a number of policy recommendations for reducing the inhibiting factors for young people living in rural or isolated Australia.

The survey of Year 10–12 students that provided the major data for the HEC study also gathered information on respondents' socioeconomic backgrounds, providing the basis for the analysis presented in this report. I am grateful to Malcolm Anderson for undertaking the new statistical analyses summarised in the present report and to Carole Hooper for her assistance in preparing the report.

The original study was directed by Richard James (CSHE) and Johanna Wyn (YRC). The project team comprised Gabrielle Baldwin (CSHE), Gary Hepworth (Curtin University), Craig McInnis (CSHE) and Andrew Stephanou (CSHE). Gabrielle Baldwin developed the 'When I leave school ...' questionnaire used to survey student attitudes.

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Executive summary

Differential higher education participation rates between community groups are found in most developed nations, despite the overall expansion of higher education towards mass systems. Imbalances in higher education participation remain a problem in Australia. This report is concerned with one under-represented group, people from lower socioeconomic backgrounds.

On crude figures, Australians from lower socioeconomic backgrounds have roughly half the likelihood of participating in higher education as Australians from medium and higher socioeconomic backgrounds. This degree of inequity has remained relatively stable for over a decade, despite extensive equity initiatives across the system as a whole.

To shed further light on the problem, this report investigates the attitudes of senior school students towards higher education. It is based on data from a previous survey of over 7000 Year 10–12 students in three states, Western Australia, New South Wales, and Victoria, conducted for the former Higher Education Council. The project surveyed students across all socioeconomic strata and across urban, rural and isolated locations, allowing comparison of the differing aspirations and expectations of young people regarding education and the possibility of higher education.

The study reveals appreciable social stratification in the opinions of senior secondary students about the relevance and attainability of a university education. Though the overall attitudes of young people towards secondary school are similar in many ways, their aspirations and intentions regarding higher education are strongly influenced by socioeconomic background, gender, and geographical location. Socioeconomic background is the major factor in the variation in student perspectives on the value and attainability of higher education.

Overall, young people's interest in tertiary education is strong. Around 90 per cent of the sample reported that, all things being equal and imagining no constraints, they would prefer to undertake tertiary education of some kind after school. Close to two-thirds of students in the sample expressed a preference to go on to university, while one-quarter reported a preference for enrolling in vocational education and training. When students were asked what they believed they actually would be doing once they completed school, the proportion expecting to go to university fell away. Higher socioeconomic background students demonstrated stronger confidence in securing a path to university study (nearly 70 per cent of them thought they would do so) than medium or lower socioeconomic background students (50 per cent and

42 per cent respectively). Sixteen per cent of students from lower socioeconomic backgrounds reported they hoped to go to university but believed they would not be able to do so.

Main attitudinal differences between socioeconomic groups

Students from lower socioeconomic backgrounds are significantly less likely than other students to believe that a university course would offer them the chance of an interesting and rewarding career. Lower socioeconomic background students have:

- a stronger belief that a TAFE course would be more useful to them than a university course (30 per cent believed that it would be, compared with only 14 per cent of higher socioeconomic background students);
- a weaker interest in the subjects they could study at university (62 per cent, compared with 78 per cent);
- less confidence that their parents want them to do a university course (44 per cent, compared with 68 per cent); and
- a stronger interest in earning an income as soon as they leave school (35 per cent, compared with 20 per cent).

In addition, students from lower socioeconomic backgrounds perceive educational achievement barriers which may impede their access to higher education. These students are:

- less confident that their academic results will be good enough for entry to courses that might interest them (38 per cent, compared with 25 per cent); and
- more likely to believe they won't have the subjects required for courses that might interest them (24 per cent, compared with 15 per cent).

The perceived cost of higher education appears to be a major deterrent for students of lower socioeconomic background. They are more likely than other students to believe the cost of university fees may stop them attending university (39 per cent, compared with 23 per cent of higher socioeconomic background students). Forty-one per cent of lower socioeconomic background students believed their families probably could not afford the costs of supporting them at university. Well over one-third of lower socioeconomic background students indicated they would have to support themselves financially if they went to university.

The deterrent effect of cost is considerably heightened for students living in rural areas. Overall, higher education is seen as less personally relevant by rural

or isolated students, particularly those from lower or medium socioeconomic backgrounds. The attitudes of rural and isolated students are primarily associated with socioeconomic factors rather than geographical location.

The differences in the views of males and females are substantial. Compared with the females in the sample, the males exhibit less commitment towards school and are less likely to see higher education as being relevant and attainable. Females tend to experience a far more supportive interpersonal environment. They are more likely than males to believe that most of their friends will go to university and also more likely to believe their teachers are encouraging them to aim for university. They have an especially positive outlook towards the social experience of university life. These differences are more pronounced for males from lower socioeconomic backgrounds.

Parental educational levels are perhaps the most reliable predictor of the educational aspirations of young people. The study examined the relationship between students' attitudes and parental education levels, parental occupations, and home postcode, using the Australian Bureau of Statistics Index of Education and Occupation, which is presently employed by the Commonwealth to calculate aggregate participation rates by socioeconomic status. Of these, parental education levels were the most closely associated with students' aspirations to attend university. Analyses based on the ABS Index showed the least significant variations in student attitudes and intentions, implying that aggregate assessment of participation rates using this locational measure may underestimate differential access rates.

Conclusions and implications

The relatively low higher education participation rates of people from lower socioeconomic backgrounds, and the apparent resistance of these participation rates to equity programmes, presents a major challenge for education policy. The findings of this study suggest some redirection of equity initiatives may be beneficial.

The research points to the educational disadvantage for young people from lower socioeconomic backgrounds created by the cumulative effect of the relative absence of encouraging factors and the presence of a stronger set of inhibiting factors. The predominant effects appear to be psychological or psycho-social factors associated with the perceived relevance of higher education. These are not factors that can be rapidly influenced through short-term policy measures. The study's findings suggest at least five areas in which further research might inform policy.

Measurement of individual socioeconomic status

The study suggests parental education levels might provide the best means for identifying less advantaged students and for monitoring overall change and development in the higher education sector overall.

Cost of higher education

For young people from lower socioeconomic backgrounds who reach the point of considering entering university, the anticipated expense may be a decisive factor. Little is known of how families who may be averse to debt perceive the benefits of the Higher Education Contribution Scheme. Research in this area would be valuable.

Early broadening of horizons

Since many of the factors underpinning differential access rates do not arise simply at the point of transition to university, further research is needed to understand the ways in which collaborative activities between universities and schools might serve to broaden the horizons of young people and assist in making higher education seem relevant and rewarding.

Curriculum

Further research may be needed to ascertain the extent to which curricula influence the decisions of students from lower socioeconomic backgrounds to enrol at universities and to continue their studies beyond first year. In particular, it may be useful to investigate the impact of the diversification of curricula to incorporate educational alternatives relevant to a wide range of personal interests, abilities and life stages. Further, the effects on the participation of students from lower socioeconomic backgrounds of curricula that accommodate part-time paid work may be worth examining.

Selection procedures

Finally, competitive entry based on school achievement is a major stumbling block for young people from lower socioeconomic backgrounds, both in their personal assessment of their possibilities and in their actual chances. A system-wide rethinking of selection procedures would be a bold and controversial step, but perhaps a vital ingredient in making progress on this difficult issue.

1 Introduction

1.1 The problem of higher education participation imbalances

One of the issues for the Australian higher education sector is the persistent inequity in access and participation between certain community groups. In 1990, *A Fair Chance for All* (DEET 1990) identified a number of population groups which were under-represented in higher education, including women (in non-traditional fields), people from non-English speaking backgrounds, Aboriginal and Torres Strait Islander people, and people with disabilities. Since then considerable progress has been made towards improving access for particular subgroups, if not yet to the point of equality.

Despite this progress, two particular imbalances have remained fairly consistent and particularly resistant to the various policies and programmes aimed at reducing them. These imbalances are those between rural and urban Australians, and those between Australians of lower socioeconomic backgrounds and those of medium and higher socioeconomic backgrounds.

Overall, more people from all sections of society commence higher education than did so ten years ago. However, the relative proportions of the university student population occupied by people from higher, medium, and lower socioeconomic backgrounds have remained remarkably stable.

The imbalances in these relative proportions are described in more detail in the Chapter to follow, but to summarise the problem in simple if crude terms: on a per capita basis, for every ten people from medium or higher socioeconomic backgrounds who go to university, only five people from lower socioeconomic backgrounds do so. On a similar per capita basis, for every ten people from urban locations who go to university, only six people from rural or isolated Australia do so (James, Wyn, Baldwin, Hepworth, McInnis & Stephanou 1999a).

Higher education is not yet equally attainable for all Australians, nor seen as equally relevant by all Australians. In regard to rural and isolated people, James et al. (1999a: ix) found that the imbalances in higher education participation in Australia reflect differences in family and community attitudes towards the relevance of education rather than the distances to campuses. In other words, the causal factors in lower participation rates are predominantly

socioeconomic in character rather than locational, a conclusion confirmed by the recent analyses of Stevenson, Evans, Maclachlan, Karmel and Blakers (2000).

James et al. (1999a) also found the effects of powerful social influences for rural students are apparent well before the final years of senior schooling or eligibility for university entry—as school completion rates are lower in rural areas, many rural students do not reach the point at which it is meaningful to speak of potential barriers to higher education. For rural students, higher education may be seen as less relevant to life and employment, and completing school and going on to university is not quite the norm that it might be in some urban regions. The purpose of the present report is to examine these issues from the perspective of students from lower socioeconomic backgrounds.

1.2 The reasons for concern

socioeconomic and regional participation imbalances can be found in most developed nations, despite the massification of higher education systems. In 1997, the OECD reported that socioeconomic concerns lie at the core of many of the issues of equity, access and participation in education and training in OECD countries (OECD 1997: 131). In the United Kingdom, evening higher education participation rates across the socioeconomic strata has emerged as a major policy issue.

In Australia, there are a number of reasons to be concerned with the current differential rates of access to higher education. First, there is the objective of social justice and the equal rights of all Australians to opportunities to enjoy the personal and economic benefits that education, particularly higher education, might confer. Second, it is increasingly recognised that Australians with low educational levels are vulnerable and at risk of being marginalised in a knowledge-based society in which labour markets require sophisticated skills and the capacity to access and interpret new knowledge (see, for example, Kirby 2000). Finally, at a national level it is now widely believed that the skilling of the Australian community is a major priority for ensuring the nation's overall economic standing in a competitive global marketplace.

Young people who are presently of school-age are preparing for life in which knowledge and the capacity to renew knowledge will be critical in their future lives. Students who complete their senior schooling in the year 2001 will have working careers that extend through to the year 2040 and beyond. While we cannot foresee the future nature of work with precision, we can anticipate that these young people will have working careers which are

complex and in a continual state of change. They will undergo a larger number of job and career changes than those experienced by preceding generations. With the possible exception of some service industries, work will require unprecedented levels of knowledge and skills. The majority of workers will 'add-value' through highly specific knowledge that will need regular renewal. These trends will place a premium on initial levels of educational attainment and for many people may require them to re-participate in formal education and training at certain stages in their lives.

The imperative for lifelong learning makes it important to understand students' expectations, the influences on them, and their decision-making process near the end of their school years, for these are likely to be central in shaping attitudes towards ongoing involvement in formal learning. The context of student decision-making as they complete compulsory schooling and senior secondary schooling has changed considerably and is influenced by new dynamics in the labour market. Students and their families face increasingly complex and sometimes difficult choices. There are sometimes significant cost-benefit decisions for families to do with the rising cost of pursuing post-secondary education. They also face a potentially bewildering array of tertiary options (James, Baldwin & McInnis, 1999b). In these circumstances it is particularly important to understand the conditions that lead to educational advantage and disadvantage if the current gaps in higher education participation between community subgroups are to be narrowed.

1.3 The present study

One way to analyse the problem of educational disadvantage is to look not only at the conditions associated with disadvantage but also at the conditions associated with educational advantage. The present study sheds light on the thinking of young Australians in senior secondary schooling, particularly with regard to their attitudes towards the relevance of higher education and their personal prospects and interest in going on to university. This is done through a comparative analysis of students' attitudes across socioeconomic subgroups. The value of the study is in the new information it reveals on the consistent patterns of attitudinal difference across social classes, and how these insights might inform future equity policies and initiatives.

The report is based on data collected in 1998 by the Centre for the Study of Higher Education and the Youth Research Centre of the University of Melbourne. The database comprises information on the attitudes and views towards life, school, and post-secondary education of over 7000 young Australians in Years 10, 11, and 12. These young people were surveyed as

part of a major study, *Rural and Isolated Students and their Higher Education Choices: A re-examination of educational advantage and disadvantage* (James et al. 1999a), conducted for the former Higher Education Council. Interviews were also conducted in selected rural and isolated schools.

This dataset is significant in three ways:

1. The student sample is large, drawn from three states (Western Australia, New South Wales, and Victoria), and carefully stratified to allow comparative analysis by location (it includes isolated, rural, and urban students), by socioeconomic background (it includes higher, medium, and lower SES students), by gender, and by various combinations of these three factors.
2. The study asked students about their post-school priorities and intentions in regard to work and a number of educational options.
3. The questionnaire design permits analysis of the dataset for ‘encouraging’ effects that create an environment of educational advantage, as well as inhibiting effects and barriers.

The present report examines students’ attitudes and intentions regarding higher education according to their socioeconomic background, taking into account geographical location, gender and other possible influences on decision-making. It begins with a brief summary of recent trends in education participation in Australia, looking particularly at the higher education participation of people from lower socioeconomic backgrounds (Chapter 2). Following a description of the study’s method (Chapter 3), the report presents data on the student sample’s attitudes towards school (Chapter 4), higher education (Chapters 5 and 6), and the personal possibility of going to university (Chapter 7). Gender differences are examined in Chapter 9, before a summary of the major encouraging and inhibiting factors according to socioeconomic group is presented (Chapter 9). The implications for policies and programme are discussed in Chapter 10.

2 Patterns of education participation in Australia

2.1 Recent national participation trends

One of the major social changes in Australia during the past 10–15 years is the significant improvement in participation rates in education. The school participation rate for 17 year olds (that is, the proportion of all 17 year olds who are at school) rose from 38 per cent in 1983 to 60 per cent in 1993, and has since hovered around this figure. In 1997, 79.4 per cent of 15–19 year olds were participating in education of some kind. The participation rate for 15–19 year olds in higher education increased from 6.5 per cent in 1985 to 10.7 per cent in 1997, and for 20–24 year olds rose from 9.1 per cent to 15.0 per cent.

It is now estimated that 90 per cent of each age cohort can be expected to enter tertiary education at some stage, with roughly equal numbers participating in higher education and vocational education and training (and with many people undertaking various combinations of both) (Aungles, Karmel & Wu 2000). The lifetime probability of entering higher education of the 1995 age cohort was 45 per cent, placing Australia among the top ranking OECD countries in terms of access to higher education. Of the 45 per cent of each age cohort anticipated to enter higher education, two-thirds are likely to do so immediately after school and the remaining one-third will do so as mature-age students (Aungles, Karmel & Wu 2000).

These participation figures offer an insight into the advances made in opening up opportunities for formal education for all Australians, in particular post-compulsory education. Yet while Australia is on the brink of achieving universal tertiary education, there are areas for concern. There is mounting evidence of entrenched social inequities in Australia's education systems (Teese 2000). School retention rates, which climbed steadily during the 1980s and early 1990s, have plateaued and in some states are in decline (Lamb, Dwyer & Wyn 2000, viii). Among the young people not completing school, people from lower socioeconomic backgrounds, rural areas, government schools, and males are over-represented (Lamb, Dwyer & Wyn 2000, viii).

Of particular concern is the considerable evidence of a growing gender disparity in educational participation and achievement. Lamb, Dwyer and Wyn (2000) report from the *Longitudinal Surveys of Australian Youth* dataset that

males made up 56 per cent of non-completers in the early 1980s, but by the mid-1990s this proportion had increased to 64 per cent. The percentage of male non-completers who were from lower socioeconomic backgrounds also increased from 35 to 44 per cent between the early 1980s and the mid-1990s. Not only are males less likely to complete school than females, they are also considerably less likely to enter higher education. Aungles, Karmel and Wu (2000) estimate that the lifetime probability of males entering higher education is 38.1 per cent, compared with 52.5 per cent for females.

2.2 People of lower socioeconomic background in higher education

In higher education there are persistent participation inequalities. Despite the steady expansion in the number of people entering higher education, certain imbalances in the student mix overall have altered very little. As Table 2.1 shows, the participation share for people of lower socioeconomic backgrounds has remained remarkably stable during the past decade. In 1992, 14.6 per cent of domestic students in Australian universities were identified as people from lower socioeconomic backgrounds. Throughout the 1990s the participation share for lower SES people hovered around this figure, ending the decade at 14.7 per cent. This participation share is well below the defined population reference point of 25 per cent.

Table 2.1 Students of lower socioeconomic background in Australian higher education as a share of domestic students, 1992–1999

Year	Number of lower SES students	Lower SES students as percentage of all domestic students
1992	76 813	14.6
1993	77 611	14.4
1994	80 359	14.4
1995	83 399	14.5
1996	86 932	14.5
1997	90 155	14.6
1998	91 557	14.7
1999	92 779	14.7

(Population reference value for people of lower SES: 25 per cent)

Stevenson, Maclachlan and Karmel (1999) have shown that participation imbalances in vocational education and training are less sizeable than those for higher education participation, but significant in magnitude nonetheless. To some extent the lower higher education rates of people from lower socioeconomic backgrounds are compensated for by greater levels of participation in vocational education and training. However, the higher rates of VET participation do not entirely offset the lower higher education participation, leading to an overall under-representation in tertiary education of people from lower socioeconomic backgrounds.

Previous studies have indicated the underlying importance of psychological factors in creating socioeconomic participation imbalances. Most recently, Stevenson, Evans, Maclachlan, Karmel and Blakers (2000) examined variations in regional access rates, finding that the Australian Bureau of Statistics Index of Education and Occupation (ABS 1990b) was more closely associated with patterns in urban regional higher education participation than the Index of Economic Resources, lending support to the conclusion that family educational levels are stronger influences on the likelihood of higher education participation than family financial circumstances.

2.3 Institutional variations

Patterns of access to universities and courses are also significant dimensions of equity consideration. Student participation across universities and across fields of study is significantly socially stratified. People from lower socioeconomic backgrounds are far from successful in applying for, and gaining access to, many of the nation's most prestigious traditional universities.

As Table 2.2 shows, in 1999 the research-intensive universities on average fell well below the national mean for participation share of people from lower socioeconomic backgrounds. The student communities of these universities are poorly representative of the national population.

Victoria University (24.4 per cent of students from lower socioeconomic backgrounds as a percentage of domestic students), Griffith University (23.1 per cent) and the University of South Australia (22.7 per cent) have been the most effective institutions in enrolling students from lower socioeconomic backgrounds in recent years.

Table 2.2 Students of lower socioeconomic background as a share of domestic students, research-intensive universities, 1999

University	Lower SES students as per cent of all domestic students
University of Adelaide	15.8
University of Melbourne	7.3
Monash University	7.6
University of Queensland	18.1
University of Western Australia	12.6
University of New South Wales	5.5
University of Sydney	6.3
Australian National University	3.9
Mean, research-intensive universities	9.6
National mean	14.7
Population reference value	25.0

The socioeconomic differences in the student populations of Australian universities partially reflect the geographical locations of individual institutions. They also indicate that students from lower socioeconomic backgrounds may not set their sights for the highly selective institutions, believing, perhaps rightly, that they are out of their reach. Even if they do aim for these universities, they may have difficulty doing well enough academically to be competitive for entry to highly selective professional and business courses. Since the more highly selective courses and institutions confer particular benefits and opportunities, the social stratification between universities in Australia is a significant equity consideration; one which tends to be overlooked if aggregate participation figures alone are examined.

3 The study's database and the measurement of socioeconomic background

The main data for this report were collected by surveying a targeted sample of urban/rural/isolated and lower/medium/higher socioeconomic background Year 10–12 students in three states: Victoria, New South Wales, and Western Australia. In total, 7023 responses were received. The survey asked this cross-section of young Australians about their personal objectives and intentions, particularly in regard to post-secondary education. The study was deliberately focused on senior school students at or near the point of school completion, including Year 10 students whose post-school aspirations and intentions are expected to be taking final shape.

3.1 Conceptual framework

The conceptual framework developed for the study places specific choices about tertiary courses and institutions in the context of broader life choices, priorities and values. A number of studies related to higher education participation have been conducted since the early 1980s, including Williams et al. (1980), Elsworth et al. (1982), Carpenter and Western (1989), Wyn and Lamb (1996), Dwyer (1997), Long, Carpenter and Hayden (1999), Marks, Fleming, Long and McMillan (2000), Stevenson, Evans, Maclachlan, Karmel and Blakers (2000), and Lamb, Dwyer and Wyn (2000). Related studies have focused on the formation of educational aspirations and decisions, including Williams et al. (1980), Lamb (1996), Elsworth et al. (1982), Carpenter and Western (1984), Hayden and Carpenter (1990), and DEET (1993).

Young people's attitudes towards education are shaped by interwoven psycho-social, socioeconomic, and personal factors. Carpenter and Western (1984) have hypothesised a causal ordering of the variables influencing student choice and opportunities for access to tertiary education:

- social origins (sex, parental occupation, geographical location, perceived family income, area, wealth);
- schooling (type of school, interest in school);
- influence of significant others (perception of parental influence, perception of teacher influence, friends' plans);

- academic self-assessment (opinion of own academic ability, perceived utility of education for later life);
- educational aspirations (plans for education beyond Year 12); and
- academic achievement (final school academic results).

Drawing on these ideas, the conceptual framework for the present research (Figure 3.1) presupposed that decisions about education are influenced by a complex range of interrelated factors including family expectations and support, the range and level of local employment opportunities, perceptions of one’s abilities and talents, degree of familiarity with the educational system and alternatives, income levels, and perceptions of costs and cost benefits.

As Figure 3.1 indicates, the research framework focuses on the current hopes, expectations and intentions of prospective students in relation to their immediate post-school choices. It proposes that these are an outcome of a multi-dimensional context for these choices. The first dimension involves personal context (Section 3), followed by specific influences (Section 2), and finally broader aspirations and beliefs (Section 1), starting from the most general (life and career) and moving to the particular (VET, higher education and work).

Figure 3.1 Framework for factors influencing student choice

Conceptual Framework			
Current hopes, expectations and specific intentions Perceived factors influencing present thinking	1a. General aspirations and beliefs (about life and career)	2. Influences, including Family School Community Information sources	3. Personal context Personal background and present context. socioeconomic background, type of schooling, geographical location
	1b. Aspirations and beliefs about school		
	1c. Aspirations and beliefs about educational alternatives: Perceived attractiveness, intrinsic/extrinsic benefits Perceived attainability		

3.2 The student survey

The survey sample was selected from three states, Western Australia, Victoria, and New South Wales. Full details are provided in the appendix. Wherever Board of Studies student databases provided appropriate details, questionnaires were mailed directly to student homes. The sample was stratified by gender, location, and socioeconomic status (in the latter cases using postcode indices). Questionnaires were also distributed to a sample of schools, selected on the basis of school type, size, and postcode region. In total, 17 000 questionnaires were distributed: 8000 mailed directly to students' homes and 9000 distributed to schools.

An objective of the sampling was to ensure that the data set would be large enough to allow for appropriate subgroup comparisons according to variables of location and socioeconomic background.

From the 17 000 questionnaires distributed, 7593 responses were received. After incomplete questionnaires were put aside, 7023 responses were useable. As Table 3.1 shows, the project's sampling strategy and student response patterns generated location and socioeconomic background subgroups which are sufficiently large to permit confident comparative analysis.

The sample overall is slightly skewed towards higher SES respondents and females. The survey received a lower response rate from males (see appendix). The pattern of lower male response was strongest in the lower socioeconomic subgroup. Given that the gender variations in response rate tended to follow a clear pattern across the subgroups (see appendix), an analysis by gender was conducted to determine the possible impact of gender imbalance in the data set. In later analyses by socioeconomic background and location, the gender variable was included.

In addition to the survey, the original Higher Education Council study also incorporated interviews with student focus groups conducted in twenty rural or isolated schools in two states.

Table 3.1 Number of useable responses, by respondent socioeconomic background and location

Location		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	376	580	323	1279
	Medium access to university campus	127	199	111	437
	High access to university campus	491	862	641	1994
Urban		811	1386	1116	3313
	All	1805	3027	2191	7023

3.3 Demographic variables

The definition and measurement of socioeconomic status and geographical location are notoriously difficult. socioeconomic status, in particular, is a highly abstract concept and its measurement is complex and often controversial.

At present the Commonwealth calculates aggregate higher education participation figures on the basis of the postcode of students' permanent home address, as self-reported for the annual statistical data collection of the Department of Education, Training and Youth Affairs. Two indices are utilised for calculating participation rates, both based on residential postcode (ABS 1990a; DPIE 1994). The thresholds used for defining geographical areas and for establishing socioeconomic subgroupings are somewhat arbitrary. Student geographic status is defined as urban, rural or isolated on the basis of the postcode of permanent home address. In preparation of the index, rurality and isolation are assessed on population density and distance from provincial centres. Students of lower socioeconomic status are defined as those whose home postcode falls within the lowest quartile of the national population, regions being coded on the value of the Australian Bureau of Statistics Index of Education and Occupation (ABS 1990b).

Area measures such as postcodes are without doubt imperfect measurement tools, not only for estimating aggregate higher education participation rates for population subgroups, but particularly for identifying individuals likely to be disadvantaged (Western et al. 1998). Household wealth obviously varies considerably within a single postcode area, and the measurement of educational advantage and disadvantage by location is similarly imperfect. Regional and rural university campuses and TAFE institutions, for instance, provide high access for people who live nearby, yet these people are classified for the purposes of measuring possible educational disadvantage as 'rural', along with people living in, or close to, the distant outback and thus living long distances from tertiary education centres.

The approaches adopted by the present project for defining student subgroups for analysis are described in the following sections.

3.3.1 The measurement of socioeconomic background

For analytical purposes, there is no single, agreed measure of individual or family socioeconomic status. Common measures for classifying students' socioeconomic status include parental employment category, family income, and parental education levels. The present study examined the utility of three variables for defining students' socioeconomic status: parental employment

category, parental education level, and post code of home address, adopting the coding of regions in the Australian Bureau of Statistics Index of Education and Occupation (ABS 1990b). Information on family income was not collected in the survey.

The analysis of the three potential measures of socioeconomic status showed that all three produce discernible and similar patterns of difference in student attitudes, suggesting that each has some utility as a measure of individual socioeconomic status, at least as it might be related to educational aspirations and expectations. Table 3.2 illustrates some of the variations between the measures tested by reporting student responses for selected questionnaire items.

As Table 3.2 shows, of the three measures trialed by the study, parental education levels revealed the clearest patterns of variation in student attitudes towards school and post-school options and preferences. On this basis, parental educational attainment was chosen for this study as a suitable measure of students' socioeconomic background for subsequent analyses. The socioeconomic background (SES) variable was defined in this way (according to the highest level of education attainment of the most educated parent):

- Lower SES*** parent(s) did not attend school, attended primary school, or attended some secondary school
- Medium SES*** parent(s) completed secondary school and/or vocational qualification, diploma or associate diploma
- Higher SES*** parent(s) completed a university degree

Table 3.2 Comparison of student responses on selected items according to three measures of socioeconomic background (% agreement*)

	Parental education			Home postcode			Parental occupation		
	Lower SES	Med SES	Higher SES	Lower SES	Med SES	Higher SES	Blue collar	White collar	Professional
'Prefer to go to university after school'	53.7	59.4	77.0	60.4	61.8	73.6	56.5	62.0	71.8
'University courses offers interesting career'	70.8	74.3	81.8	74.0	75.3	80.5	72.6	74.5	80.4
'My parents want me to do a university course'	43.6	48.1	67.7	49.5	52.3	61.5	48.2	48.2	59.2
'Results not good enough for courses I'd like'	37.7	33.2	24.9	31.8	33.2	27.8	35.9	29.4	27.4
'Cost of university fees will stop me attending'	38.5	33.7	22.5	35.2	31.9	22.3	37.3	33.8	23.3
'My teachers encourage me to aim for university'	44.1	48.4	58.2	51.8	47.9	53.9	46.5	49.2	55.9

*Percentage of respondents reporting agreement or strong agreement (marking points four or five on a 5-point Likert-scale).

3.3.2 The measurement of geographical location

The project dataset permitted grouping of respondents according to their home postcode and their self-reported distance from a university campus (in accordance with the focus on university access of the original project brief for the Higher Education Council). This allowed students to be classified as urban or rural dwelling according to their home postcode, with the rural group further classified into three subgroups using university access classifications similar to those proposed by Western et al. (1998):

- Isolated*** home postcode classified as 'distant' (generally more than 300 km to a university campus)
- Medium university access*** 151–300 kilometres to a university campus
- High university access*** fewer than 150 kilometres to a university campus

Since the high access category includes students whose residence is within 150 km of a university campus, as recommended by Western et al. (1998), one concern for the original HEC project was the distribution of distances within this range, assuming that distances upwards of 150 km might still have an inhibiting effect on student decision-making. The survey therefore sought more detail and asked students to nominate whether the closest campus was fewer than 25 km, 26–100 km, or 101–150 km away. Of the students in the sample classified as high access/rural, 59.5 per cent live close to a university, within 25 km.

Figure 3.2 Guide to interpreting tables

Interpreting the Report's Tables

The subgroups

Categories of **socioeconomic background** are based on the education level of the parent with highest level of education.

<i>Lower SES</i>	did not attend school, attended primary school, or attended some secondary school
<i>Medium SES</i>	completed secondary school and/or vocational qualification, diploma or associate diploma (e.g TAFE)
<i>Higher SES</i>	university degree

Location subgroupings are based on students' self-reported distance from a university and the classification of the postcode of their permanent home address.

<i>Urban</i>	home postcode classified as urban
<i>Rural</i>	<i>Isolated</i> home postcode classified as 'distant'
	<i>Medium univ. access</i> 151–300 kilometres to a university
	<i>High univ. access</i> fewer than 150 kilometres to a university

The scales

Means are reported for five-point scales. The scales are variously labelled in the 'When I leave school...' questionnaire, but generally students were asked to respond on a Likert scale on which 5 = strongly agree and 1 = strongly disagree.

Item means on a five-point scale that fall in the vicinity of 4.0 or above signify very high levels of overall agreement among the respondents. Means of 2.0 or below indicate very low levels of agreement.

Statistical significance

Wherever the socioeconomic and location variables have been found on a Manova test ($p < 0.01$) to make a significant contribution to explaining variation in the sample, these groups have been underlined in the tables.

Because of the nature of the Manova test, there is no simple benchmark to indicate whether an observed difference in means between two student subgroups is statistically significant or not. As a rule of thumb, however, differences between subgroup means of 0.1–0.2 tend to be statistically significant. Differences above 0.2 are almost certainly statistically significant. Many of the contrasts in student attitudes that have been identified by this study are not only statistically significant, but also are large in practical and policy terms.

4 Present attitudes towards school

4.1 Student attitudes overall

The survey questionnaire asked students to respond to a set of items concerning their present attitudes towards school and study. After factor analysis, these items were grouped into three broad areas (Table 4.1): 'commitment' (a group of negatively-worded items reflecting the place of education in personal priorities), 'motivating environment' (items associated with a personal context supportive of educational achievement) and 'intrinsic satisfaction' (items relating to the personal satisfaction students gain from school and school work).

In general, the views, goals and immediate priorities of the young people in Years 10 to 12 in the study are similar in many ways. The study's findings provide confirming evidence of the strong commitment of young Australians to education beyond compulsory schooling. The commitment towards education and doing well at school exists across all socioeconomic strata. Successfully completing school is a major goal of most students. As reported earlier (James et al. 1999a), 75 per cent of students indicated that completing Year 12 is a very high priority for them.

As Table 4.1 indicates, a relatively small number of the students showed a lack of interest in school or a poor commitment to school. Roughly 11 per cent of the group as a whole reported that being at school is just filling in time while deciding their futures. Similarly, only 5 per cent were in agreement with the statement 'I'm only staying at school because there are no jobs around here'. However, many of the students in the sample appear to derive little satisfaction and enjoyment from school: only 34 per cent reported they 'get a lot of satisfaction from school work', and 57 per cent agreed that overall 'I enjoy school'.

4.2 Socioeconomic variations

The differences between the socioeconomic subgroups in their attitudes towards school are generally small, considerably smaller than the differences in their views about higher education reported in Chapters to follow,

suggesting that attitudes towards school are a poor indicator of post-school aspirations and intentions. The patterns of difference that emerge between the socioeconomic groups, however, are consistent with the stronger variations in attitudes towards post-school options reported later.

The findings in Table 4.1 are based on an analysis using parental education levels as the measure of socioeconomic status, however similar though slightly weaker patterns emerge when the other possible SES measures available to the study—parental occupation and home postcode index—are employed. Classifying SES on the basis of home postcode using the ABS Index of Education and Occupation yields the weakest patterns of variation in student attitudes.

Looking in detail at the items in Table 4.1, while a number of the variations are statistically significant, the differences are usually small. However, they form a consistent pattern. Students from lower socioeconomic backgrounds show a slightly weaker commitment to staying at school, are less likely to discuss their school work with members of their family, and less likely to believe their parents encourage them to do well at school. The variations between the subgroups are smallest on items relating to the personal satisfaction gained from school work and personal interest in the subjects being studied—student attitudes are virtually indistinguishable for these items.

Table 4.1 Attitudes towards school by socioeconomic background (% agreement)

	Lower SES	Medium SES	Higher SES
Commitment			
Being at school is just filling in time while I decide my future	11.8	11.0	9.9*
I'm only staying at school because my parents want me to	8.9	7.1	5.7*
I am happy to get by with the bare minimum of work	20.8	18.4	16.4*
My friends are not really interested in school	24.2	23.0	22.0
I'm only staying at school because there are no jobs available	7.7	5.7	3.5*
Motivating environment			
I really want to do well at school	90.4	91.3	91.3
Being at school will really help me get what I want in life	73.5	75.2	73.6
I often discuss my school work with members of my family	39.1	40.1	44.3*
My parents encourage me to do well at school	83.9	87.5	90.0*
Intrinsic satisfaction			
I find it difficult to get myself motivated to study	53.4	54.0	51.5
I get a lot of satisfaction from school work	34.2	33.8	33.4
I am interested in the subjects I'm studying	68.4	68.8	69.4
Overall, I enjoy school	55.3	57.2	57.6*

Percentage of respondents reporting agreement or strong agreement (four or five on 5-point Likert-scale).

* statistically significant difference between subgroups.

One item for which there was clear and important patterns of response is ‘You learn more on the job than you do in a classroom or from books’. This item may provide an overall indication of the perceived pertinence of school to life and work, for it invites students directly to consider the relationship between what is learned at school and their perceptions of the relevance of this knowledge to the wider world. Table 4.2 reports detailed subgroup means for this item, including across locational groupings. Interestingly, there is a strong overall level of agreement by students with this proposition. There is also a possibly important pattern of difference by socioeconomic background, in which the students of lower socioeconomic background tend to have less faith in the relevance of learning in formal settings. No such differences emerge between locational subgroups, suggesting that differences in the perceived relevance of classroom based learning may be predominantly a socioeconomic effect.

Table 4.2 Extent of agreement with ‘You learn more on the job than you do in a classroom or from books’
Overall mean = 3.77 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	3.85	3.77	3.68	3.77
	Medium uni access	3.85	3.81	3.72	3.80
	High uni access/rural	3.81	3.82	3.62	3.75
Urban		3.89	3.79	3.68	3.78
	All	3.86	3.79	3.67	

Underlining indicates the SES variable makes a significant contribution to explaining variation in this item. The contribution of gender is also significant.

4.3 Locational differences

Notable patterns of difference emerge between student subgroups when geographical location is also taken into account. As reported previously (James et al. 1999a, 23–37), urban and rural students differ in their outlooks and priorities. Students living in urban areas place more emphasis than students in rural Australia on having high-status careers and on making high incomes; they are also more concerned with having their families around them and meeting the expectations of their parents and families.

Tables 4.3, 4.4 and 4.5 present detailed SES/location subgroup means for three questionnaire items. All means are for 5-point scale items.

The survey returned a very high overall mean of 4.60 for the item ‘going through and completing Year 12’ (Table 4.3), indicating that a large majority of students, from all socioeconomic groups and in both rural and urban areas, are clearly keen to succeed at school and to finish Year 12. However, the subgroup differences in Table 4.3 are statistically significant across both locational and SES groupings (denoted in the table and in those to follow by underlining of the relevant variables), indicating slight differences between student subgroups in the strength of this priority. The lowest priority for completing Year 12 was given by students of lower socioeconomic background living in isolated areas. Students of higher socioeconomic background tended to attach the highest priority to this goal.

Table 4.3 Priority attached to ‘Going through and completing year 12’
Overall mean = 4.60 on scale 1 (not a priority at all) to 5 (very high priority)

		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	4.42	4.49	4.62	4.49
	Medium uni access	4.61	4.66	4.71	4.65
	High uni access	4.50	4.55	4.70	4.58
Urban		4.64	4.64	4.70	4.66
	All	4.54	4.59	4.68	

Underlining indicates the SES variable and location variable make significant contributions to explaining variation in this item.

In a similar fashion, the statistically significant differences between the item means in Table 4.4 indicate that a slightly higher proportion of students living in isolated locations and from lower socioeconomic backgrounds, were prepared to indicate that school is simply ‘filling in time’ until they decide what to do with their lives. This group is a minority, even among the lower socioeconomic background, isolated students who are perhaps the most at risk of being educationally disadvantaged. Once again, students from higher socioeconomic backgrounds were less likely to agree with this item.

Table 4.4 Extent of agreement with ‘Being at school is just filling in time’
Overall mean = 2.07 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	2.26	2.13	2.10	2.17
	Medium uni access	2.04	1.85	1.82	1.90
	High uni access	2.08	2.03	1.93	2.01
Urban		2.09	2.09	2.05	2.08
All		2.13	2.07	2.02	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. The contributions of gender and year level are also significant.

While most respondents overall did not agree with the statement ‘I’m only staying at school because there are no jobs available’ (Table 4.5), those living in rural communities and those from lower socioeconomic backgrounds were more likely to do so. The differences that emerge on this item between rural and urban students may be due to differences in the availability of jobs between the regions rather than differences in personal attitudes and objectives, assuming that many rural areas, some of which have faced severe economic downturns, may offer fewer employment prospects for young people at the present time than urban areas. The differences in the responses of the socioeconomic subgroups to this item are probably less likely to be attributable to opportunity effects of this kind and more likely represent actual differences in student dispositions and intentions.

Table 4.5 Extent of agreement with ‘I’m only staying at school because there are no jobs available’
Overall mean = 1.55 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	1.82	1.69	1.46	1.68
	Medium uni access	1.71	1.48	1.41	1.54
	High uni access	1.79	1.65	1.43	1.61
Urban		1.55	1.45	1.40	1.46
All		1.69	1.55	1.42	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. Gender is also significant.

4.4 The influences of parents and careers teachers

Family influences, in particular parental interest and involvement in school achievement, and the extent to which discussion of school work at home in a part of family life, communicate strong messages to young people about the relevance of education and usually significantly shape their beliefs about the value of school achievement.

Distinctive variations in students' perceptions of their parents' attitudes and the apparent influence of these have been found in this study. While there was a low overall level of agreement with the statement 'I'm only staying at school because my parents want me to' (Table 4.6), students from lower socioeconomic backgrounds and those from isolated areas were more likely to agree.

While these differences may be due to slight variations in students' personal aims, equally they may provide evidence of parents in rural and regional areas being anxious about the future of their communities and the prospects for their children, and seeing education as an important avenue for maximising options and offering security in the event of future difficulties.

Table 4.6 Extent of agreement with 'I'm only studying at school because my parents want me to'

Overall mean = 1.68 on scale 1 (strongly disagree) to 5 (strongly agree)

		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	1.85	1.79	1.65	1.78
	Medium uni access	1.71	1.51	1.59	1.60
	High uni access	1.70	1.67	1.53	1.63
Urban		1.74	1.65	1.62	1.66
All		1.76	1.68	1.61	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. The contributions of gender and year level are also significant.

Two other items probing the level of encouragement and dialogue between students and their parents and other family members—'My parents encourage me to do well at school' and 'I often discuss my school work with members of my family'—show significant and consistent patterns. In both cases, student location has little apparent effect but the levels of both perceived encouragement and discussion of school work rise according to family socioeconomic status.

As reported earlier (James et al. 1999a) parents are considered to be the most important source of advice to students in assisting them to plan their futures, with mothers having more influence than fathers. Siblings and best friends provide some input, but their advice is not as important as that of parents. No statistically significant differences according to socioeconomic background or location are evident in responses to these questions.

As the data in Table 4.7 indicate, students consider the advice of career advisers to be moderately important. Once again the differences in student attitudes are principally associated with socioeconomic background. Students from lower socioeconomic backgrounds place more emphasis, or have more reliance, on the advice of career advisers than students from higher socioeconomic backgrounds, regardless of their particular geographical location.

Table 4.7 Importance of views and advice of careers advisers

Overall mean = 3.30 on scale 1 (not at all important) to 5 (very important)

		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	3.41	3.27	3.29	3.31
	Medium uni access	3.50	3.43	3.17	3.39
	High uni access	3.38	3.39	3.21	3.33
Urban		3.38	3.32	3.10	3.26
All		3.40	3.35	3.17	

Underlining indicates the SES variable makes a significant contribution to explaining variation in this item. The contribution of year level is also significant.

4.5 Summary

In many ways the students surveyed for this study are similar in their outlook towards schooling, however there are important, if predictable, differences. The perceived relevance of school increases slightly with rising family socioeconomic status. In particular, there is an association between parental educational attainment and young people's attitudes toward schooling and education in general. Students from lower socioeconomic backgrounds, with parents who have completed less formal education, are the most likely group to report they are 'marking time' at school until appropriate work opportunities emerge.

Geographical location is also a factor in differing student attitudes, though generally the relationship between location and the views of young people is weaker than that of socioeconomic status. Overall, however, students in rural and isolated locations are slightly less likely to see relevance in school than urban students. Stronger patterns of difference emerge when socioeconomic status and geographical location are considered together. Students from lower socioeconomic backgrounds living in rural or isolated areas are a distinct group. In aggregate terms, these students report less interest in school than their counterparts and appear to be at greater risk of educational disadvantage.

Overall, the differences between the student subgroups on attitudes towards school differ only modestly. More marked attitudinal variations towards the possibility of higher education, discussed in the Chapters to follow, suggest that students' attitudes towards school are a relatively poor predictor of their post-school intentions, at least in terms of identifying students with higher education aspirations.

5 Attitudes towards post-school options

The survey asked students to indicate what they would prefer to do after completing school, assuming there were no constraints on their choices. The intention of this question was to determine students' personal preferences free of potentially inhibiting factors, rather than what they believed they would most likely be doing once they finished schooling.

Young people's interest in tertiary education is strong (Table 5.1). Close to 90 per cent of the sample reported they would prefer to undertake tertiary education of some kind after school. Higher education is the dominant preference, being the preferred outcome of 63 per cent of students overall. Fewer than ten per cent of the respondents indicated they would prefer to commence full-time work immediately after finishing school.

Unlike the relatively small differences between the socioeconomic subgroups in their attitudes towards school, the question of post-school preferences reveals substantial differences. Slightly over three-quarters of higher socioeconomic background students reported a preference for higher education.

In comparison, little over half of the students from lower socioeconomic backgrounds expressed a preference for higher education.

Similar clear variations were found between the student subgroups with regard to the option of working in full-time employment. Close to one in ten students from lower SES backgrounds expressed a preference to commence full-time work when they complete school. The comparable figure is only one in twenty-five for higher socioeconomic background students.

Table 5.1 Post-school preferences by socioeconomic background (%)

	Lower SES	Medium SES	Higher SES
Overall prefer university	52.9	59.3	76.8
Overall prefer TAFE	33.6	28.8	14.2
<i>Study at a TAFE college</i>	23.4	20.3	10.6
<i>Take an apprenticeship</i>	10.2	8.5	3.6
Overall prefer work	9.5	7.8	3.7
<i>Work in a full-time job</i>	8.8	7.0	3.2
<i>Work in family business</i>	0.7	0.8	0.5
Other	3.9	4.1	5.3
	100.0	100.0	100.0

The choice between higher education and TAFE sets up significant socioeconomic contrasts. While TAFE study is a less preferred option than university study by all socioeconomic subgroups, it is a relatively stronger preference for students from lower and medium socioeconomic backgrounds relative to higher socioeconomic background students. One third of students from lower socioeconomic backgrounds expressed a preference for TAFE, compared with 14 per cent of students from higher socioeconomic backgrounds. Compared with the higher socioeconomic background subgroup, over twice the proportion of lower and medium socioeconomic background students expressed a preference to attend a TAFE college after completing school. The greater interest in vocational education and training among lower SES students is almost strong enough to offset their lower interest in higher education.

Some of the underlying reasons for these differences in student preferences are explored in more detail in the Chapters to follow. The differences reflect the composite effect of a number of interrelated variables, including the differing stringency of entry requirements to university compared with TAFE colleges, the alternative school subjects required for entry to TAFE or university, differences in the cost of study, and the suitability of particular courses to career goals and intentions.

Some of the differences in student attitudes may also be due to the potentially higher short-term opportunity cost of attending university. It is notable that far higher proportions of lower and medium socioeconomic background students expressed a preference for income earning options, including seeking apprenticeships or full-time employment. The increasing proportion of undergraduates who are working while enrolled in full-time study, and the rising number of hours they are working (McInnis, James & Hartley 2000) suggest that young people may find the costs of tertiary study to be a growing burden. Equally, this may be evidence of a wider social trend for young people to be unwilling to forego their earning potential while completing tertiary education. Both these factors may contribute to the relative attractiveness of study options that allow greater flexibility and opportunities for part-time paid employment. The possible shifts in young people's expectations of tertiary education have considerable ramifications for the design of the curriculum.

6 Attitudes towards university

6.1 Students' views overall

A central component of the study's questionnaire was a set of items designed to investigate students' beliefs about life at university and the relevance of higher education. The responses to these questions show sustained variations between student subgroups, in particular large divergences between students of lower and higher socioeconomic backgrounds and between students living in urban and rural areas.

Factor analytical techniques were used to separate the items into two groups, labelled encouraging effects and disincentives (Table 6.1). There are strong patterns in what students consider to be the attractions of university, and notable differences in the attitudes of the socioeconomic subgroups. Though some of the items under the title of 'encouraging effects' in Table 6.1 may appear conceptually distinct, they nevertheless draw a clear pattern of responses. A university education and life at university have broad appeal, and the thought of going to university captures the imagination of most senior secondary students.

Table 6.1 Attitudes towards university by socioeconomic background (% agreement)

	Lower SES	Medium SES	Higher SES
Encouraging effects			
University education really helps you develop your skills	81.8	83.5	86.6*
University study allows you to explore interesting things	66.0	69.6	75.8*
Going to university offers the chance to meet many interesting people	77.4	78.8	81.2*
Completing a university degree is a good investment in the future	79.9	82.2	87.8*
A university education broadens your outlook on life	63.3	65.0	71.4*
Life at university sounds exciting	58.6	61.8	69.0*
Disincentives			
Universities are big and unfriendly places	8.6	7.7	8.3
The years at university are just a way of delaying the hunt for a job	8.3	6.4	5.6*
Universities are really for wealthy people	18.2	17.3	13.1*

*Percentage of respondents indicating agreement or strong agreement (four or five on 5-point Likert-scale).

Consistently, however, students from lower socioeconomic backgrounds are less likely to believe in the ‘encouraging effects’. For each item listed under ‘encouraging effects’ in Table 6.1 there are statistically significant differences between the socioeconomic subgroups. In some cases the per cent agreement differs by ten points between the lower and higher SES groups, indicating substantial differences in attitude.

Lower socioeconomic background students were more reserved in their opinions on whether ‘a university degree is a good investment in the future’, whether ‘university study allows you to explore interesting things’ and whether ‘life at university sounds exciting’. Higher SES students, on the other hand, appear to give greater credence in the factors that might make the thought of university appealing.

The differences between the subgroups in their responses to the ‘disincentive’ items listed in Table 6.1 are less substantial. Slightly more lower SES students report that the years at university are just a way of delaying the hunt for a job, but the numbers who do so are low. A more significant proportion of lower socioeconomic background students agreed with the proposition ‘universities are really for wealthy people’, though once again most students overall did not agree with this statement.

6.2 Some key areas of variation

Tables 6.2 and 6.3 provide a more detailed breakdown of subgroup means for two of the ‘disincentive’ items. Table 6.2, reporting the item ‘Universities are really for wealthy people’, shows a clear divide between the opinions of rural and urban students and a steady trend across the socioeconomic subgroups.

Table 6.2 Extent of agreement with ‘Universities are really for wealthy people’
Overall mean = 2.35 on scale 1 (strongly disagree) to 5 (strongly agree)

		Socioeconomic Status			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	2.46	2.50	2.31	2.44
	Medium uni access	2.66	2.48	2.24	2.48
	High uni access/rural	2.47	2.49	2.31	2.43
Urban		2.29	2.27	2.18	2.24
	All	2.41	2.38	2.25	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. The contribution of gender is also significant.

Table 6.3 provides similar subgroup breakdowns for the item ‘completing a university degree is a good investment in the future’. This statement was strongly supported by all subgroups (overall mean of 4.32), however both socioeconomic background and rurality cause variations in student responses. The rurality effect appears to play a small but statistically significant part. On the other hand, socioeconomic background is consistent in its effect: students from lower and medium socioeconomic backgrounds are less likely to be positive about the potential future benefits of time spent at university.

Table 6.3 Extent of agreement with ‘Completing a university degree is a good investment in the future’

Overall mean = 4.32 on scale 1 (strongly disagree) to 5 (strongly agree)

		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	4.06	4.26	4.36	4.22
	Medium uni access	4.34	4.38	4.42	4.37
	High uni access/rural	4.17	4.23	4.39	4.27
Urban		4.34	4.35	4.48	4.39
	All	4.23	4.30	4.43	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item.

Though previous research (James et al. 1999a) has shown that, on aggregate, rural and urban students tend to differ less in their attitudes than socioeconomic subgroups, there are items for which location does appear to play a part. All rural subgroups are significantly more likely than their urban peers to believe they would have the chance to ‘meet many interesting people’ at university, and that life at university ‘sounds exciting’. Urban students are more likely to see university education as important for skill and career development. However, student location appears to play little part in whether or not students believe they will be able to explore interesting things at university.

Overall, the higher the socioeconomic background of students, the more likely they are to imagine that university study allows you to meet interesting people, and that life at university would be exciting. On questionnaire items that gauged whether or not a university education is worthwhile for developing skills and broadening personal outlook, students from lower socioeconomic background consistently showed slightly more ambivalence. They are more sceptical about the importance in life of university learning and also more likely to see any time spent at university as delaying entry to the workforce. In contrast, students from higher socioeconomic backgrounds tend to see a university education as important career-wise and attractive in its own right.

7 The personal possibility of going to university

The student survey asked respondents to indicate what they believed they would most likely be doing once they have completed school and the main reasons for this outcome. Unlike like the data reported in Chapter 5, in which students were asked to report what they would prefer to do, the findings in the present Chapter are tempered by students’ perceptions of the likely realities.

7.1 Likely post-school outcomes

Compared with the 63 per cent who reported a preference for going to university, only 54 per cent of the sample believed that this was likely to be the outcome for them (Table 7.1). Higher socioeconomic background students had a greater confidence in the likelihood they would pursue university study (nearly 70 per cent of them expected to do so) than lower or medium socioeconomic background students (42 and 50 per cent respectively). Sixteen per cent of the lower socioeconomic background students reported they hoped to go to university but believed they would not be able to do so.

Table 7.1 Actual intentions regarding higher education, by socioeconomic background (%)

	Lower SES	Medium SES	Higher SES	All
Definitely planning to enrol in a university course	31.2	38.1	52.6	40.9
Planning to apply for a place but then defer for a year	10.9	12.0	16.9	13.0
<i>Subtotal</i>	<i>42.1</i>	<i>50.1</i>	<i>69.5</i>	<i>53.9</i>
Hoping to go to university but may not be able to	16.2	13.6	9.9	13.0
Don't want to go to university now, but may do so later in my life	8.1	9.5	6.4	8.2
Not planning to go to university	21.6	17.0	6.5	15.0
Very undecided	7.7	6.3	5.3	6.4
Haven't really thought about it	4.3	3.5	2.4	3.4
	100.0	100.0	100.0	100.0

Fifteen per cent of the students surveyed had no intention at this stage of attending university, while eight per cent indicated they did not want to go to university when they finished school but may do so later in life.

A considerably larger proportion of the higher socioeconomic background students intended to apply for a university place and then defer for a year, possibly a sign of greater cultural capital and awareness of the possibilities among these students, as well as possibly stronger financial circumstances.

7.2 Socioeconomic variations in the main factors affecting likely outcomes

Tables 7.2 shows the particular factors that students indicated were the most influential in shaping their present choice. Looking first at the students who definitely intend to enrol in a university, over half the student sample, there are only small differences between the socioeconomic subgroups. These students share strong vocational or career motives. They most frequently report improving job prospects or opportunities for interesting and rewarding careers as the dominant factors in their thinking.

Table 7.2 Most frequently reported factor influencing present intentions, by intention and by socioeconomic background (%)

	Lower SES	Medium SES	Higher SES
Students definitely planning to enrol at university (53.9%)			
A university degree would improve my chances of getting a job	33.7	37.9	39.8
A university course would offer me the chance for an interesting and rewarding career	35.3	33.0	31.8
I am interested in the subjects I could study at university	5.8	6.2	8.4
Students definitely not planning to go to university (15.0%)			
A TAFE course would be more useful to me than a university course	31.3	28.5	35.1
A university qualification is not necessary for the job I want	11.7	11.1	11.7
I want to start earning a proper income as soon as I leave school	10.1	10.4	8.1
A TAFE course would be more affordable for me than university	10.4	8.2	2.7
I don't see any point in me going to university	7.9	9.4	10.8

On the other hand, the students not planning to go on to university are most likely to indicate that the reasoning behind their decision is that a TAFE course would be more useful to them. Once again, this sentiment is relatively consistent across the socioeconomic subgroups. Also important in the thinking of these students are the affordability of TAFE, a desire to earn an income immediately, and the view that a university degree is unnecessary for the employment they have in mind.

Table 7.3 reveals some of the striking contrasts uncovered by the study in the personal attitudes of the socioeconomic subgroups towards the relevance and attainability of a university education. The items listed in the table report encouraging and inhibiting factors, arranged following factor analysis into four principal themes. Note that the study found statistically significant differences between the student subgroups for each of the items in the table.

Table 7.3 Factors in relevance of post-school options by socioeconomic background*

	Lower SES	Medium SES	Higher SES
Relevance of higher education to life & career			
A university degree would improve my chances of getting a job	79.9	83.9	88.3 [†]
A TAFE course would be more useful to me than a university course	29.9	24.8	13.5 [†]
A university course would offer me the chance for an interesting and rewarding career	70.8	74.3	81.8 [†]
I am interested in the subjects I could study at university	61.7	67.2	77.8 [†]
My parents want me to do a university course	43.6	48.1	67.7 [†]
I don't see any point in me going to university	18.9	15.5	7.7 [†]
I want to start earning a proper income as soon as I leave school	34.9	31.2	20.0 [†]
A university qualification is not necessary for the job I want	25.6	24.4	16.4 [†]
Achievement barriers			
I don't think my results will be good enough to get into any courses that interest me	37.7	33.2	24.9 [†]
I probably won't have the subjects required for courses that might interest me	24.3	22.8	14.8 [†]
Cost concerns			
A TAFE course would be more affordable for me than university	57.2	55.4	42.3 [†]
The cost of university fees may stop me attending	38.5	33.7	22.5 [†]
My family probably can't afford the costs of supporting me at university	40.9	35.9	22.8 [†]
I would have to support myself financially if I went to university	36.3	34.6	25.7 [†]
Social support factors			
Most of my friends will probably go to university	39.6	43.3	51.7 [†]
My teachers have encouraged me to aim for university	44.1	48.4	58.2 [†]

* Percentage of respondents reporting agreement or strong agreement (points 4 or 5 on 5-point Likert-scale).

† Statistically significant differences between subgroups (p<.001)

Students of lower socioeconomic background are clearly distinguishable from students of higher socioeconomic background by their attitudes towards the relevance of university. Lower SES students have:

- a stronger belief that a TAFE course would be more useful than a university degree (30 per cent believed that it would, compared with only 14 per cent of higher socioeconomic background students);
- a weaker interest in the subjects they could study at university (62 per cent, compared with 78 per cent);
- a far weaker belief that their parents want them to do a university course (44 per cent, compared with 68 per cent); and
- a stronger interest in earning an income as soon as they leave school (35 per cent, compared with 20 per cent).

In addition, students from lower socioeconomic backgrounds perceive achievement barriers in their way:

- they are less confident that their academic results will be good enough for entry to courses that interest them (38 per cent, compared with 25 per cent); and
- they are more likely to believe they won't have the subjects required for courses that might interest them (24 per cent, compared with 15 per cent).

Students from lower socioeconomic backgrounds are also more likely to report concerns about costs: they are more likely to believe the cost of university fees may stop them attending university (39 per cent, compared with 23 per cent) and that their family probably could not afford the costs of supporting them at university (41 per cent, compared with 23 per cent). Thirty-six per cent of lower SES students indicated that they would have to support themselves financially if they went to university.

Finally, students' perceptions of the encouragement of their teachers to aim for university are in marked contrast. While 58 per cent of higher SES students believed their teachers were encouraging them to aim for university, only 44 per cent of lower SES students did so.

In all, the findings presented in Table 7.3 present a striking picture of the differences between the socioeconomic subgroups in their attitudes towards higher education. They suggest the cumulative effects for young people from lower socioeconomic backgrounds of the relative absence of encouraging factors combined with the stronger presence of various inhibiting factors.

7.3 TAFE considerations

TAFE courses are seen as a more attractive option than university—in terms of usefulness and affordability—by higher proportions of lower socioeconomic background and rural students (Tables 7.4 and 7.5), though the differences between rural and urban students on the question of usefulness are slight. While 30 per cent of lower socioeconomic background students see TAFE as more useful to them than a university course, only 14 per cent of higher socioeconomic background believe this would be so. As Tables 7.4 and 7.5 show, there are also sustained variations between rural and urban students in their perceptions of the relative affordability of TAFE and higher education, though these are weaker than the socioeconomic differences.

Table 7.4 Extent of agreement with ‘A TAFE course would be more useful to me than a university course’

Overall mean = 2.68 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Low access	3.13	2.84	2.46	2.83
	Medium access	2.96	2.75	2.29	2.70
	High access/rural	2.89	2.79	2.35	2.67
Urban		2.83	2.70	2.34	2.61
All		2.93	2.77	2.35	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. The contributions of gender and year level are also significant.

Table 7.5 Extent of agreement with ‘A TAFE course would be more affordable for me than university’

Overall mean = 3.53 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	3.79	3.67	3.35	3.61
	Medium uni access	4.02	3.87	3.14	3.73
	High uni access/rural	3.76	3.68	3.38	3.60
Urban		3.58	3.54	3.17	3.43
All		3.71	3.63	3.25	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item.

7.4 The appeal of higher education

Most students see strong advantages in attending university in terms of future employment and careers. All student groups, regardless of socioeconomic background or geographical location, indicated reasonably strong agreement with the statement ‘I am interested in the subjects I could study at university’. Impressions of the lifestyle at university are also an attraction, with most respondents agreeing they believe they would have an enjoyable time at university, though few rate this an important factor in their decision-making.

Tables 7.6 and 7.7 show the relationships between location and socioeconomic status on student attitudes towards the possible attractions of a university education, revealing significant socioeconomic effects.

Table 7.6 Extent of agreement with ‘A university degree would improve my chances of getting a job’

Overall mean = 4.32 on scale 1 (strongly disagree) to 5 (strongly agree)

		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Location	Isolated	4.04	4.24	4.26	4.18
Rural	Medium uni access	4.14	4.41	4.39	4.32
	High uni access/rural	4.19	4.27	4.45	4.31
Urban		4.27	4.33	4.50	4.37
	All	4.19	4.30	4.45	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. The contribution of year level is also significant.

Lower socioeconomic background students are less likely to believe that a university degree will assist them with employment and careers (Table 7.6), or to be interested in the subjects they could study at university (Table 7.7). In both cases there is also a significant location effect, with lower access and rural context being associated with a smaller appreciation of the possible benefits of university.

Table 7.7 Extent of agreement with ‘I am interested in the subjects I could study at university’

Overall mean = 3.92 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	low access	3.60	3.79	3.99	3.78
	Medium access	3.59	3.97	4.06	3.88
	High access/rural	3.74	3.87	4.14	3.93
Urban		3.83	3.92	4.16	3.97
All		3.73	3.87	4.12	

Underlining indicates the SES variable and the location variable make significant contributions to explaining variation in this item. The contribution of gender is also significant.

For a minority of students, going to university might be a necessary evil in the absence of available employment. The item ‘I’m considering university because there aren’t any jobs around here’ (Table 7.8) was one of the few which revealed an effect of location but not socioeconomic background. While the levels of agreement with this item are generally low, suggesting that the sentiment is not a strong one, the effect that can be detected is clearly one of rurality. Rural students in all access categories register higher levels of agreement with this statement, reflecting, it seems, perceptions of the relatively depressed state of some rural economies.

Table 7.8 Extent of agreement with ‘I’m considering university because there aren’t any jobs around here’

Overall mean = 2.00 on scale 1 (strongly disagree) to 5 (strongly agree)

Location		Socioeconomic Status			
		Lower SES	Medium SES	Higher SES	All
Rural	low access	2.13	2.01	1.95	2.03
	Medium uni. access	2.08	2.22	2.21	2.18
	High uni. access/rural	2.11	2.09	2.02	2.07
Urban		1.95	1.87	1.91	1.90
All		2.03	1.99	1.96	

Underlining indicates the location variable makes a significant contribution to explaining variation in this item. The contributions of gender and year level are also significant.

8 Gender differences

Many of the major differences in student attitudes and aspirations revealed by the study are those occurring between males and females. For the majority of the questionnaire items there were statistically significant gender differences. The findings suggest the attitudes of young males towards education may be a cause for concern. Compared with the females in the sample, the males exhibit less commitment towards school and are less likely to see higher education as being relevant and attainable for them. These effects are most pronounced for males from lower socioeconomic backgrounds.

8.1 Views on school

Table 8.1 compares the attitudes towards their current schooling by males and females, using data presented for both lower and higher socioeconomic subgroups. Data for the medium socioeconomic subgroup has been excluded for the sake of simplicity.

The study's findings show that females have a stronger commitment to school, get more satisfaction from school work, and are more likely to discuss their school work with their families. Overall, however, females report little more enjoyment of school than males. Both sexes find school equally interesting and express a similar desire to do well. They also report similar levels of parental encouragement to do well at school.

The most striking differences lie in student responses to questions on the attitudes of their friends to school and whether they are happy to get by with the minimum amount of work. Overall, males more strongly believe their friends are not interested in school—a particularly high proportion of lower SES males, close to one-third, agreed with this proposition—and males were similarly more likely to report they did the minimum amount of work at school as possible. Males in all socioeconomic subgroups were more likely than females to say they find it difficult to get motivated to study.

The differences between higher SES and lower SES males on items associated with the satisfaction and enjoyment they receive from school work are generally insignificant. Lower SES males reported a slightly higher level of agreement with the item 'I get a lot of satisfaction from school work' than the higher SES males, a finding counter to the prevailing patterns.

There are few differences between the female SES groups in the extent to which they report discussing their school work with other family members, but for males the differences are sizeable. Only 29 per cent of lower SES males said they often discuss their school work with their families, compared with 45 per cent of higher SES males. Despite the suggestion in these figures of low levels of direct family involvement in school work for the vast majority of lower SES males, 86 per cent of these students reported that their parents encourage them to do well at school.

Table 8.1 Attitudes towards school by gender and socioeconomic background (% agreement)

	Lower SES		Higher SES		M/F overall
	Male	Female	Male	Female	
Commitment					
Being at school is just filling in time while I decide my future	14.8	9.8**	11.9	8.4**	**
I'm only staying at school because my parents want me to	10.8	7.7*	7.5	4.1**	**
I am happy to get by with the bare minimum of work	24.8	18.5**	21.4	12.3**	**
My friends are not really interested in school	30.6	20.5**	24.8	19.8**	**
I'm only staying at school because there are no jobs available	11.5	5.5**	4.7	2.4**	**
Motivating environment					
I really want to do well at school	86.4	92.9**	88.7	93.8**	**
Being at school will really help me get what I want in life	70.9	75.1	71.5	75.6*	**
I often discuss my school work with members of my family	29.0	44.9**	40.0	47.9**	**
My parents encourage me to do well at school	86.2	82.8	91.3	89.3	**
Intrinsic satisfaction					
I find it difficult to get myself motivated to study	57.5	51.0**	56.0	47.9**	**
I get a lot of satisfaction from school work	32.2	35.4	29.2	36.8**	**
I am interested in the subjects I'm studying	69.0	68.3	69.6	69.2	
Overall, I enjoy school	53.1	56.8	53.0	61.3**	**

Percentage of respondents reporting agreement or strong agreement (four or five on 5-point Likert-scale).

* statistically significant difference between subgroups, $p < 0.05$.

** statistically significant difference between subgroups, $p < 0.01$

8.2 Attitudes towards higher education

The items in Table 8.2 report general attitudes towards higher education. Males and females have similar views on the value of university in developing skills and allowing students to explore interesting knowledge areas. They differ markedly, however, in their perceptions of the social experience of life at university. Females are more strongly interested in campus life, showing considerably higher levels of agreement with ‘life at university sounds exciting’ and ‘going to university offers the chance to meet interesting people’—differences of the order of eight to nine percentage points in all cases. Males on the other hand appear to have comparable instrumental attitudes to females, with both sexes focusing equally on the probable skill development outcomes and the likelihood of university being a worthwhile investment.

Table 8.2 Attitudes towards university by gender and socioeconomic background (% agreement)

	Lower SES		Higher SES		M/F overall
	Male	Female	Male	Female	
Encouraging effects					
University education really helps you develop your skills	82.8	81.6	85.5	87.7	
University study allows you to explore interesting things	65.0	66.7	74.1	77.2	*
Going to university offers the chance to meet many interesting people	72.7	80.1**	76.4	85.2**	**
Completing a university degree is a good investment in the future	81.0	79.6	87.8	87.7	
A university education broadens your outlook on life	61.0	64.6	68.9	73.5*	**
Life at university sounds exciting	53.8	61.5**	64.4	72.8**	**
Disincentives					
Universities are big and unfriendly places	11.7	6.7**	9.0	7.7	**
The years at university are just a way of delaying the hunt for a job	11.4	6.6**	7.2	4.3**	**
Universities are really for wealthy people	19.9	17.1	14.1	12.2	**

Percentage of respondents reporting agreement or strong agreement (four or five on 5-point Likert-scale).

* statistically significant difference between subgroups, $p < 0.05$.

** statistically significant difference between subgroups, $p < 0.01$

On questions directly to do with the personal possibility and likelihood of going on to university (Table 8.3) the most substantial differences between the sexes emerge. With regard to the probable impact of likely university costs on their decision-making there are notable differences between the sexes. While the higher SES gender groups responded similarly to the item 'the cost of uni fees may stop me attending', the lower SES females agreed more strongly than their male counterparts. An alarming 41 per cent of lower SES females reported they believed costs may make university impossible for them (compared with 34 per cent of lower SES males). Similarly, 43 per cent of lower SES females were clearly concerned that their families could not afford the costs of supporting them at university (compared with 37 per cent of lower SES males). These findings may indicate greater alertness and sensitivity on the part of females to their families' financial situations.

Table 8.3 Factors in relevance of post-school options by gender and socioeconomic background*

	Lower SES		Higher SES		M/F overall
	Male	Female	Male	Female	
Relevance of higher education to life & career					
A university degree would improve my chances of getting a job	80.8	79.7	89.4	87.4	
A TAFE course would be more useful to me than a university course	35.2	26.7**	15.7	11.5**	**
A university course would offer me the chance for an interesting and rewarding career	66.7	73.4**	78.8	84.6**	**
I am interested in the subjects I could study at university	57.0	64.5**	72.0	82.7**	**
My parents want me to do a university course	44.3	43.1	67.5	67.7	
I don't see any point in me going to university	25.4	15.3**	10.7	5.1**	**
I want to start earning a proper income as soon as I leave school	40.4	31.5**	23.3	17.3**	**
A university qualification is not necessary for the job I want	32.4	21.7**	19.2	14.0**	**
Achievement barriers					
I don't think my results will be good enough to get into any courses that interest me	37.2	37.7	23.9	25.5	
I probably won't have the subjects required for courses that might interest me	25.6	23.3	16.2	13.6	
Cost concerns					
A TAFE course would be more affordable for me than university	59.4	56.0	45.2	39.9*	*
The cost of university fees may stop me attending	34.1	40.8**	22.7	22.2	*
My family probably can't afford the costs of supporting me at university	36.8	43.2**	20.8	24.4*	**
I would have to support myself financially if I went to university	35.6	36.6	27.6	24.3	
Social support factors					
Most of my friends will probably go to university	35.8	41.7*	45.8	56.7**	**
My teachers have encouraged me to aim for university	40.1	46.4**	54.4	61.5**	**

Percentage of respondents reporting agreement or strong agreement (four or five on 5-point Likert-scale).

* statistically significant difference between subgroups, $p < 0.05$.

** statistically significant difference between subgroups, $p < 0.01$

The gender groups differ little in their attitudes towards potential achievement barriers, such as not achieving higher enough grades or not having the required subjects for entry to courses of interest. Females, though, tend to experience a far more supportive interpersonal environment. They are more likely than males to believe most of their friends will go to university and also more likely to believe their teachers are encouraging them to aim for university. These differences hold for all SES groupings, and are large and statistically significant.

Males appear to believe less in the factors that might generate a strong commitment towards higher education. The degree of variation in attitudes between the sexes is perhaps surprising:

- 35 per cent of lower SES males believed a TAFE course would be more useful to them than a university course, compared with 27 per cent of lower SES females and 12 per cent of higher SES females.
- 57 per cent of lower SES males reported an interest in the subjects they could study at university, compared with 65 per cent of lower SES females and 83 per cent of higher SES females.
- 40 per cent of lower SES males wanted to start earning a proper income as soon as they leave school, compared with 32 per cent of lower SES females.

Some of the differences in gender attitudes towards life after school may be underpinned by lingering perceptions that TAFE courses are more viable alternatives for young males than females, and more work opportunities being available for young males. Overall, however, a picture emerges of males who are less impressed with both the short- and long-term benefits of what attending university might offer. A significant proportion simply do not see higher education as relevant to their needs and career intentions. These conclusions are most applicable to males from lower socioeconomic backgrounds. Females experience more encouraging effects, including perceptions of the support of people around them and an especially positive outlook towards the experience of university life.

9 A summary of the encouraging and inhibiting factors

In terms of students' personal aspirations and expectations for higher education, the study provides evidence of a set of potentially encouraging effects that are consistently stronger for students from higher socioeconomic backgrounds. Equally, it provides evidence of the cumulative effect of discouraging or inhibiting factors that are more prevalent for students from lower socioeconomic backgrounds. It can be concluded that not only do students from lower socioeconomic backgrounds experience inhibiting circumstances, or actual barriers, but they also lack the various mechanisms of support and encouragement that might make going on to university seem relevant and attainable.

To illustrate the consistency of these effects, Tables 9.1 and 9.2 show in turn the student subgroups in most agreement with encouraging and discouraging factors. Where a subgroup is reported in the right-hand column the differences in item means between SES subgroups have been found to be statistically significant. Since in some cases the differences appear small, though statistically significant, items have been starred to highlight where the differences are most pronounced.

Table 9.1 Student subgroups in greatest agreement with factors that potentially encourage higher education participation

Factor	SES subgroup in greatest agreement (L=lower SES H=higher SES)
A university degree would improve my chances of getting a job	H
A university course would offer me the chance for an interesting and rewarding career	H
I am interested in the subjects I could study at university	H*
I think I would have a good time at university	H*
Going to university would offer me the opportunity to become more independent	H
I'm considering university because there aren't any jobs around here	-
My parents want me to do a university course	H*
Most of my friends will probably go to university	H*
My teachers have encouraged me to aim for university	H*

H=statistically significant agreement of higher SES subgroup compared with lower SES subgroup.

H*= pronounced difference between higher SES subgroup and lower SES subgroup.

- = no statistically significant difference between SES subgroups

As Table 9.1 indicates, lower SES students, on average, report less likelihood of experiencing possible ‘encouraging’ factors. Higher SES students on the other hand, benefit from a greater likelihood of believing that university will result in desirable career outcomes, and from stronger perceptions of parental and teacher encouragement.

Conversely, Table 9.2, reporting the ‘discouraging’ factors, reveals a compelling convergence of factors that assist in explaining the under-representation in higher education of people from lower socioeconomic backgrounds. Lower SES students are more likely on average than their counterparts to see a university degree as less relevant to their futures and to be worried by the costs of attending university.

Table 9.2 Student subgroups in greatest agreement with factors that potentially discourage higher education participation

Factor	SES subgroup in greatest agreement (L=lower SES H=higher SES)
I don't see any point in me going to university	L*
A TAFE course would be more useful to me than a university course	L*
A university qualification is not necessary for the job I want	L*
A TAFE course would be more affordable for me than university	L*
I would have to support myself financially if I went to university	L
The cost of university fees may stop me attending	L*
My family probably can't afford the costs of supporting me at university	L*
I want to start earning a proper income as soon as I leave school	L*
It would be difficult for me to find affordable accommodation if I went to university	L
I would probably have to leave home if I were to attend university	-
I don't think my results will be good enough to get into any courses that interest me	L*
I probably won't have the subjects required for courses that might interest me	L*
If I went to university, I would lose touch with my friends	-
Getting organised for university is so complicated I don't know where to start	L

L=statistically significant agreement of lower SES subgroup compared with higher SES subgroup.

L*=pronounced difference between lower SES subgroup and higher SES subgroup.

- = no statistically significant difference between SES subgroups

Factor analytic statistical techniques allow a succinct summary of the project's findings to be prepared from the data presented in the report this far. Table 9.3 shows the scale means for the particular factors identified in student attitudes in Chapter 4 (views on school), Chapter 6 (impressions of university), and Chapter 7 (personal possibility of higher education).

The three scales relating to views on school show only small, though statistically significant differences. Students from higher socioeconomic backgrounds reported the perception of slightly more motivating environments and exhibited a stronger commitment towards school. On the other hand, there were no statistically significant differences between

the student groups in the immediate satisfaction they were finding from school and from school work.

Turning to students' impressions of university, greater differences become apparent. Students from higher socioeconomic backgrounds are more likely to experience the 'encouraging effects' of believing that university study allows you to explore interesting topics, helps you develop your skills and overall is a worthwhile investment. In contrast, possible 'disincentives', such as the belief that going to university is simply delaying the search for employment and that universities are really for wealthy people, are more likely to be experienced by students from lower socioeconomic backgrounds.

Table 9.3 Summary of scale means

Factors	Lower SES	Medium SES	Higher SES
Views on school (Chapter 4)			
'Motivating environment'	3.99	4.04	4.08*
'Intrinsic satisfaction'	3.23	3.26	3.26
**'Commitment'	2.16	2.09	2.01*
Impressions of university (Chapter 6)			
'Encouraging effects'	3.97	4.04	4.16*
**'Disincentives'	2.16	2.12	2.03*
The personal possibility of higher education (Chapter 7)			
'Relevance of HE to life & career'	3.58	3.71	4.01*
'Social support factors'	3.17	3.28	3.54*
**'Achievement barriers'	2.59	2.48	2.27*
**'Cost concerns'	3.23	3.10	2.73*

* denotes statistically significant difference between student subgroups ($p < 0.001$)

** denotes negatively worded scale

Finally, the largest variations emerge between student groups in their responses to questions on the personal possibility of going to university when they finish school. Students from higher socioeconomic backgrounds have a stronger belief in the relevance of higher education to their lives and careers and enjoy a more positively supportive social context, believing most of their friends will attend university and that their teachers are encouraging them to work towards university entry. On the other hand, students from lower socioeconomic backgrounds are more likely to face obstacles and barriers, including a lack of confidence in the attainability of university given the subjects they are studying and their likely school results. The costs of attending university are also a much stronger concern for these students, and they are more likely to believe that their families could not afford the cost of them going to university.

10 Summary and conclusions

10.1 Major conclusions from the study

This study adds to knowledge of the nature of differential participation rates in Australian higher education and how these imbalances might be approached through policy. An important finding is that while there are only marginal differences between the attitudes of student socioeconomic subgroups towards their schooling, the thought of university education shows up marked attitudinal variations. With the expectation of completing secondary schooling now close to a social norm, tertiary education remains the locus of differing class expectations regarding educational participation.

Significant patterns of difference emerge between students on questions to do with the usefulness and attainability of tertiary education. These differences find maximum expression in students' actual intentions for life immediately after school. The attitudinal patterns are consistently linked to students' socioeconomic backgrounds, gender, and to a lesser extent their geographical locations. The study also points to the compound educational disadvantage experienced by young people who belong to multiple under-represented or disadvantaged groups.

Overall, there is a widespread belief among young people that tertiary education provides valuable career outcomes. Most students surveyed indicated they saw value in tertiary study, even those who were intending to commence work after school. Vocational education and training is a lower priority than higher education—going to university is the dominant preference among young people. In broad terms, around two-thirds of students in the sample would prefer to go to university, only one quarter reported a similar attraction for TAFE, and well under 10 per cent intended to work.

The students in the sample who are definitely planning to enrol at university share strong vocational or career motives. They report improving job prospects and opportunities for interesting and rewarding careers as the dominant factor in their thinking. The students in the sample not considering higher education are most likely to indicate that the main reason behind their decision is the greater usefulness of a TAFE course.

While it is possible to debate the appropriateness of various approaches to the definition and measurement of socioeconomic status, the general pattern of educational advantage and disadvantage emerging from the study is fairly

clear. Overall, young people from lower socioeconomic backgrounds appear to consider education in the context of a shorter time horizon and may focus on the short-term opportunity costs of attending university in comparison with young people from higher socioeconomic backgrounds.

Students from lower socioeconomic backgrounds are more likely to experience inhibiting factors and are less likely to experience various influences that might encourage higher education participation. They are less secure about their personal achievement levels and capacities, and possibly lack financial resources. Overall, they have:

- a stronger belief that a TAFE course would be more useful than a university course;
- a weaker interest in the subjects they could study at university;
- less confidence that their parents want them to do a university course;
- a stronger interest in earning an income as soon as they leave school;
- less confidence that their academic results will be good enough for entry to courses that might interest them; and
- less confidence they will have the subjects required for courses that might interest them.

The differences in the views of males and females are substantial. Compared with the females in the sample, the males exhibit less commitment towards school and are less likely to see higher education as being relevant and attainable. Females tend to experience a far more supportive interpersonal environment. They are more likely than males to believe that most of their friends will go to university and also are more likely to believe their teachers are encouraging them to aim for university. They have an especially positive outlook towards the social experience of university life. The effects are more pronounced for males from lower socioeconomic backgrounds.

A significant proportion of students in the study indicated the anticipated cost of higher education is a genuine concern for them. Students from lower socioeconomic backgrounds were the most likely to report concerns about costs. They were more likely to believe the cost of university fees may stop them attending university and that their families probably could not afford the costs of supporting them at university. Well over one-third of lower socioeconomic background students indicated they would have to support themselves financially if they went to university.

10.2 Implications for equity policies and programmes

The attitudes of young people towards post-secondary education as they near the end of secondary schooling are of critical importance to their ongoing education participation and future opportunities.

The findings of the present study, raise a number of considerations for education policy and programmes. Clearly the issue is complex and related to deeply entrenched social differences and attitudes within the Australian community. Despite the findings on financial influences, it is misleading to conceptualise the problem of differential access merely in terms of barriers to access, whether these are financial or based on educational achievement: participation imbalances are caused by demand side factors as well as supply side factors, and the problem is not restricted to lower income or poorer families. While potential financial obstacles to university entry, and in some cases simply the perceived cost of higher education, are contributing factors to lower participation rates, the predominant effects may be to do with the perceived relevance of higher education. Thus the image of the poor student who cannot afford to attend university, although a political and highly emotive one, is an inadequate representation of the situation overall. The problem runs deeper and is associated with psychological or psycho-social factors that result in differing levels of importance and value being attached to higher education. These are not factors that can be rapidly influenced through short-term policy measures.

socioeconomic background is of course only one factor in community and individual diversity, and the traditional, linear school-higher education route is not the only gateway to higher education. However, this is a highly important route. The long-term prospects for broadening higher education participation through this channel are heavily reliant on encouraging and supporting first-generation entrants. The relationship between parental education levels and young people's educational aspirations and expectations is quite clear: more highly educated parents are more likely to create an interest in education and to build an expectation of educational achievement, notwithstanding notable examples of educational success among particular immigrant communities. Rising levels of community educational attainment will therefore have long term generational effects on tertiary education participation.

The study's findings point to at least five areas in which further research might inform policy.

Measurement of individual socioeconomic disadvantage

The analyses conducted for this study show that the method of calculating aggregate participation rates based on postcode index, while adequate perhaps for detecting regional imbalances, probably significantly underestimates the extent of differential access according to individual socioeconomic status. With the broadening of access to university and the reduction of some previous barriers, family attitudes towards the relevance of higher education are likely to be a reasonable predictor of individual participation. This suggests that data on parental education levels might provide the best means for identifying less advantaged students and for monitoring overall change and development in the higher education sector over time.

Cost of higher education

For young people from lower socioeconomic backgrounds who reach the point of considering entering university, the anticipated expense may be a decisive factor. Little is known of how families who may be averse to debt perceive the benefits of the Higher Education Contribution Scheme. Further research in this area would be valuable.

Early broadening of horizons

Since many of the factors underpinning differential access rates do not arise simply at the point of transition to university, further research is needed to understand the ways in which collaborative activities between universities and schools might serve to broaden the horizons of young people and assist in making higher education seem relevant and rewarding.

There is an inevitable tendency for universities to focus student recruitment and equity initiatives on students who are nearing the completion of secondary school. The findings of this study suggest that programmes targeting students close to the point of transition, while important, may have a limited influence on the underlying issue of student aspirations. The implication is that universities must also work with schools somewhat earlier, to assist in broadening young people's horizons well before the final decision-making points. Since many students from lower socioeconomic backgrounds set their sights lower than other students, sustained efforts are needed to improve their awareness of what might be possible for them. It is difficult to imagine how this could effectively occur without schools and universities acting in unison. One strategy worth examining may be the establishment of close relationships between universities and sets of schools catering for under-represented students. If such networks involved sustained linkages and programmes aimed at junior and middle secondary students, then some gains in the long term may be possible. Pilot programmes could be helpful in assessing the possibilities.

Curriculum

The effects of the university curriculum on student access is unclear from this study and further research may be needed to ascertain the extent to which curricula influence students from lower socioeconomic backgrounds to enrol in universities and to continue their studies beyond the first year. Research could examine the effects on participation of the diversification of curricula to incorporate educational alternatives relevant to a wider range of personal interests, abilities and life stages, and the availability of options for entry and re-entry to education at various points throughout life. Further, little is known of the possible impact on participation of curricula which take account of the changing expectation of full-time students for undertaking part-time paid employment while they are studying. More research needs to be carried out fully to understand the ramifications of these trends for academic progress and outcomes, however, the accommodation of part-time paid work may provide for financial stability that encourages entry to university and assists retention.

Selection procedures

Finally, continuing improvement in the pathways into higher education that bypass competitive selection procedures would be beneficial. Competitive entry based on school achievement is a major stumbling block for young people from lower socioeconomic backgrounds, both in their personal assessment of their possibilities and in their actual chances. The older universities, in particular, which are the most subject to the constraints of competitive selection processes (Teese 2000), might need to be the most innovative if they are to widen their student bases in this way. The next decade will be a particularly important period for development in this area.

Appendix A

A.1 The definition and measurement of socioeconomic background and location

The definition and measurement of rurality and socioeconomic status for the purposes of higher education participation is conceptually and methodologically complex. Definition and measurement were critical to this project in two ways: first, in the creation of an appropriate student sample; second, in defining appropriate subgroups for comparative analysis.

Presently, the measure of socioeconomic status and geographical location available to the Department of Education, Training and Youth Affairs is derived from the postcode of a student's permanent home address. Indices (ABS 1990a; ABS 1990b; DPIE 1994) are used to calculate aggregate participation rates for rural and isolated people and people from low socioeconomic backgrounds. The setting of thresholds for high/medium/low socioeconomic status and urban/rural/isolated location is arbitrary.

Area measures based on population average are widely recognised to be inadequate for measuring individual educational disadvantage. In the case of socioeconomic background, a regional or suburban average is clearly an inappropriate measure of the status and wealth of individual families. For measuring rurality and isolation, and the possible education disadvantage of living a long way from a campus, the postcode indices have particular shortcomings for people who live near regional universities or the rural campuses of urban universities.

Western, McMillan and Durrington (1998) re-examined the measurement of socioeconomic background and location under the Evaluations and Investigations Programme, taking into account the reliability and validity of various potential measures and the associated costs of data collection. As an alternative to the present postcode indices, the authors recommended that DETYA collect for each higher education student during the annual statistical data collection:

- the distance of permanent home address from a university campus, from which students would be classified as high, medium or low access; and
- parental education and/or parental occupation for both parents, from which socioeconomic subcategories could be determined.

The first recommendation is based on the assumption that educational disadvantage for rural students is in part related to lack of proximity to a university campus. It is argued that the advantage of this measure is that it would avoid the present problem of rural people who live close to a rural campus or regional university being aggregated with rural people who are vast distances from a campus, thus allowing better discrimination in targeting people for access and equity initiatives.

In collecting demographic information from survey respondents the present project followed the Western et al. (1998) recommendations. The project examined the relative utility of using parental education, parental occupation and home postcode. Highest parental education provided the clearest variations in educational aspirations and was therefore chosen as an appropriate measure of socioeconomic background for the analyses that followed. It is recognised, however, that parental education may not be an adequate indicator of family wealth and household capacity to support the various costs of university attendance.

Some adaptation of the location measures recommended by Western et al. (1998) was believed necessary for analysing and reporting the project data. This adaptation involved separating 'high access' students (those living within 150 km of a university) into two categories, high access/rural and high access/urban, on the assumption that students in country areas may experience rural effects that are impediments to higher education participation — such as limited availability of local employment opportunities for graduates or perceived lack of peer or community encouragement—whether or not they live close to a regional campus. The decision was subsequently justified by the significant differences found between the attitudes of high access/urban and high access/rural students in the sample (see James, Wyn, Baldwin, Hepworth, McInnis & Stephanou 1999a).

The project took into account three interrelated factors, which, individually or in combination, may limit aspirations or access to higher education. These are listed below.

1. **socioeconomic background**, including family expectations and support, and knowledge of higher education options. This factor is measured in the study by highest level of parental education. This SES variable allowed the study to define three SES subgroups by banding as follows.
 - *Lower SES* parents did not attend school, attended only primary school, or attended some secondary school
 - *Medium SES* parents completed secondary school and/or vocational qualification, diploma or associate diploma (e.g. TAFE)
 - *Higher SES* parents completed a university degree

2. physical **access**, that is the distance from home to a university campus, measured by self-reported distance of permanent place of residence to the nearest campus; and
3. **community context**, which includes the local social, cultural and economic context of young people, such as community perceptions of the relevance of higher education to life and employment, the range and level of local employment possibilities, and the relationship between university education and employment opportunities. This factor is measured in the study using the ABS postcode classification of geographical areas.

The last two factors are concerned with student location. The latter, community context, was included in the belief that student attitudes towards the relevance, attractiveness and attainability of higher education would be related significantly to the socioeconomic and cultural differences that exist between urban and rural areas. Therefore, it was assumed that imbalances in urban and rural higher education participation rates are influenced not only by family socioeconomic circumstances and physical access to a university campus, but also by the characteristics of the community environment in which students are living.

The two location variables allowed the study to define the following four student subgroups.

- *Isolated* postcode defined as distant
- *Medium univ. access* rural postcode, 151–300 kilometres to a university
- *High access/rural* fewer than 150 kilometres to a university and home postcode classified as rural
- *Urban* home postcode classified as urban

The low/medium/high banding follows the Western et al. recommendations. Low and medium access students are necessarily rural students, and urban students must be high access. Student home postcodes provided a convenient means of dividing the large high access subgroup, as defined on distance to the campus nearest home, into two distinct categories.

A.2 Data collection

The project surveyed Year 10, 11, and 12 students in three states, New South Wales, Victoria, and Western Australia, with the ‘When I leave school’ questionnaire. A total of 7593 responses were received, 7023 of which were useable.

To complement the survey information, focus groups interviews were conducted in rural and isolated schools in Western Australia and Victoria. Interviews were conducted in 20 schools with approximately 350 Year 10, 11 and 12 students.

A.2.1 'When I leave school ... ' questionnaire

The instrument is available to researchers on request from the Centre for the Study of Higher Education. The questionnaire begins by asking students to indicate their present intentions after completion of secondary school and their degree of confidence about realising these aspirations. Four sections explore the reasons for these responses, moving logically through:

1. 'Your personal goals and priorities';
2. 'Your views about school and further study'; and
3. 'Your thoughts about the possibility of going on to university'; to end with a section,
4. 'For students who are planning or hoping to do a university course'.

In these central sections, general aspirations and perceptions, and the influence of others, are investigated by asking respondents to indicate the extent of agreement with a series of propositions, and the degree of importance of various factors/influences. They are also asked about subjects offered at their schools, and the extent of their knowledge about costs associated with going to university, sources of financial assistance and distance education options. The final section asks for personal and demographic details, including the information used to construct subgroups for analysis purposes: home postcode; distance to the nearest university; and parental education and occupational details.

A.2.2 The project's surveying strategy

Two approaches were used to survey students. First, a stratified sample of 8000 students was randomly selected from the databases of the Victorian Board of Studies (Year 11 and 12 students), the Curriculum Council of Western Australia (Year 12 students), and the NSW Board of Studies (Year 12 students). The students in this sample received questionnaires directly by mail to their home address. Second, a stratified sample of 180 schools—60 in each of the three states—was mailed batches of questionnaires with a request to distribute, collect, and return responses. The school sample allowed the project to survey students not accessible through the central databases in each of the states.

During the initial planning of the study, consideration was given to approximate student numbers Australia-wide according to geographic location and socioeconomic status as calculated by postcode indices. Table A2 indicates, the strong correlation between the indices for location and socioeconomic status. This analysis allowed the project to select appropriate states in which to administer the instrument and to prepare broad sample targets.

Table A1 Summary of sample size by state and year level

	Year 10	Year 11	Year 12	Total
Victoria	1800 (schools)	2000 (central database)	2000 (central database)	5800
WA	1800* (schools)	1800* (schools)	2000 (central database)	5600
NSW	1800* (schools)	1800* (schools)	2000 (central database)	5600
Total	5400	5600	6000	17 000

* Schools were requested to distribute questionnaires equally among Year 10 and Year 11 students.

Table A2 Cross-tabulation of residential location and socioeconomic background for Australians in 17–24 years age group

		Location			
		Distant	Country	Urban	Total
SES	Lower	41 415 1.9%	178 140 8.3%	289 674 13.5%	509 229 23.6%
	Medium	39 731 1.8%	286 694 13.3%	748 064 4.7%	1 074 489 49.9%
	Higher	359 0.02%	13 366 0.6%	557 122 25.9%	570 847 26.5%
Total		81 505 3.8%	478 200 22.2%	1 594 860 74.0%	2 154 565 100%
		distant	country	urban	

Calculated from 1991 census data using postcode categorisation

A.2.3 Questionnaire mailed to students

Since this study is principally a comparative analysis of population subgroups identified on residential location and socioeconomic status, it was essential that the sampling technique generated an appropriate stratification across both dimensions. DETYA currently uses postcode of student permanent home address and two indices for classifying these postcodes (ABS 1990a; ABS 1990b; DPIE 1994) for measuring geographical location and socioeconomic background for the purposes of monitoring participation rates. Location is defined as urban, rural, or isolated, and socioeconomic status as high,

medium, and low. Notwithstanding the previously discussed shortcomings of an area-based index for measuring individual characteristics, student and school postcodes were the only variables available to the research team for preparation of the survey samples.

Once access was granted to the Boards of Studies databases, a similar analysis was conducted on each dataset. Sample targets were selected for each of the nine subgroup cells in the location-SES matrix. To ensure that the project would have subgroup cells with sufficient respondents to permit reliable analysis, increased sample targets were chosen wherever the cell sizes were small.

In total, 8000 students were surveyed using this method. The response rate to the first direct mail to students was 39.7 per cent. After reminder questionnaires were sent to non-respondents, the total number of responses was increased to 4079, a response rate of 51 per cent.

A.2.4 Questionnaires mailed to schools

Students whose home address details could not be accessed through central databases were surveyed through their schools. Year 10 students in Victoria, and Year 10 and 11 students in Western Australia and New South Wales, were surveyed in this manner. The sample was chosen from all Government, Catholic and Independent schools registered with the appropriate State Board of Studies (Victoria and NSW) and the Western Australian Curriculum Council.

Again use was made of the ABS indices to identify school and select the school sample. Schools were classified according to their geographical location and the socioeconomic status of the region or suburb. While the postcode indices do not differentiate between schools on the basis of distance from university campuses, this was considered during sampling by taking account of distance from a capital city or regional city.

For each state, a master list of schools was constructed showing categories in terms of socioeconomic status and geographical location. Sixty schools were selected from each state list, 30 rural/isolated schools and 30 urban schools. Each group of thirty schools comprised 20 government schools, seven Catholic schools, and three independent schools, in approximate proportion to the national attendance by sector. These procedures resulted in the distribution of sample schools reported in table A3.

Table A3 **Distribution of schools in sample**

Victoria						
Rural Sample		HC	MC	LC	MD	LD
	Government		11	7	2	
	Catholic		5	2		
	Independent		3			
	Totals:		19	9	2	
Urban Sample		HU	MU	LU		
	Government		7	7	6	
	Catholic		3	2	2	
	Independent		1	2		
	Totals:		11	11	8	
Western Australia						
Rural Sample		HC	MC	LC	MD	LD
	Government		2	7	5	6
	Catholic		1	2	2	2
	Independent		1	1		
	Totals:		4	10	7	8
Urban Sample		HU	MU	LU		
	Government		5	10	5	
	Catholic		2	3	2	
	Independent		2	3	2	
	Totals:		9	16	9	
New South Wales						
Rural Sample		HC	MC	LC	MD	LD
	Government		1	7	8	1
	Catholic		1	3	3	
	Independent		3			
	Totals:		5	10	11	1
Urban Sample		HU	MU	LU		
	Government		6	11	3	
	Catholic		2	4	1	
	Independent		2	1		
	Totals:		10	16	4	

H= higher SES U= Urban
M= medium SES C= Country
L= lower SES D= Distant

A summary of the school survey response patterns is presented in Table A4 below. The number of returns from individual schools varied considerably. Notional student response rates are provided for illustrative purposes, calculated on the assumption that all questionnaires were distributed.

Some delays were experienced in receiving approval to conduct the research in NSW government schools. The later dispatch of the questionnaires to NSW schools resulted in a lower response rate in that state.

The total number of student responses returned by schools was 3698. Some responses were incomplete and were discarded, leaving 3501 responses.

Table A4 Response rates to school survey

	School response		Notional student response			
	Number of schools surveyed	Number of responding schools	School response rate	Number of questionnaires provided to schools	Number of student responses	Notional student response rate
Victoria	60	50	83 %	1 800	854	47 %
WA	60	42	70 %	3 600	2 031	56 %
NSW	60	27	45 %	3 600	813	23 %
Overall	180	119	66 %	9 000	3 698	41 %

A.2.5 Useable responses and response patterns

The analyses conducted for the report relied on respondents providing information on their parents' education, self-reported distance from a university, and postcode or permanent home address. Some respondents did not provide full information and these responses could not be included in most analyses. In addition, the home postcodes of some respondents could not be classified because they are not included in the 1990 ABS index. These responses also could not be analysed. After putting aside all non-useable responses, 7023 responses were available to the project for analysis (Table A5).

The survey received a lower response rate from males. This pattern of lower male response was most pronounced in the lower socioeconomic subgroup (Table A6).

The data analysis relied on self-reported distance from a university. Students reporting large distances from a campus may be unaware of campuses closer to their homes. Alternatively, students may mistakenly report the distance to a post-secondary institution such as a TAFE campus.

There is always a possibility with research of this kind that students interested in, and committed to, schooling and the possibility of higher education are more likely to respond.

Table A5 Number of useable responses, by respondent socioeconomic background and location

		Lower SES	Medium SES	Higher SES	All
Rural	Low access	376	580	323	1279
	Medium access	127	199	111	437
	High access/rural	491	862	641	1994
Urban	High access/urban	811	1386	1116	3313
	All	1805	3027	2191	7023

Table A6 Gender of respondents, by socioeconomic background and location

		Lower SES	Medium SES	Higher SES	All
Rural	Low access	245 F	327 F	173 F	745 F
		128 M	247 M	150 M	525 M
	Medium access	87 F	122 F	66 F	275 F
		38 M	77 M	45 M	160 M
	High access/rural	332 F	483 F	351 F	1166 F
		157 M	377 M	287 M	821 M
Urban	High access/urban	491 M	757 F	622 F	1870 F
		316 F	628 M	496 M	1440 M
	All	1155 F	1689 F	1212 F	4056 F
		639 M	1329 M	978 M	2946 M

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