

TAFE, university or work?

The **early preferences**

and **choices** of

students in

Years 10, 11 and 12

Richard James

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ISBN 0 87397 525 1 printed edition

0 87397 526 X web edition

TD/TNC 62.13

Published by NCVER

ABN 87 007 967 311

252 Kensington Road, Leabrook SA 5068

PO Box 115, Kensington Park SA 5068, Australia

www.ncver.edu.au



Contents

List of tables and figures	iv
Preface	vi
Executive summary	vii
1 The context	1
Educational participation in Australia	1
The present study	2
2 Methodology	4
The study's conceptual framework	4
The survey and interviews	5
Definition of student subgroups for the analyses	6
3 Student backgrounds and their attitudes towards life and school	9
The relevance of school	9
Significant others	11
Summary	12
4 TAFE, university or work? Demographic patterns	13
The effects of some demographic variables: Gender, school type, year level, ethnicity, part-time work	13
Location and socioeconomic backgrounds	16
Decisiveness and confidence	18
Summary	20
5 Underlying attitudes and objectives	21
Immediate priorities and influential others	21
Attitudes towards school	22
Impressions of university	23
Summary	26
6 The personal relevance of TAFE, university and work	27
Factors influencing present intentions	27
The attractions of TAFE	29
The appeal of higher education	31
Summary	32
7 Key patterns in student attitudes	33
8 Conclusion	36
Discussion	37
References	40
Appendix	43

List of tables and figures

Tables

2.1	Number of useable responses, by respondent socioeconomic background and location	6
3.1	Priority attached to 'Going through and completing Year 12'	10
3.2	Extent of agreement with 'Being at school is just filling in time'	10
3.3	Extent of agreement with 'I'm only staying at school because there are no jobs available'	10
3.4	Extent of agreement with 'I'm only studying at school because my parents want me to'	11
3.5	Importance of views and advice of careers advisers	12
4.1	Post-school preferences by gender (per cent)	14
4.2	Post-school preferences by school type (per cent)	14
4.3	Post-school preferences by year level (per cent)	15
4.4	Post-school preferences of Indigenous students compared with all others (per cent)	15
4.5	Summary of post-school preferences by language spoken at home (per cent)	16
4.6	Post-school preferences by weekly hours of part-time work (per cent)	16
4.7	Summary of post-school preferences by location (per cent)	17
4.8	Post-school preferences by socioeconomic background (per cent)	18
4.9	Time when arrived at present post-school preference (per cent)	19
4.10	Definite plans by post-school preference (per cent)	19
5.1	Students' broad personal objectives by post-school preference	21
5.2	The influences of significant others by students' post-school preference	22
5.3	Extent of agreement with 'You learn more on the job than you do in a classroom or from books'	22
5.4	Attitudes towards school by students' post-school preference	23
5.5	Attitudes towards university by students' post-school preference	24
5.6	Extent of agreement with 'Universities are really for wealthy people'	25
5.7	Extent of agreement with 'Completing a university degree is a good investment in the future'	25
6.1	Most frequently reported factor influencing present intentions, by intention and by SES (per cent)	27
6.2	Most frequently reported factor influencing present intentions, by intention and by location (per cent)	28
6.3	Factors in relevance of post-school options, by post-school preferences	29
6.4	Extent of agreement with 'A TAFE course would be more useful to me than a university course'	30

6.5	Extent of agreement with 'A TAFE course would be more affordable for me than university'	30
6.6	Extent of agreement with 'A university degree would improve my chances of getting a job'	31
6.7	Extent of agreement with 'I am interested in the subjects I could study at university'	32
7.1	Variations in the attitudes of students preferring TAFE and those preferring university (factor means on a 5-point scale, higher score = more agreement)	33
7.2	Variations in the attitudes of students preferring TAFE and those preferring to work (factor means on a five-point scale, higher score = more agreement)	34
7.3	Variations in the attitudes of students preferring university and students preferring to work (factor means on a 5-point scale, higher score = more agreement)	35
A1	Summary of sample size by State and year level	46
A2	Cross-tabulation of residential location and socioeconomic status for Australians in 17–24-years age group	46
A3	Distribution of schools in sample	48
A4	Response rates to school survey	49
A5	Number of useable responses, by respondent socioeconomic background and location	49
A6	Gender of respondents, by socioeconomic background and location	50

Figures

Figure 2.1	Framework for factors influencing student choice	5
Figure 2.2	Guide to interpreting the tables of the report	8

Preface

The research that provided the data for this report was conducted in 1998 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 HEC 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 student attitudes towards going on to university—in particular, it examined the discouraging effects for students living in rural/isolated areas and for students of lower socioeconomic background. The report included a number of policy recommendations for reducing these inhibiting effects.

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, and Jack Darmody prepared the school sample and coordinated the distribution and retrieval of questionnaires.

The author is especially grateful to Gabrielle Baldwin for her contribution to this research program. Marcia Devlin and Carole Hooper kindly read the draft manuscript for the present report and offered many helpful suggestions. Thanks also go to Malcolm Anderson for undertaking the new statistical analyses.

Executive summary

The project

This report investigates the attitudes and aspirations of school students regarding post-secondary education and work. It is based on data from a survey of over 7000 Year 10–12 students in three States. For comparative analysis, the project surveyed students across urban, rural and isolated locations and across all socioeconomic strata.

Key findings

The research reveals appreciable differences in the attitudes of senior secondary students towards the post-school options of vocational education and training (VET), higher education or employment. Student intentions are strongly influenced by socioeconomic background, geographical location and gender. Difference in socioeconomic background, measured in this study by the highest level of education achieved by parents, is the major factor in student perspectives.

- ❖ Around 90 per cent of the sample reported they would prefer to undertake tertiary education after school. Higher education is the goal of most. The gap between higher education and VET is large: around two-thirds of students in the sample would prefer to go on to university, while only one-quarter reported a similar attraction for Technical and Further Education (TAFE).
- ❖ While there is evidence that ongoing learning is widely valued and seen as important for both personal and vocational reasons, many students do not find their school work motivating or satisfying.
- ❖ On the whole, the attitudes of students intending to enrol in a TAFE course are almost indistinguishable from those who plan to work. Prospective TAFE students reveal little of the educational or 'academic' orientation evident in students desiring to undertake higher education. TAFE applicants have shorter term objectives and are less likely to see personal relevance in further study.
- ❖ Work is not a highly favoured option. Well under ten per cent of students in the sample intended to work when they left school. This may reflect the dual effects of tight labour markets for school-leavers, in which low-status service occupations are often the only option, and sustained community confidence in post-secondary education as a means for personal development and career opportunity.
- ❖ Student attitudes towards their post-school options are strongly socially stratified. One-third of students from lower socioeconomic backgrounds expressed a preference for a TAFE course, compared with only 14 per cent of students from higher socioeconomic backgrounds.
- ❖ In a similar vein, only 14 per cent of students attending independent private schools intended to enrol in a TAFE course, compared with 23 per cent of students attending Catholic schools and 31 per cent attending government schools.

- ❖ In general, post-secondary education is seen as less relevant by rural/isolated students, particularly those from lower or medium socioeconomic backgrounds. The cost of higher education is a major deterrent and TAFE courses are viewed as more affordable. On average, rural students, especially those from lower socioeconomic backgrounds, are significantly less likely than urban students to believe that a university course would offer them the chance of an interesting and rewarding career or that their parents want them to do a university course.
- ❖ In aggregate terms, females, young people from higher socioeconomic backgrounds and those living in urban areas are more likely to intend to enrol in a university course than their respective counterparts. On the other hand, students from lower socioeconomic backgrounds, those living in rural or isolated areas, and males tend to express a greater preference for a TAFE course, though the majority of students in these subgroups still indicate a first preference for higher education. The students intending to commence work are similar in profile to those considering a TAFE course.

Implications of the findings

The young people surveyed reflect rather static public perceptions about the relative roles and status of the two post-secondary alternatives in Australia. While the level of commitment among young people to tertiary education and training is reassuring, the dominant interest in 'going on to uni' provides evidence that many school-leavers are poorly informed and unrealistic in their aspirations. VET does not have a high profile among school students, and TAFE courses do not enjoy the status associated with degree courses. Many young people may be unaware of the VET opportunities and outcomes available to them.

The historical juxtaposition of higher education and VET in Australia offers diverse post-secondary educational opportunities. Such diversity is essential for accommodating a wide variety of interests, expectations and capacities. Equally, however, a sharp higher education-VET dichotomy creates perceptions of a hierarchy of value that may inhibit appropriate choices.

Perhaps it is time for a significant reassessment of the negative effects of the current neo-binary model of tertiary education provision and opportunities. It seems likely that the national imperative of lifelong education will be best served by a highly flexible spectrum of education and training opportunities. If this is the case, then existing conceptions of higher education and VET may look increasingly irrelevant as people participate in short- and long-term educational opportunities at various stages in their lives and careers.

Continuing efforts to reduce the image problem borne by TAFE and VET in general will be valuable, as will efforts to reduce the perceived status/relevance differential between higher education and VET. It is simple, of course, to suggest the profile and status of VET should be raised, but far more difficult to identify the steps that might be taken. Some blurring of the boundaries and distinctions between higher education and VET is already occurring; however, sustaining marketing efforts might accelerate the breakdown of the present dichotomy into a more continuous spectrum of education and training opportunities.

1 The context

Educational participation in Australia

Participation rates in Australian education have risen significantly during the past 10–15 years. 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. The participation rate for 15–19-year-olds in higher education increased from 6.5 per cent in 1985 to 10.5 per cent in 1997, and for 20–24-year-olds rose from 9.1 per cent to 15.0 per cent. During the same period, the Technical and Further Education (TAFE) participation rates for 15–19-year-olds declined slightly (from 20.5 per cent to 17.9 per cent), while the participation of 20–24-year-olds grew from 12.7 per cent to 14.9 per cent.

In 1997, 79.4 per cent of 15–19-year-olds were participating in education: 49.5 per cent in school, 19.1 per cent in TAFE or other forms of vocational education and training (VET), and 10.7 per cent in higher education. It is estimated that 90 per cent of present school-leaver cohorts can be expected to undertake tertiary education of some kind during their lifetimes, with roughly equal numbers participating in higher education and VET (and, of course, in various combinations of both).

This snapshot of Australian education participation is important for a number of reasons. The participation figures offer an insight into the advances made in opening up opportunities for formal post-compulsory education for all Australians. Yet while Australia is on the brink of achieving universal tertiary education, there are areas for concern. School retention rates, which climbed steadily during the 1980s and early 1990s, have plateaued. In some States they are even in serious decline, particularly for males. Furthermore, educational participation is significantly socially stratified, especially according to socioeconomic background. Of particular concern for policy relating to the secondary-tertiary transition are the persistent socioeconomic and geographical imbalances in post-secondary educational opportunity.

Certain groups of Australians are significantly less likely to participate in tertiary education. Current estimates suggest that, on a per capita basis, for every ten urban people who attend university, roughly six rural/isolated Australians do so (James, Wyn, Baldwin, Hepworth, McInnis & Stephanou 1999a). The situation for people of lower socioeconomic background is slightly worse. Importantly, this under-representation is not offset by participation in VET. Stevenson, Maclachlan and Karmel (1999) have shown that regional participation imbalances in VET are less sizeable than those for higher education participation, but significant in magnitude nonetheless.

Post-secondary education is not equally attainable for all Australians, nor seen as equally relevant. In regard to higher education access and participation for rural and isolated people, James et al. (1999a: ix) make the following point:

Despite the explicit barrier or disincentive created by the cost of attending university, expense is not the only or major influence on student attitudes. The present imbalances in higher education participation in Australia also reflect differences in family and community attitudes towards the relevance of education. The effects of these powerful social influences 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 in families and communities where higher education is seen as less relevant to life and employment, completing school and going on to university is not yet the norm.

Imbalances in tertiary participation and the causes for them have been the subject of a number of studies during the 1980s and 1990s, including DEET (1994), NBEET (1991), Parker et al. (1993) and Williams et al. (1993). For the higher education sector, 'A fair chance for all' (DEET 1990) identified key target groups for equity and access initiatives.

Generally, it is believed that young Australians with low educational levels are increasingly vulnerable and at risk of being marginalised in labour markets that require sophisticated skills in a 'knowledge society' (see for example Kirby 2000). For this reason, among others, the 1990s have been marked by consensus on the desirability of 'lifelong learning' for all Australians.

Young people completing secondary education around the year 2000 will have working lives that extend through to the year 2040. Most will have careers which are complex and in a continual state of change. While no-one can foresee the future nature of work with precision, we can confidently expect most people will undergo a larger number of job and career changes than those experienced by preceding generations. In addition, with the 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 require regular renewal. For most people, these trends will place a premium on participation in education and training throughout their lives.

The imperative of lifelong education 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 pivotal in setting-up attitudes towards ongoing involvement in formal learning.

With little doubt, most young people and their families are facing increasingly complex and sometimes difficult choices near the end-point of secondary schooling. They have a potentially bewildering array of university and course options and must undertake a complex decision-making process. The range of tertiary options has expanded, and post-secondary institutions are now vigorous in their marketing of themselves and their courses. Research by James, Baldwin and McInnis (1999b) has revealed a degree of uncertainty, information shortfalls and indecision among tertiary applicants that is disturbing. Major studies of the first-year university experience (McInnis & James 1995; McInnis, James & Hartley, forthcoming) show that about one-third of first-year students believed that, looking back, they were not ready to choose a course during their final school year. In addition, students and their parents also face increasingly significant cost-benefit decisions to do with the rising cost of pursuing post-secondary education.

The present study

Part of the complexity for the prospective tertiary student is that Australia has developed a strongly two-tiered approach to the provision of public post-secondary education since the creation of the Unified National System of higher education in the late 1980s. VET is provided by the TAFE sector, other government providers, community education providers and other registered providers. Higher education is the province of the universities. The universities continue to be recognised for providing professional and liberal academic courses, while TAFE has developed a strong reputation for vocationally relevant training, for attracting mature-age students, and for showing flexibility and responsiveness to student and industry needs. Though some softening of the sectoral boundaries has occurred in recent years, post-secondary education opportunities still represent for most school students a dichotomous choice between going on to TAFE or university.

The present study was an opportunity to examine how young people nearing the completion of their schooling view the relative relevance and attainability of VET, higher education and

employment. In 1998, the Centre for the Study of Higher Education created a significant database comprising over 7000 young Australians' attitudes and views on life, school, and post-secondary education. These young people, in Years 10, 11 and 12, were surveyed as part of a major study, *Rural and isolated school 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 (HEC). Interviews were also conducted in selected rural/isolated schools. Some student comments from these interviews incorporated in the original study are again reported here.

This dataset is significant in three ways:

- ❖ 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 socioeconomic status [SES] students), by gender, and by various combinations of these three factors.
- ❖ The study asked students about their post-school priorities and intentions in regard to work and a number of educational options, allowing direct comparison of the views of three subgroups: those students preferring TAFE, those preferring university and those preferring to enter the full-time workforce immediately.
- ❖ 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 objectives of the present analysis were to:

- ❖ examine Year 10–12 students' attitudes and intentions regarding post-compulsory education and training alternatives
- ❖ illuminate the effects of location, socioeconomic background, gender and other influences on decision-making
- ❖ discuss the implications of the findings—in particular, for relevant institutions providing the community with information to aid choice and decision-making about VET

Just as students talk of going on to 'uni' rather than 'higher education', 'TAFE' is the common expression for vocational education and training. For this reason, terms such as 'go on to uni' and 'go on to TAFE' were used in the questionnaire. This approach ensured that respondents who were focused on either VET or higher education could be identified with some confidence. This usage was not intended to imply that the provision of VET is limited to public providers. For practical purposes, it is assumed that 'TAFE' serves as the most common and well-understood expression in the public lexicon and that it covers a wide range of VET opportunities, both public and private.

The data from this study are not particularly nuanced, given the large variety of pre-vocational, preparatory and VET multi-field education courses. This is inevitable when a dataset generated for another project is utilised for new purposes. Despite this, the present analysis yields important findings and insights.

The present analyses add valuable empirical research to the existing studies in this area, including the recent market research into Australians' attitudes towards learning commissioned by the Australian National Training Authority (ANTA 2000a) and the work of Golding and Volkoff (1995, 1997a, 1997b, 1998) and Kilpatrick (1999) on access and equity and related issues. The findings will be of interest to policy-makers, researchers, institutional managers, and staff with responsibilities for student recruitment. The final chapter discusses in detail the overall conclusions and implications of the study.

2 Methodology

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 lives, and 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 shape or already well formed.

The study's conceptual framework

The conceptual framework developed by James and Baldwin for the study places specific choices about tertiary courses and institutions in the context of broader life choices, priorities and values.

Tertiary education participation and the factors influencing participation have been the subject of some scrutiny. A number of studies related to higher education participation have been conducted since the early 1980s, including Anderson and Vervoorn (1983), Williams et al. (1980), Elsworth et al. (1982), Carpenter and Western (1989), Wyn and Lamb (1996) and Dwyer (1997). 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).

Clearly, 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)
- ❖ academic achievement (final school academic results)

Drawing on these ideas, the conceptual framework for the present research (figure 2.1) 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 2.1 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 2.1: Framework for factors influencing student choice

CONCEPTUAL FRAMEWORK			
<p>Current hopes, expectations and specific intentions</p> <p>Perceived factors influencing present thinking</p>	<p>1a. General aspirations and beliefs (about life and career)</p> <p>1b. Aspirations and beliefs about school</p> <p>1c. Aspirations and beliefs about educational alternatives</p> <p>Perceived attractiveness, intrinsic/extrinsic benefits</p> <p>Perceived attainability</p>	<p>2. Influences, including:</p> <ul style="list-style-type: none"> ❖ Family ❖ School ❖ Community ❖ Information sources 	<p>3. Personal context</p> <p>Personal background and present context</p> <p>Socioeconomic background, type of schooling, geographical location</p>

The survey and interviews

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 (SES) (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.

It was not an objective of the sampling to prepare a sample representative of the national student population. Rather, the goal was to ensure that the dataset would be large and diverse 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 2.1 shows, the project's sampling strategy and student response patterns have generated location and socioeconomic background subgroups which are sufficiently large to permit confident comparative analysis.

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 dataset. In later analyses by socioeconomic background and location, the gender variable was included.

In addition to the survey, the original HEC study also incorporated interviews with student focus groups conducted in 20 rural or isolated schools in two States. Some insights from these focus groups and selected student comments reported in the previous study are also included in the present report.

Table 2.1: Number of useable responses, by respondent socioeconomic background and location

LOCATION		SOCIOECONOMIC STATUS			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	376	580	323	1279
	Medium uni access	127	199	111	437
	High uni access	491	862	641	1994
Urban		811	1386	1116	3313
	All	1805	3027	2191	7023

Definition of student subgroups for the analyses

In framing the study and defining student subgroups for data analysis, the principal grouping is according to students' self-reported post-school preference. In addition, the study examines variations by socioeconomic background and geographical location in the assumption that educational advantage and disadvantage can be attributed to these factors, individually or in combination.

The definition and measurement of SES and rurality or isolation are notoriously difficult. Aggregate higher education participation figures are calculated 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 (DETYA). 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 SES 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 also 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 long distances from tertiary education centres.

With these concerns in mind, the approach taken to define student subgroups for the purposes of the present study are summarised below.

1. Post-school preference subgroups

Three subgroups are defined according to respondents' immediate post-school intentions:

<i>Prefer TAFE</i>	all respondents who indicated an intention to enrol either full time or part time in a TAFE course, including intending to look for an apprenticeship
<i>Prefer university</i>	all respondents who indicated an intention to enrol either full time or part time in a university course
<i>Prefer work</i>	all respondents who indicated they would commence work

2. Socioeconomic background

The measurement of SES is always contentious. The usual measures of family SES are parental employment category, family income, or parental education level, either individually or in combination. Each of the three measures has shortcomings. For this study, parental educational attainment was chosen as a suitable measure of students' socioeconomic background. The project also had available to it parental occupation information, and our analyses show that similar patterns emerge in the findings when this is used as the measure of SES. Ultimately, we opted to use parental education attainment, for we believe it provides the clearest picture of the likely encouragement and commitment of families to their children's education. Granted, this decision introduces a skewing effect—by definition, the variable used to measure SES has inherent biases to do with the likely 'educational capital' of families.

The socioeconomic background variable allows the study to define three subgroups:

<i>Lower SES</i>	parents did not attend school, attended primary school, or attended some secondary school
<i>Medium SES</i>	parents completed secondary school and/or vocational qualification, diploma or associate diploma
<i>Higher SES</i>	parents completed a university degree

3. Location

The dataset permits 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 HEC). This allows 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):

<i>Isolated</i>	home postcode classified as 'distant' (generally more than 300 km to a university campus)
<i>Medium univ. access</i>	151–300 km to a university campus
<i>High univ. access</i>	less than 150 km 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 less 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 2.2: Guide to interpreting the tables of the report

INTERPRETING THE TABLES IN THE REPORT

The subgroups

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 km to a university
	<i>High univ. access</i>	less than 150 km to a university

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

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.

3 Student backgrounds and their attitudes towards life and school

It is appropriate to begin the presentation of the study's findings with a brief, broadbrush account of the attitudes of the young Australians surveyed by the project. As reported previously (James et al. 1999a), the general views and goals of the young people in the study are in many ways similar. However, substantial differences between student attitudes tend to be revealed in the confidence and security they have in their futures. Even more significant patterns of difference emerge on questions to do with the relevance of school and the usefulness and attainability of tertiary education. These patterns are linked to students' socioeconomic backgrounds more than their geographical locations. Since the variable measuring SES in this study is based on parental education levels, this finding is not unexpected: it confirms that parents' educational background is a strong determinant of young people's attitudes towards the relevance and attainability of education and significantly affects the options they consider.

In terms of young people's overall personal priorities, students from lower socioeconomic backgrounds are a distinctive group, as has been reported earlier (James et al. 1999a: 35):

They seem somewhat more concerned with job security and less with the inherent interest of further learning, and to be more inclined to want to meet parental and family expectations. Notable patterns of difference also emerge between urban and rural students. Urban students place more emphasis than rural students 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.

The relevance of school

The students surveyed for this study are very similar in their immediate priorities. Successfully completing school is a high priority for most students. A large majority of students, from all socioeconomic groups, and in both rural and urban areas, are keen to succeed at school and to finish Year 12. Questionnaire items relating to school were given the highest priority by all subgroups, with high overall means on a five-point scale: 4.45 for 'doing well at school' and 4.60 for 'going through and completing Year 12' (table 3.1).

In all, 75 per cent of students indicated that completing Year 12 is a very high priority for them. There are small statistically significant differences between student subgroups in the strength of this priority, with the lowest priority for completing Year 12 being given by lower socioeconomic background, isolated students and the highest priority being given by higher socioeconomic background, urban students.

Most students appear reasonably confident that school will help them achieve their goals in life, but some students are equally attracted to the immediate 'returns' offered by employment. As table 3.2 indicates, a significant number of students, particularly those in isolated locations or from lower socioeconomic backgrounds, admit that school is simply 'filling in time' until they decide what to do with their lives. This group is still a minority, however, even among the lower socioeconomic background, isolated students who are perhaps the most at risk of being educationally disadvantaged on the basis of other measures used in this study.

Table 3.1: 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)

LOCATION		SOCIOECONOMIC STATUS			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	4.42	4.49	4.62	<u>4.49</u>
	Medium uni access	4.61	4.66	4.71	<u>4.65</u>
	High uni access	4.50	4.55	4.70	<u>4.58</u>
Urban		4.64	4.64	4.70	<u>4.66</u>
All		<u>4.54</u>	<u>4.59</u>	<u>4.68</u>	

See figure 2.2 for a guide to interpreting the table. Underlining indicates the SES variable and location variable make significant contributions to explaining variation in this item.

Table 3.2: 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			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	2.26	2.13	2.10	<u>2.17</u>
	Medium uni access	2.04	1.85	1.82	<u>1.90</u>
	High uni access	2.08	2.03	1.93	<u>2.01</u>
Urban		2.09	2.09	2.05	<u>2.08</u>
All		<u>2.13</u>	<u>2.07</u>	<u>2.02</u>	

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.

Clear differences emerge between rural and urban students in their responses to the statement ‘I’m only staying at school because there are no jobs available’ (table 3.3). While the respondents overall generally did not agree with this statement, those living in rural communities and those from lower socioeconomic backgrounds were more likely to do so.

Table 3.3: 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			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	1.82	1.69	1.46	<u>1.68</u>
	Medium uni access	1.71	1.48	1.41	<u>1.54</u>
	High uni access	1.79	1.65	1.43	<u>1.61</u>
Urban		1.55	1.45	1.40	<u>1.46</u>
All		<u>1.69</u>	<u>1.55</u>	<u>1.42</u>	

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

Significant others

Parental interest and involvement in children’s school achievement and discussion of school work at home can be expected to shape young people’s beliefs about the relevance of education in significant ways.

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 level of agreement with the statement ‘I’m only staying at school because my parents want me to’ (table 3.4), overall, students from lower socioeconomic backgrounds and isolated areas were more likely to agree. These differences may be due to slight variations in students’ personal objectives; equally, they may be evidence of some parents in rural and regional areas displaying anxiety about the future of their communities, and viewing education as important insurance against future difficulty.

Table 3.4: 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)

LOCATION		SOCIOECONOMIC STATUS			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	1.85	1.79	1.65	<u>1.78</u>
	Medium uni access	1.71	1.51	1.59	<u>1.60</u>
	High uni access	1.70	1.67	1.53	<u>1.63</u>
Urban		1.74	1.65	1.62	<u>1.66</u>
All		<u>1.76</u>	<u>1.68</u>	<u>1.61</u>	

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 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 rises according to family SES.

As expected, 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 (see table 5.2). 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. However, as discussed later, the students intending to opt for TAFE or to work once they complete school show a stronger tendency to listen to the views of their peers (see chapter 5).

Overall, the advice of teachers and careers advisers is considered to be more important by students than that offered by friends and other family members such as siblings. Small differences, linked to socioeconomic background, are evident in the effect of careers advisers on students’ planning. As table 3.5 shows, students from lower socioeconomic backgrounds place more emphasis, or have more reliance, on the advice of careers advisers than students from higher socioeconomic backgrounds, regardless of their particular geographical location.

Table 3.5: Importance of views and advice of careers advisers

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

LOCATION		SOCIOECONOMIC STATUS			All
		Lower SES	Medium SES	Higher SES	
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		<u>3.40</u>	<u>3.35</u>	<u>3.17</u>	

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

Summary

In many ways the students surveyed for this study are similar in outlook, but the preceding examination of backgrounds and attitudes to life after school reveals important, though sometimes predictable, findings. The relevance of school rises with family SES. In particular, there is a strong 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 opportunities emerge.

Geographical location also has some influence over student attitudes. Students in rural and isolated locations are less likely to see relevance in school than urban students, though generally the effects of location on the views of young people appear to be smaller than those of SES.

4 TAFE, university or work?

Demographic patterns

The *When I leave school ...* questionnaire invited students to nominate their principal personal preference, assuming there were no constraints, for what they would do when they leave school. Their responses provide insights into the relative attractiveness of TAFE, university and work for Australian youth in the late 1990s, data which will serve as future reference points for detecting changes in community preferences and expectations.

Overall, 25 per cent expressed a preference for studying at a TAFE college (either full time or part time, including apprenticeships—of the students who indicated they preferred a TAFE program, close to one-quarter were interested in an apprenticeship), 63 per cent a preference for studying at university (either full time or part time), seven per cent a preference for work, and five per cent a preference for other activities. Many of these students' preferences will not eventuate, of course. If previous patterns are a guide, fewer will go on to university than would like to, more will enrol in a VET course of some kind, and more will seek employment. Many, of course, will explore a number of alternatives, often over a number of years, before settling on a preferred option.

Close to 90 per cent of the sample consider tertiary education of some kind as a personal preference. This is evidence of strong educational confidence and commitment in the three States in which the study was conducted, and possibly indicative of community attitudes throughout Australia. Within this broad figure, however, the sub-group variations are marked, revealing post-school preferences which are heavily socially stratified.

The effects of some demographic variables: Gender, school type, year level, ethnicity, part-time work

Gender

Males and females differ significantly in their preferences, with males in the sample considerably more likely to express a desire to attend a TAFE college and marginally more likely to seek work than females (table 4.1). The stronger interest among females in higher education has been showing up for some time in their growing representation among commencing higher education students. In 1999, females accounted for 55.6 per cent of all commencing higher education students and males 44.4 per cent (DETYA 1999)—put in other terms, for every 100 females commencing higher education there are presently around 80 males doing so. In schools, females appear more committed to educational achievement and are consistently outperforming their male counterparts in examination performance.

The gender differences in attitudes towards the post-secondary education alternatives doubtless reflect numerous social and economic trends, and it would be unwise to speculate on the dominant factors. On the one hand, these findings may be evidence of a lingering association of TAFE with trades and other occupations that have traditionally been male-oriented or exclusively male. On the other hand, the findings may add weight to the evidence of alienation and disaffection with traditional liberal school education of many adolescent males and the greater attractiveness and relevance some find in VET.

Table 4.1: Post-school preferences by gender (per cent)

	Males (N=2941)	Females (N=4037)
Prefer TAFE	29.9	23.8
Prefer university	61.5	70.2
Prefer work	8.7	6.0
Total	100.0	100.0

The females in the survey were more interested than the males in doing well at school and completing Year 12, while the males gave a higher priority than females to earning money and to interests outside school, such as being involved in sport and pursuing hobbies. When they consider their priorities for the future, females tend to place greater value than males on learning and understanding more about the world, making a contribution to society, being close to families and having opportunities to travel, while males place more importance than females on making a good deal of money and meeting the expectations of their families.

Respondents' views about schooling create an impression of males who are less motivated, less engaged and more likely to be at school because their parents want them to be or because there are no jobs available. Their friends are also less likely to be interested in school. The females, on the other hand, indicate a stronger desire to do well at school and a firmer belief that it will help them achieve what they want in life, greater satisfaction in study and enjoyment of school. They are also more likely to discuss their school work with members of their families.

The males in the study tend to express more instrumental views, especially in their attitudes towards university. They are more likely to agree that you learn more in the 'real-world' (that is, in the workforce) than you do in a classroom or from books, that university is a way of delaying the hunt for a job, and that universities are for wealthy people. In terms of their own choices, they are more likely to be considering further study because of a lack of jobs and to indicate that they want to start earning money immediately. They are also more likely to believe that a degree is not necessary for the job they want and to see no point in going to university.

School type

In addition to these gender variations, there are also marked differences between student attitudes according to the type of school they are attending (table 4.2). Relatively few students attending independent schools are intending to enrol in TAFE or to work, reflecting the traditional academic and higher education orientation of the majority of these schools. Nevertheless, over 17 per cent, or about one in six, of the students at independent schools expressed a preference for these options. Students attending government schools were the least likely to indicate a preference for higher education. Of the students in government schools intending to enter post-secondary education, almost one in three prefer a TAFE course.

Table 4.2: Post-school preferences by school type (per cent)

	Government school (N=4093)	Catholic school (N=1880)	Independent school (N=986)
Prefer TAFE	30.9	23.0	13.8
Prefer university	60.6	71.2	82.6
Prefer work	8.6	5.8	3.6
Total	100.0	100.0	100.0

Year level

The sample of Year 10 and 11 students in this study doubtless includes students who will not complete Year 12, as is apparent in the variations in attitude across the students in the three years (table 4.3). Compared with Year 12 students, those in Year 10 and 11 were more likely to express a TAFE preference. Predictably perhaps, students who have reached Year 12 express a considerably stronger preference for the university pathway. As reported earlier (James et al. 1999a: 20), the attitudes and aspirations of Year 10 students revealed by this study

... appear idealistic yet confused and paradoxical. They appear more interested in learning for its own sake than their older peers, while at the same time they attach a higher priority to earning money, having a high-status career, and finding a job that uses their talents; everything is still possible it would seem. The point at which trade-offs in one's ambitions or prospects must be faced still lies ahead for many Year 10 students. In contrast, Year 11 and 12 students are more pragmatic in their objectives and assessments of what is possible for them.

Table 4.3: Post-school preferences by year level (per cent)

	Year 10 (N=1948)	Year 11 (N=2220)	Year 12 (N=2793)
Prefer TAFE	29.1	28.5	22.8
Prefer university	64.8	64.1	69.5
Prefer work	6.1	7.4	7.7
Total	100.0	100.0	100.0

Among the Year 10 students is a group of young people who have already made firm decisions to leave school as soon as possible—the post-school directions are setting, or are set, for a sizeable group of Year 10 students, though the actual decision points may come later. Year 10 students are more likely than students in the later years to report that their friends are not interested in school. Comparison of student attitudes across the year levels provides further evidence of disillusionment with the school environment in the middle secondary years, and the gradual building up of a peer—and perhaps family and community—environment that acts against educational involvement.

Ethnicity

The study did not deliberately seek an appropriately balanced sample of Indigenous students, therefore the 182 responses collected from these students may not be representative of the views and attitudes of this group overall. Nevertheless, the data that were collected suggest large differences are likely to found between the attitudes of Indigenous students and other students (table 4.4).

Table 4.4: Post-school preferences of Indigenous students compared with all others (per cent)

	Aboriginal or Torres Strait Islanders (N=182)	All others (N=6595)
Prefer TAFE	38.1	25.7
Prefer university	46.0	67.4
Prefer work	15.9	6.8
Total	100.0	100.0

The Indigenous students in the sample were much more likely than others to be considering working after school. TAFE was also a much stronger preference for these students. The

Indigenous students are the only subgroup whose preference for higher education falls below 50 per cent of the group, and the only group for which the preference for TAFE begins to look as though it might match the university preference.

These patterns are reversed for students who speak a language other than English (LOTE) in their homes (table 4.5). For these students, higher education is the dominant intention, reflecting the value attached to university education by many immigrant groups and the strong expectation of many families that their children will attend university and enter professional careers. Work is a priority for a much smaller proportion of students who speak a language other than English in their homes than for other students in the sample.

Table 4.5: Summary of post-school preferences by language spoken at home (per cent)

	Language other than English spoken at home (N=1192)	Only English spoken at home (N=5750)
Prefer TAFE	23.6	27.0
Prefer university	71.9	65.4
Prefer work	4.5	7.6
Total	100.0	100.0

Part-time work

About half the students in the sample were not engaged in any part-time paid employment during a typical week. However, 15 per cent of the students were working longish hours, ten hours per week or more. Students expressing a preference for TAFE or full-time employment had a tendency to be doing more part-time work during a typical school week than the students intending to enrol in university (table 4.6).

Table 4.6: Post-school preferences by weekly hours of part-time work (per cent)

	0 hours (N=3173)	1–5 hours (N=1132)	6–10 hours (N=1331)	11–20 hours (N=806)	20+ hours (N=119)	Total
Prefer TAFE	44.1	15.5	21.5	15.7	3.2	100.0
Prefer university	50.1	18.3	19.8	10.7	1.1	100.0
Prefer work	48.2	13.9	20.1	14.1	3.6	100.0

Location and socioeconomic backgrounds

Geographical location and family SES have considerable impact on student attitudes and expectations. Young people in rural areas are more likely to be considering TAFE, as are students from lower or medium socioeconomic backgrounds. In addition, rural students and students from lower socioeconomic backgrounds appear considerably more inclined to leave school to take up available employment than their peers. In particular, the study suggests that rural students who wish to continue living in their towns and region may be on the look-out for upcoming employment opportunities and may accept employment options even if they do not correspond with their principal ambitions in life.

Location

Student preferences for TAFE or work increase as their distances from major urban centres and university locations increase (table 4.7). The subgroup of isolated students appears to be a distinct group. While overall they still express a strong preference to attend university, as do all subgroups, they are more likely than urban and other rural students to be interested in TAFE or work. The patterns in student attitude according to their location probably reveal differences in both the relevance and accessibility of post-secondary education. Overall, the urban students show a much stronger interest in higher education.

As table 4.7 shows, rural students are less likely to express a preference for attending university than urban students, although the differences on this dimension are not as strong as the differences according to socioeconomic background described shortly. The location effect is most marked for isolated students, with 55 per cent of these students indicating a preference for attending university, compared with approximately 62 per cent of other rural students and 68 per cent of urban students.

No strong differences emerge between the proportions of rural or urban students who would like to pursue TAFE studies, except for the isolated group. Students in this group have a stronger tendency towards TAFE than the rural or urban groups, with a total of 32 per cent indicating a preference for TAFE study. This stronger preference for TAFE may be due in part to the presence of TAFE colleges either in, or in close proximity to, more remote rural regions, allowing students to attend without the costs and personal stresses associated with the relocation necessary for metropolitan university attendance.

Table 4.7: Summary of post-school preferences by location (per cent)

	RURAL			URBAN
	Isolated	Medium uni access	High uni access	
Overall prefer TAFE	32.0	26.2	25.0	22.3
<i>Study at a TAFE college</i>	21.3	16.2	15.4	17.6
<i>Take an apprenticeship</i>	10.7	10.0	9.6	4.7
Overall prefer university	55.0	62.8	61.2	68.0
Overall prefer work	9.5	7.3	8.1	5.2
<i>Work in a full-time job</i>	8.3	6.8	7.2	4.9
<i>Work in family business</i>	1.2	0.5	0.9	0.3
Other	3.4	3.7	5.7	4.4
Total	100.0	100.0	100.0	100.0

Socioeconomic background

The most striking differences in student attitudes are related to their socioeconomic backgrounds. Recalling that the study uses parental education as proxy for SES, it is apparent from the findings that the level of parental education is the single most important factor in determining the attitudes of students towards life after school and the possibility of tertiary education. The students from higher socioeconomic backgrounds—that is, those having a parent or parents who have completed an undergraduate degree or higher—tend to stand out. For these students with university-educated parents, TAFE is far less likely to be a consideration.

While TAFE study is seen as a less desirable 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. Compared with the higher socioeconomic background subgroup, twice the proportion of lower socioeconomic background students nominate a preference to attend a TAFE college after completing school.

Put in another way, only 14 per cent of higher socioeconomic background students indicated a TAFE preference compared with around one-third of students from medium or lower socioeconomic backgrounds. This difference may reflect the composite effect of a number of interrelated variables, including the differing entry requirements to TAFE colleges compared with university; the alternative school subjects required for entry to TAFE or university; the differences in the cost of study; and the view held by some students that a university qualification may be unnecessary for the type of employment they seek.

Similar clear differences exist between students from higher socioeconomic and lower/medium socioeconomic backgrounds with regard to the option of working in full-time employment. Compared with the higher socioeconomic background students, approximately twice the proportion of lower and medium socioeconomic background students have a preference for working after completing school. Around ten per cent of lower socioeconomic background students indicate work as a preferred activity, compared with less than four per cent of higher socioeconomic background students.

Table 4.8: Post-school preferences by socioeconomic background (per cent)

	Lower SES	Medium SES	Higher SES
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 university	52.9	59.3	76.8
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
Total	100.0	100.0	100.0

These marked differences between socioeconomic groups regarding preference for university may be due in part to the opportunity cost of attending university. That is, it is the money that will be foregone for potentially employable family members that may be an important factor in the lower interest shown in university participation by some student subgroups. This conclusion is supported by the higher proportions of lower and medium socioeconomic background students seeking apprenticeships or full-time employment, where money coming into the household from those activities may be essential.

Decisiveness and confidence

The questionnaire asked students to indicate the approximate time at which they had reached their present preference for life after school. Many of the students preferring higher education appear to have been raised in an environment in which progression to higher education is assumed and expected, most indicating they had arrived at a higher education preference a number of years ago. Even so, 29 per cent of these students made their decision only within the previous year (table 4.9).

The students expressing a preference for TAFE or work are less decisive in comparison. Over 40 per cent of these students arrived at this preference within the year preceding the survey, and a far greater proportion reported that they were still very undecided or had not really

thought about the issue—overall, well over one quarter of the students who expressed a preference for TAFE or work confessed they were ‘still very undecided’ or ‘hadn’t thought about it at all’.

Table 4.9: Time when arrived at present post-school preference (per cent)

	Prefer TAFE	Prefer university	Prefer work
Past year	43.8	29.0	40.6
2 to 3 years ago	19.8	32.1	19.4
More than 3 years ago	10.5	31.5	10.8
Still very undecided	17.9	7.0	19.1
Haven’t thought about it at all	8.1	0.5	10.1
Total	100.0	100.0	100.0

In addition to asking students what they would prefer to do after completing school, assuming no constraints on this choice, the survey asked them to indicate what they believed it was *most likely they would do* (table 4.10). The responses provide insights into students’ confidence and decisiveness—in particular, they highlight the relative uncertainty of many of the young people who are expressing a preference for TAFE or work. In contrast, the students who indicate a university preference are more definite in their plans, though 16 per cent of these students believed that they may not be able to go to university despite this being their main preference.

It is particularly notable that while 42 per cent of the students who indicated a TAFE or university preference emphatically reported they were ‘not planning to go to university’, around 20 per cent reported they may consider university later in life.

Also significant is the group of students who indicated that they were likely to enrol in a university course despite a personal preference for TAFE. Whether or not these intentions are a result of strong family/school pressure cannot be determined from the data, but this group—8.8 per cent of ‘TAFE preferees’ overall—is appreciable and more detailed research into this issue is warranted.

Table 4.10: Definite plans by post-school preference (per cent)

	Prefer TAFE	Prefer university	Prefer work
Definitely planning to enrol in a university course	4.6	61.8	1.7
Planning to apply and then defer for a year	4.2	15.8	10.0
Hoping to go to university but may not be able to	8.1	16.1	7.8
May consider university later in life	21.4	1.3	19.7
Not planning to go to university	42.4	0.2	42.4
Unsure	19.5	4.8	18.4
Total	100.0	100.0	100.0

Summary

Well over 90 per cent of the student sample express a preference for undertaking tertiary education when they complete schooling. Within this strong commitment to continuing with some form of formal education and training, higher education is the dominant preference for all student subgroups analysed by this study. However, there are clear demographic patterns in student preferences. Males, students at government schools, students living in rural or isolated areas, and students from lower or medium socioeconomic backgrounds express stronger preferences for TAFE than their respective counterparts.

A high proportion (40–45 per cent) of students preferring to enrol in a TAFE course or to commence employment reached this decision only within the previous year. In contrast, the higher education preferencees were more likely to have made their minds up several years ago.

Around 20 per cent of the students expressing a preference for TAFE or employment indicated they might consider attending university later in life. A sign of the strong (and well-meaning) family and community pressure for higher education that has built up in Australia is the 8.8 per cent of the student sample who expressed a personal preference for TAFE but were actually intending to apply for a university place.

5 Underlying attitudes and objectives

This chapter examines the attitudes and expectations that give rise to the post-school intentions described in the previous chapter. It begins with a discussion of variations in the personal objectives of young people and the influences upon them.

Immediate priorities and influential others

As table 5.1 shows, the student subgroups are very similar in the extent to which they desire employment that is secure and interesting. Broadly speaking, however, the students preferring to commence paid employment immediately after school tend to focus on objectives that are achievable within a shorter timeframe. These more immediate and concrete aims are apparent in their focus on ‘making a good deal of money’ and ‘having a steady job’, perhaps even in their slightly smaller interest in ‘learning more about the world’.

Table 5.1: Students’ broad personal objectives by post-school preference*

	Prefer TAFE	Prefer university	Prefer work
Steady and interesting employment			
Working in employment that interests me	97.1	97.3	96.8
Finding a job that uses my talents and abilities	92.3	92.3	87.1
Having a steady job	93.4	90.7	95.3
Income and status			
Earning a reasonable income	92.2	89.4	93.7
Having a high-status career	48.5	52.7	49.9
Making a good deal of money	67.6	60.1	75.1
Personal satisfaction			
Making a contribution to society	48.9	57.6	45.1
Learning and understanding more about the world	52.1	60.5	50.3
Having opportunities for travel	69.9	72.1	66.5
Living in a good community	79.5	76.4	76.6

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

Parents are the main influences on students’ plans for the future (table 5.2). However, it is important to note the stronger likelihood of peer influences on the students who are intending to work or enrol in TAFE upon leaving school. The students preferring to work also report considerably less influence from teachers and school careers advisers than do other students. In contrast, the students planning to enrol in TAFE indicate the strong influence of careers advisers on their thinking.

The students intent on going on to university have a distinctive profile. They are more likely to be influenced by the views of their teachers than the others and less likely to be influenced by their friends.

Table 5.2: The influences of significant others by students' post-school preference*

	Prefer TAFE	Prefer university	Prefer work
Mother	81.9	80.6	78.9
Father	74.7	73.9	71.6
Brothers/sisters	41.5	40.3	40.2
Best friend	48.4	43.5	50.0
Other friends	29.3	22.7	31.9
School careers advisers	50.3	48.2	39.2
Teachers	40.6	47.8	35.5

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

Attitudes towards school

On the whole, the students surveyed are reasonably positive about school, though many report they struggle to get motivated to study and only a minority say they derive a good deal of satisfaction from their school work.

Important patterns of variation emerge in students' attitudes towards school. For example, looking at their responses to the statement 'You learn more on the job than you do in a classroom or from books' (table 5.3)—to which there is a soberingly high level of agreement by students overall—there is a consistent pattern of difference by socioeconomic background in which the students of lower socioeconomic background tend to have less confidence in the relevance of learning in formal settings. One student interviewed for the study summed up this sentiment by saying 'people ... prefer to be out and experiencing life rather than learning it through books'.

Table 5.3: 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			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	3.85	3.77	3.68	3.77
	Medium uni access	3.85	3.81	3.72	3.80
	High uni access	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.

As table 5.4 shows, the contrasts in attitudes towards school among the student groups according to post-school preferences for TAFE, university or work are consistently large. In fact, attitude towards school is likely to be a rough measure of post-school intentions, at least in terms of identifying students with higher education aspirations. Students intending to work or enrol in TAFE are more likely to be ambivalent about school and the relevance of school than the students intending to go on to higher education. Approaching one-quarter of students intending to work immediately after school say that they are only filling in time at school while they decide their future. Fewer, 15.4 per cent, report that they are only staying on because of parental wishes, though this is a higher proportion than that for the other two

groups. Again the possible influence of peer groups, in this case peers who appear less interested in school, is suggested, but causal relationships are not clear from the data.

The items grouped in the scale 'Intrinsic satisfaction' in table 5.4 demonstrate the extent to which many students—in particular, those choosing TAFE or work—do not find school and school work satisfying. Fewer than one-quarter of those preferring TAFE or work 'get a lot of satisfaction from school work'; fewer than half say they enjoy school, despite a larger proportion reporting they find the subjects they are studying interesting.

Table 5.4: Attitudes towards school by students' post-school preference*

	Prefer TAFE	Prefer university	Prefer work
Marking time			
Being at school is just filling in time while I decide my future	17.2	7.0	23.1
I'm only staying at school because my parents want me to	12.7	4.1	15.4
I am happy to get by with the bare minimum of work	24.3	14.7	30.6
My friends are not really interested in school	29.0	19.7	32.0
I'm only staying at school because there are no jobs available	11.5	2.2	14.2
Motivating environment			
I really want to do well at school	83.0	95.9	79.1
Being at school will really help me get what I want in life	63.2	81.3	56.4
I often discuss my school work with members of my family	35.5	44.8	32.5
My parents encourage me to do well at school	82.2	89.6	84.4
Intrinsic satisfaction			
I find it difficult to get myself motivated to study	62.3	48.3	60.8
I get a lot of satisfaction from school work	24.0	39.4	21.6
I am interested in the subjects I'm studying	62.8	72.7	59.6
Overall, I enjoy school	44.3	63.8	39.5

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

Impressions of university

The project asked students a set of questions probing their beliefs about university life and the relevance of higher education. The responses to these question show sustained variations between student subgroups—in particular, large divergences between students of lower and higher socioeconomic backgrounds and between urban and rural students.

The factor analytical techniques used to prepare table 5.5 indicate strong patterns in what students consider to be the attractions of university. Though some of the items under the title of 'encouraging effects' in the table may appear conceptually distinct, they nevertheless draw a consistent 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 students, even those expressing a personal preference for commencing a TAFE course or seeking employment immediately after leaving or completing school.

Table 5.5: Attitudes towards university by students' post-school preference*

	Prefer TAFE	Prefer university	Prefer work
Encouraging effects			
University education really helps you develop your skills	72.4	90.0	75.3
University study allows you to explore interesting things	51.9	80.2	51.9
Going to university offers the chance to meet many interesting people	70.3	83.8	67.7
Completing a university degree is a good investment in the future	66.6	91.7	67.9
A university education broadens your outlook on life	47.9	76.7	46.2
Life at university sounds exciting	40.9	74.5	41.3
Disincentives			
Universities are big and unfriendly places	10.9	6.7	10.3
The years at university are just a way of delaying the hunt for a job	13.1	3.2	13.0
Universities are really for wealthy people	23.3	12.2	23.3
Other items			
You can't get a decent job without a university degree	18.2	36.8	16.5
'Distance education' (e.g. studying from home) is a good alternative to on-campus study	25.8	17.7	22.9

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

In terms of seeing 'a university degree as a good investment in the future', the students intending to work or enrol in TAFE are more reserved in their judgments. Around two-thirds of these students believe that it would be, compared with well over 90 per cent of the students preferring to go on to university. In a similar vein, the students focused on work or TAFE are far less likely to believe that life at university would be exciting and that university broadens personal outlooks.

In responses to the proposition 'universities are really for wealthy people' (table 5.5), there are clear differences between the three subgroups: the students intending to work or enrol in TAFE are significantly more likely to associate university with wealth. These strong differences in perceptions are echoed in the sizeable differences between socioeconomic subgroups and the even larger differences between rural and urban students shown in table 5.6. While there are clear variations between urban and rural responses, there is little variation between the various rural locations.

As table 5.7 indicates, students in general believe that completing a university degree 'is a good investment in the future'. This statement is 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 significant part. On the other hand, socioeconomic background is consistent in its effect: students from lower and medium socioeconomic backgrounds are more likely to express doubts about the benefit of time spent at university.

Table 5.6: Extent of agreement with ‘Universities are really for wealthy people’

Overall mean = 2.35 on scale 1 (strongly disagree) to 5 (strongly agree)

LOCATION		SOCIOECONOMIC STATUS			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	2.46	2.50	2.31	<u>2.44</u>
	Medium uni access	2.66	2.48	2.24	<u>2.48</u>
	High uni access	2.47	2.49	2.31	<u>2.43</u>
Urban		2.29	2.27	2.18	<u>2.24</u>
All		<u>2.41</u>	<u>2.38</u>	<u>2.25</u>	

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 5.7: 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)

LOCATION		SOCIOECONOMIC STATUS			
		Lower SES	Medium SES	Higher SES	All
Rural	Isolated	4.06	4.26	4.36	<u>4.22</u>
	Medium uni access	4.34	4.38	4.42	<u>4.37</u>
	High uni access	4.17	4.23	4.39	<u>4.27</u>
Urban		4.34	4.35	4.48	<u>4.39</u>
All		<u>4.23</u>	<u>4.30</u>	<u>4.43</u>	

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

Slightly more ambivalence towards higher education on the part of lower socioeconomic background students also emerges on other items that gauge whether or not students believe university education is worthwhile for developing skills and broadening personal outlook. Students from higher socioeconomic backgrounds tend to be more likely than others to see a university education as important career-wise and attractive in its own right. Lower socioeconomic background students, on the other hand, are more sceptical about the importance in life of university learning and more likely to see any time spent at university as delaying entry to the workforce. On aggregate, rural and urban students differ less. Urban students are more likely to see a university education as important for skill and career development. Rural students see universities as exciting places where you meet interesting people.

Overall, the higher students’ socioeconomic background, the more likely they are to imagine university study is interesting, that it allows you to meet interesting people, and that life at university would be exciting. While student location appears to play little part in whether or not students believe they will be able to explore interesting things at university, 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’. These repeated patterns suggest the thought of attending university is closely associated with adventure and an exciting social life for many rural students, and the prospect of life at university holds a certain mystery and attraction for at least some.

Summary

The influences of peers appear to be strongest on the students who are considering TAFE or work. These students are also the most ambivalent towards school and its relevance—approaching one-quarter of the students intending to seek work, for example, say they are only ‘filling in time’ at school while they decide their future. The students intending to seek work also have generally shorter term objectives in life.

On questions regarding the relevance of higher education, clear-cut differences emerge between the student subgroups. The students expressing a preference for TAFE or work are far less likely than those considering higher education to believe that university would be intrinsically interesting or that it is a good investment in the future. They are also more likely to believe that universities are ‘really for wealthy people’: attitudes that not only reflect the economic realities for young people and their families but also the strong cultural differences that exist between social groups in Australian society.

6 The personal relevance of TAFE, university and work

This chapter explores the key factors influencing students' personal choices as they near the end of their school years. The discussion is focused on the factors that are ultimately pivotal in shaping individuals' personal intentions.

Factors influencing present intentions

To open up this exploration, tables 6.1 and 6.2 report the particular factors that students overall indicated were the most influential in shaping their present choice. Looking first at those who definitely intend to enrol in a university—over half the student sample—there are small differences between socioeconomic and location subgroups. Nevertheless, the students definitely planning to enrol at university 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.

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

Table 6.1: Most frequently reported factor influencing present intentions, by intention and by SES (per cent)

	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

Table 6.2: Most frequently reported factor influencing present intentions, by intention and by location (per cent)

	RURAL			URBAN
	Isolated	Medium uni access	High uni access	
Students definitely planning to go to university (53.9%)				
A university degree would improve my chances of getting a job	31.5	37.6	37.8	39.7
A university course would offer me the chance for an interesting and rewarding career	33.4	32.1	31.0	34.0
I am interested in the subjects I could study at university	5.4	5.5	2.5	6.7
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	20.9	30.3	31.8
A university qualification is not necessary for the job I want	11.4	11.9	13.0	10.1
I want to start earning a proper income as soon as I leave school	7.6	11.9	13.0	8.9
A TAFE course would be more affordable for me than university	5.7	14.9	9.7	7.7
I don't see any point in me going to university	8.5	4.5	8.8	10.4

Table 6.3 compares the strength of these factors from the perspectives of the three subgroups defined by their post-school preferences. The findings in this table are central to understanding the differences in student attitudes. Factor analysis identifies four clusters of items which are listed under the following headings:

- ❖ Relevance of higher education to life and career
- ❖ Achievement barriers
- ❖ Cost concerns
- ❖ Social support factors

The differences between the attitudes of the subgroups are vast. As expected, the students expressing a desire to work or enrol in TAFE see much less relevance in higher education than those intending to go on to university. As well as appearing less relevant, higher education is seen as unattainable by many: they believe their school results will not be good enough or their family will not be able to afford the cost.

Further large variations are apparent in the social context of these young people. The findings indicate that the students wishing to go to university are more likely to experience what could be called 'encouraging effects': there is a stronger likelihood of their friends also going to university and they are more likely to believe that their teachers have encouraged them to aim for higher education.

Table 6.3: Factors in relevance of post-school options, by post-school preferences*

	Prefer TAFE	Prefer university	Prefer work
Relevance of higher education to life and career			
A university degree would improve my chances of getting a job	65.6	93.8	67.5
A TAFE course would be more useful to me than a university course	63.6	4.1	44.5
A university course would offer me the chance for an interesting and rewarding career	45.9	90.8	49.7
I am interested in the subjects I could study at univ.	34.0	86.9	38.6
My parents want me to do a university course	22.0	68.8	26.8
I don't see any point in me going to university	37.2	1.4	39.6
I want to start earning a proper income as soon as I leave school	50.6	14.3	74.5
A university qualification is not necessary for the job I want	50.1	7.5	48.9
Achievement barriers			
I'm considering university because there aren't any jobs around here	7.9	8.9	9.2
I don't think my results will be good enough to get into any courses that interest me	46.1	24.1	45.8
I probably won't have the subjects required for courses that might interest me	36.2	12.3	39.3
Cost concerns			
A TAFE course would be more affordable for me than university	73.6	41.7	65.3
The cost of university fees may stop me attending	44.0	24.4	46.5
My family probably can't afford the costs of supporting me at university	42.4	28.0	42.0
Social support factors			
If I went to university, I would probably lose touch with my friends	26.9	16.6	33.3
Most of my friends will probably go to university	31.8	51.5	33.9
My teachers have encouraged me to aim for university	23.9	62.9	33.6

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

The attractions of TAFE

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 6.4 and 6.5), 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 13 per cent of higher socioeconomic background believe it to be so.

Table 6.4: 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			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	3.13	2.84	2.46	<u>2.83</u>
	Medium uni access	2.96	2.75	2.29	<u>2.70</u>
	High uni access	2.89	2.79	2.35	<u>2.67</u>
Urban		2.83	2.70	2.34	<u>2.61</u>
All		<u>2.93</u>	<u>2.77</u>	<u>2.35</u>	

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.

There is a sustained variation between rural and urban students in their perceptions of the relative affordability of TAFE and higher education. In focus groups conducted for the HEC study, rural students who discussed the advantages of TAFE study over university also had some ambivalence towards TAFE as an option. As we reported (James et al. 1999a: 65), some young people interviewed believed that TAFE might be a good option for them and said that its status was changing:

I see no difference. If I can do a night-time TAFE course while I am working ... everyone gets a university degree now. For me, I don't want to get into big debts at uni before I start anything.

However, most saw TAFE as a less than ideal option or simply a stepping stone to university, offering comments such as (James et al. 1999a: 65):

A university degree looks better in a job interview—it looks better on your resume.

TAFE is inferior to a university degree.

In my town it's kind of low brow to go to TAFE.

Some people think of uni as too high, but think of working in Woollies as too low, so they think of TAFE.

It's a bit of a weak option. If you're not academic it can be a good option, it can help you get into uni.

Table 6.5: 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			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	3.79	3.67	3.35	<u>3.61</u>
	Medium uni access	4.02	3.87	3.14	<u>3.73</u>
	High uni access	3.76	3.68	3.38	<u>3.60</u>
Urban		3.58	3.54	3.17	<u>3.43</u>
All		<u>3.71</u>	<u>3.63</u>	<u>3.25</u>	

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

Of the students preferring to enter TAFE, many are doing so principally because they regard it as a way into good employment. Interviews with young people reveal a range of often highly polarised impressions about the relevance of TAFE and on the attainability of university (James et al. 1999a: 66):

University is more theoretical. TAFE is more hands on.

Most people doing TEE [subjects that lead to eligibility for university entry] are thinking of doing TAFE, they are only thinking of doing uni if they are aiming for things like medicine or law.

You don't need uni any more for a lot of things, now that TAFE is an option.

In these interviews, students who were thinking of enrolling in a TAFE course frequently mentioned the lower cost factor as an attraction. For others, gaining a TAFE credential was seen as a way of enhancing their chances of getting a part-time job to support them in university later in life (James et al. 1999a: 66).

The appeal of higher education

Most students see strong advantages in attending university in relation to future employment and careers. All students, 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 that they think they would have a good time at university—though fewer consider this an important factor in making their decisions.

The questionnaire items which explored the possible attractions of university education reveal significant socioeconomic effects. Lower socioeconomic background students are less likely to believe that a university degree will assist them with employment and careers (table 6.6), to be interested in the subjects they could study at university (table 6.7), or to think that they would have a good time there. In the first two cases, there is also a significant location effect, with lower access and rural context being associated with lower appreciation of these possible benefits of university.

Table 6.6: 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)

LOCATION		SOCIOECONOMIC STATUS			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	4.04	4.24	4.26	<u>4.18</u>
	Medium uni access	4.14	4.41	4.39	<u>4.32</u>
	High uni access	4.19	4.27	4.45	<u>4.31</u>
Urban		4.27	4.33	4.50	<u>4.37</u>
All		<u>4.19</u>	<u>4.30</u>	<u>4.45</u>	

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.

The item 'I'm considering university because there aren't any jobs around here' was one of the few which reveal 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 very 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, their perception of the relatively depressed state of some rural economies.

Table 6.7: 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			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	3.60	3.79	3.99	<u>3.78</u>
	Medium uni access	3.59	3.97	4.06	<u>3.88</u>
	High uni access	3.74	3.87	4.14	<u>3.93</u>
Urban		3.83	3.92	4.16	<u>3.97</u>
All		<u>3.73</u>	<u>3.87</u>	<u>4.12</u>	

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.

Summary

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. On the other hand, the students definitely *not* planning to go to university are more likely to indicate that the main reasoning behind their decision is that a TAFE course would be more useful to them. Also important to them is the affordability of TAFE and a desire to earn an income immediately.

As well as appearing not particularly relevant to some students, higher education is also seen as unattainable: they believe their school results will not be good enough or their family will not be able to afford the cost. The students wishing to go to university are more likely to experience 'encouraging effects': their friends also are likely to go to university and they are more likely to believe that their teachers are encouraging them.

7 Key patterns in student attitudes

Factor analytic statistical techniques permit a succinct summary to be prepared of the principal variations in student attitudes according to whether they would prefer to attend TAFE, attend university, or commence work when they finish their secondary schooling. In constructing the three summary tables in this chapter, factor analysis was used to develop scales comprised of the items used in the questionnaire. The tables report the mean scores for each subgroup on each scale and indicate with underlining whether or not the differences between student subgroups are significant on pair-wise tests ($p < .001$).

Table 7.1 compares students who prefer TAFE with those who prefer higher education. The differences between these groups are sizeable and sustained. The students with a TAFE preference are less educationally oriented—they are significantly more likely to say they are simply marking time at school—and considerably less likely to see any relevance in higher education or to believe that it is within their grasp.

Table 7.1: Variations in the attitudes of students preferring TAFE and those preferring university (factor means on a 5-point scale, higher score = more agreement)

Factors	Prefer TAFE	Prefer university
Immediate priorities		
'Doing well at school'	<u>4.15</u>	<u>4.73</u>
'Interests outside school'	<u>3.76</u>	<u>3.49</u>
Future goals		
'Income and status'	3.95	3.88
'Steady and interesting employment'	4.60	4.59
Influence of others		
'Friends'	<u>3.16</u>	<u>2.93</u>
'Teachers/careers advisers'	3.29	3.35
Views on school		
'Motivating environment'	<u>3.83</u>	<u>4.17</u>
'Intrinsic satisfaction'	<u>3.02</u>	<u>3.38</u>
*'Marking time'	<u>2.42</u>	<u>1.90</u>
Impressions of university		
'Encouraging effects'	<u>3.69</u>	<u>4.25</u>
*'Disincentives'	<u>2.38</u>	<u>1.95</u>
The personal possibility of higher education		
'Relevance of HE to life and career'	<u>2.94</u>	<u>4.21</u>
'Social support factors'	<u>2.76</u>	<u>3.62</u>
*'Achievement barriers'	<u>2.82</u>	<u>2.25</u>
*'Cost concerns'	<u>3.36</u>	<u>2.83</u>

Underlining indicates statistically significant difference between student subgroups ($p < .001$).

*Negatively worded scale.

In contrast, the students preferring to go to university have a highly optimistic outlook regarding the opportunities that university will provide and have a stronger supportive environment for educational participation. These students experience a set of factors that encourage their confidence in the attainability and relevance of higher education and are less likely to see any disincentives or obstacles in the way of going on to university.

Table 7.2 compares students who prefer to enrol in a TAFE with those preferring work. The distinguishing feature of this comparison is the general absence of statistically significant differences between the subgroups, an indication of the strong similarities in the views and outlooks of these students. Overall, there are only two areas of difference, in each case reasonably small in magnitude. Except for these, the two groups of students are barely distinguishable in their responses.

Table 7.2: Variations in the attitudes of students preferring TAFE and those preferring to work (factor means on a five-point scale, higher score = more agreement)

	Prefer TAFE	Prefer work
Immediate priorities		
'Doing well at school'	4.15	4.17
'Interests outside school'	3.76	3.75
Future goals		
'Income and status'	3.95	4.01
'Steady and interesting employment'	4.60	4.61
Influence of others		
'Friends'	3.16	3.13
'Teachers/careers advisers'	<u>3.29</u>	<u>3.02</u>
Views on school		
'Motivating environment'	3.83	3.77
'Intrinsic satisfaction'	3.02	2.94
**'Marking time'	2.42	2.50
Impressions of university		
'Encouraging effects'	3.69	3.69
'Disincentives'	2.38	2.38
The personal possibility of higher education		
'Relevance of HE to life and career'	2.94	2.95
'Social support factors'	<u>2.76</u>	<u>2.94</u>
**'Achievement barriers'	2.82	2.81
**'Cost concerns'	3.36	3.36

Underlining indicates statistically significant difference between student subgroups ($p < .001$).

*Negatively worded scale.

Finally, table 7.3 presents the pair-wise comparison of students who indicated a preference for a university course and those preferring to commence work. As expected, these students have little in common. There are appreciable differences in their immediate priorities and broad goals for the future, and even sharper differences are found in their views about school, their impressions of university, and the personal educational possibilities they envisage.

Table 7.3: Variations in the attitudes of students preferring university and students preferring to work (factor means on a 5-point scale, higher score = more agreement)

	Prefer university	Prefer work
Immediate priorities		
'Doing well at school'	<u>4.73</u>	<u>4.17</u>
'Interests outside school'	<u>3.49</u>	<u>3.75</u>
Future goals		
'Income and status'	<u>3.88</u>	<u>4.01</u>
'Steady and interesting employment'	4.59	4.61
Influence of others		
'Friends'	<u>2.93</u>	<u>3.13</u>
'Teachers/careers advisers'	<u>3.35</u>	<u>3.02</u>
Views on school		
'Motivating environment'	<u>4.17</u>	<u>3.77</u>
'Intrinsic satisfaction'	<u>3.38</u>	<u>2.94</u>
*'Marking time'	<u>1.90</u>	<u>2.50</u>
Impressions of university		
'Encouraging effects'	<u>4.25</u>	<u>3.69</u>
'Disincentives'	<u>1.95</u>	<u>2.38</u>
The personal possibilities		
'Relevance of HE to life and career'	<u>4.21</u>	<u>2.95</u>
'Social support factors'	<u>3.62</u>	<u>2.94</u>
*'Achievement barriers'	<u>2.25</u>	<u>2.81</u>
*'Cost concerns'	<u>2.83</u>	<u>3.36</u>

Underlining indicates statistically significant difference between student subgroups ($p < .001$).

*Negatively worded scale.

The salient feature of these comparisons, and the one with perhaps the most significant policy implications, is the marked attitudinal divide between students who are considering university and those considering TAFE. Whereas the students preferring university appear to have a reasonably strong educational orientation and are optimistic about their educational possibilities, those preferring TAFE show far less of these characteristics and are closely aligned in outlook with the students who are intending to work.

These large differences have considerable implications for efforts to attract students to tertiary education through a VET pathway and for the design of appropriate teaching and learning strategies which are appealing and perceived as relevant by incoming VET students. Many of the students expressing a preference for TAFE do not show particularly high levels of intrinsic interest in education; many may have had unsatisfying and off-putting educational experiences at school.

8 Conclusion

This research identifies significant contrasts in young people's perceptions of the relevance and attainability of VET and higher education. School students' views and attitudes are highly polarised on these matters, with gender, location and socioeconomic background emerging as key influences. Socioeconomic effects are generally more pronounced and pervasive than the other effects detectable in this dataset. However, the research also shows that the effects of socioeconomic background sometimes combine with other influences to produce substantial contrasts in attitudes and perceptions.

Putting educational aspirations to one side for the moment, the study reveals many similarities in the personal goals and priorities of the young people surveyed. Where there are differences, these are usually small. Secondary school students in the three States surveyed appear generally alike in their outlooks, in their immediate personal objectives, and what they are looking for in life. However, telling contrasts appear in students' post-secondary intentions and their reactions to the personal possibility of going to university. Here the subgroups analysed in this study diverge considerably. There are large socioeconomic effects and large urban-rural contrasts—the most profound differences in student attitudes are revealed when both family socioeconomic background and location are taken into account.

It is widely believed 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. Many of the respondents, however, do not find school interesting or motivating and many report they belong to peer groups which are not particularly interested in school. Negative experiences of school may distort young people's beliefs about the usefulness of tertiary education. In turn, this may have important implications for their future involvement in lifelong education. At the very least it needs to be recognised that many of the young people entering VET courses may have had unsatisfactory or alienating educational experiences.

VET is a lower priority than higher education—going to university is the dominant preference among young people, who see it as vital for opening up career prospects and possibilities. In broad terms, around two-thirds of students in the sample would prefer to go on to university, only one-quarter report a similar attraction for TAFE, and well under ten per cent intend to work. When student intentions are compared on a subgroup-by-subgroup basis, the Indigenous students in the sample are the only group in which the preference for higher education falls short of 50 per cent for the group overall.

Despite the comparatively low appeal of VET, these courses are acknowledged to be highly accessible—entry is seen as less restricted than university entry—and relatively inexpensive. University is considered to be a far more costly option, and there is evidence of young people who may hold ambitions to attend university but are hindered by a financial obstacle. Young people are conscious of the rising cost of university fees, and rural students in particular, who would need to leave home to attend university, are concerned about the additional costs of accommodation and living in a city.

Students intending to enrol in TAFE or commence working are more strongly influenced by their peers than those wishing to go to university. Of the students who indicated they preferred a TAFE program, one-quarter were looking to an apprenticeship. TAFE applicants show little evidence of the educational orientation held by students intending to go on to

university—VET is closely aligned with work rather than education in young people’s minds. The students intending to look for employment are characterised by their focus on short-term, though reasonable, objectives, such as securing a steady job and earning a good income.

There are also notable demographic patterns among the VET and higher education preferencees. Intending TAFE enrollees are more likely to be male, more likely to be living in rural or isolated areas rather than urban areas, and more likely to be of lower or medium socioeconomic background. On the other hand, females, urban students and students from higher socioeconomic backgrounds—those with parents who are university graduates—express stronger preferences for higher education.

The findings of this study have a number of implications for policy. Quantitative survey findings such as these rarely comprehensively inform policy deliberations. Nevertheless, the present data are a valuable complement to existing research—in particular, the market research into Australians’ attitudes towards learning commissioned by the Australian National Training Authority (ANTA 2000a).

A number of areas for future research can be identified. In some cases qualitative studies would be valuable. Areas for more detailed research include:

- ❖ students who express a personal preference for a TAFE course but report they are most likely to enrol in a university course
- ❖ students who are not considering tertiary education and training as they near completion of school, but who indicate they might do so some time later in their lives
- ❖ the key advisers that students are listening to—in particular, students who are planning to undertake VET or commence work
- ❖ the gap between community perceptions of the VET sector and what it actually has to offer

The ANTA National Marketing Strategy (ANTA 2000b) is an important initiative. On the basis of the present study, VET marketing considerations might include:

- ❖ capitalising on community recognition of the dual personal and vocational outcomes from ongoing participation in formal learning
- ❖ clearly differentiating the nature, quality and relevance of the VET learning experience from the (lukewarm) recollections that prospective students might hold of their school experiences
- ❖ highlighting the advantageous pedagogical settings in VET compared with many higher education courses: smaller class sizes, greater access to teaching staff, ‘hands-on’ experiences—in all, a more personalised educational experience
- ❖ on the one hand, stressing the intellectual rigor of the VET ‘product’ and the achievement levels that can be reached, while, on the other, communicating the simple enjoyment and non-threatening nature of VET study

Discussion

The study confirms the social layering that exists in Australian education. In powerful ways, young people’s educational objectives and participation are fashioned by their family and community context. Post-school educational intentions are generally taking shape well before the final years of school.

It is evident that most students see merit in tertiary education but that most perceive sharp distinctions between higher education and VET. The study’s findings provide reassuring evidence of significant variations in the dispositions and intentions of young people which are presently catered for by the clear-cut distinctions they perceive between VET and higher

education. Less positively, students appear to have notions of university and TAFE which exaggerate the differences between the institutions and their missions, and which distort differences in the nature and personal relevance of courses.

The findings show that VET continues to have an image problem among young people. At the very least it is less visible than higher education. This problem has been noted by earlier studies (for example, ANOP 1994) and unfortunately persists despite the responsiveness of TAFE institutions to the needs of both students and industry, the generally advantageous class sizes compared with university, and the likelihood of good vocational opportunities. Research elsewhere (James, Baldwin & McInnis 1999b) has shown that course selectivity is strongly associated with perceptions of quality and personal relevance in the thinking of prospective tertiary students. Ironically, while TAFE generally offers less competitive and less expensive access, this community service may have the unintended affect of lowering perceptions of selectivity and thus prestige or quality.

The widespread preference or expectation for higher education among young people is clearly unrealistic. Fewer of the young people surveyed will go on to higher education than expect to, for reasons which include competitive entry requirements and inability to meet the costs. Arguably, the high level of confidence that young people have in higher education providing career outcomes may be unwarranted. Certainly the legitimacy and potential of VET is underestimated. There are serious social consequences if TAFE and VET in general are relegated to lower, 'second best' status in the minds of incoming students. Equally, there is some evidence in this study—though further work on this is needed—that some students experience pressure to go on to university even though they may feel little interest or have low commitment. With little doubt there are many students who would benefit personally and career-wise from an appropriately selected TAFE course who do not consider this option.

In all, this suggests that TAFE is a community resource with the potential to be better utilised. This is not the place for a sustained discussion of the advantages and disadvantages of the present sectoral divide between VET and higher education. However, trends in both sectors have made the distinctions that are perceived by prospective students look increasingly out-dated. The university sector, for example, has become implicitly differentiated, and many universities now market their courses on the principal basis of their vocational relevance—in university application trends there has been a steady rise in vocationally oriented courses and a declining interest in liberal arts/science degrees. These trends have not been matched by rising interest in TAFE.

The nature of educational pathways are also changing. There is now sound evidence in the work of Barry Golding (1995) of the unexpected extent of two-way movement between the sectors—student movement patterns strongly suggest that people holding university degrees turn to VET to secure desired vocational and personal outcomes. Furthermore, people are increasingly dipping in and out of education at various life and career stages, and the trend towards modularised, 'just-in-time' programs appears likely to continue. If it does so, the present distinctions between 'higher education' and 'vocational education and training' and between universities and TAFE colleges will become increasingly artificial and tenuous, and will fail to reflect the nature of labour markets and patterns of community need and choice.

The findings of this study are also relevant to the growing issue of school retention and the alienation that some young people experience with school. VET programs have an important role to play in improving school retention rates through the further development of VET programs in schools. This study provides further evidence of the disaffection with school experienced by some young people. Clearly, traditional school curricula—particularly in the middle/senior secondary years—do not interest or motivate a significant number of young people, and they find little relevance in school to their personal objectives in life. The existence of attractive VET options while at school may be one way of sustaining school retention rates and stemming the rising rate of early leaving.

Social and economic change in Australia is quickly overtaking the present distinctions between vocational and liberal education. The nation needs a vision for the future of tertiary

education which incorporates educational alternatives relevant to a wide range of personal interests, abilities and career stages. These alternatives must provide options for people to enter and re-enter tertiary education at various points throughout their lives.

It is clear from this study that efforts to make VET more attractive to young people will be valuable. This may require greater cooperation between universities, TAFE colleges and private providers in raising understanding of the relevance and benefits of VET and in building incentives and encouragement in communities and families. The strengths of TAFE lie in its immediate vocational relevance, its low relative cost, its small class sizes and ease of student access to teaching staff, its capacity to serve industry, and its accessibility for people at various life and career stages. Careers advisers and school teachers should be one target of any initiatives designed to improve the perceived status of TAFE among young people.

An option for bridging the status divide between TAFE and universities may be for the sectors to unite in offering 'foundation degrees' or similarly titled awards. A model of short (two-year) degrees has been launched in England, similar to the associate degrees of the United States, offering mainly vocational programs delivered part time and in modular form. Such a model would both raise the perceived status of VET while offering new progression pathways to full degrees.

It is important that any initiatives of this kind do not dilute the distinctive character of VET programs. One consideration for federal and State policy posed by the study, therefore, is whether hierarchical and narrow views about the relative nature of higher education and VET should or can be reduced without compromising the character of each of the sectors, and the valuable range of choices and diversity this provides. VET and higher education *do* cater for different needs, and these benefits should not be lost. Furthermore, there are genuine differences in their value to individuals that cannot be ignored or downplayed, for higher education in many cases offers far greater career possibilities and benefits.

Overall, however, it is likely that the aggregate tertiary education participation of young people would be enhanced if TAFE had a stronger identity. In the main part, deeply entrenched public perceptions are at play here: a reduction in the perceived value differential between VET and higher education—in particular, any strengthening of the image of VET—is not going to occur quickly.

The dilemma, perhaps, is that any action to reduce present perceptions of a hierarchy of value and relevance between TAFE and university might equally lead to a loss of diversity. However, a convergence is already naturally occurring—the strong global forces that are reshaping tertiary systems worldwide are gradually eroding previously sharp VET-higher education boundaries. The question for policy, perhaps, is whether steps to accelerate these changes are desirable, necessary, or at all possible.

References

- ABS (Australian Bureau of Statistics) 1990a, *Australian Standard Geographic Classification (ASGC)*, Australian Government Publishing Service, Canberra.
- ABS 1990b, *Socioeconomic Indexes for Areas Catalogue No 1356.0*, AGPS, Canberra.
- Anderson, D.S. & Vervoorn, A.E. 1983, *Access to Privilege: Patterns of participation in Australian postsecondary education*, ANU Press, Canberra.
- ANOP Research Services Pty Ltd 1994, *Young People's Attitudes to Post-Compulsory Education and Training*, AGPS, Canberra.
- ANTA (Australian National Training Authority) 2000a, *National Marketing Strategy for Skills and Lifelong Learning, General Community Research Report*, ANTA, Brisbane, Queensland. (<http://www.anta.gov.au/lifelong/STRATEGY>)
- ANTA 2000b, *National Marketing Strategy for Skills and Lifelong Learning, Options for Strategy Directions—Work in Progress*, ANTA, Brisbane, Queensland. (<http://www.anta.gov.au/lifelong/STRATEGY>)
- Carpenter, P. & Western, J. 1984, Transition to higher education, *Australian Journal of Education*, 28, 3: 249–273.
- Carpenter, P. & Western, J. 1989, *Starting a Career: The early attainments of young people*, ACER Research Monograph No.36, ACER, Hawthorn.
- DEET (Department of Employment, Education and Training) 1993, *NSW Year 10–12 Students' Attitudes to Post-compulsory Education and Training*, Executive Summary of 1992 Research Program, AGPS, Canberra.
- DEET 1994, *Young People's Attitudes to Post-compulsory Education and Training*, AGPS, Canberra.
- DEET, NBEET (National Board of Employment, Education and Training) 1990, *A Fair Chance for All: National and Institutional Planning for Equity in Higher Education, a discussion paper*, AGPS, Canberra.
- DETYA (Department of Education, Training and Youth Affairs) 1999, *Preliminary Student Statistics 1999*, AGPS, Canberra.
- DPIE (Department of Primary Industries and Energy) and Department of Human Services and Health 1994, *Rural, Remote and Metropolitan Areas Classification: 1991 Census Edition*, AGPS, Canberra.
- Dwyer, P. 1997, 'Outside the Educational Mainstream: foreclosed options in youth policy', *Discourse*, 18, 1: 71–86.
- Elsworth, G., Day, N., Hurworth, R. & Andrews, J. 1982, *From School to Tertiary Study: Transition to College and University in Victoria*, ACER, Melbourne.
- Golding, B. 1995, *Tertiary transfer: the unacknowledged pathway between university and TAFE*, TAFE Pathways Issues Paper 2, Office of Training and Further Education, Melbourne.
- Golding, B., Volkoff, V. & Ferrier, F. 1997a, Summary report of access and equity literature on vocational education and training in Australia: barriers, strategies and policies, ANTA, Brisbane [Published within *Stocktake of equity reports and literature in vocational education and training*, <http://www.anta.gov.au>, ANTA, Brisbane].
- Golding, B. & Volkoff, V. 1997b, *Participation in VET in Australia: different drives, same needs?*, Paper to Conference 'Different Drums, one beat?, Economic and Social Goals in Education and Training', Centre for the Economics of Education and Training, Monash University and NCVER, 20–21 March, Mt Evelyn, Victoria.
- Hayden, M. & Carpenter, P. 1990, 'From school to higher education in Australia', *Higher Education* 20, 2: 175–196.

- James, R., Wyn, J., Baldwin, G., Hepworth, G., McInnis, C. & Stephanou, A. 1999a, *Rural and isolated school students and their higher education choices*, AGPS, Canberra.
- James, R., Baldwin, G. & McInnis, C. 1999b, *Which University?: The factors influencing the choices of prospective undergraduates*, AGPS, Canberra.
- Kilpatrick, S. 1999, *Issues which impact on VET in rural and remote Australia*, NCVER, Adelaide.
- Kirby, P. (Chair) 2000, *Ministerial Review of Post Compulsory Education and Training Pathways in Victoria Interim Report April 2000*, DEET, Melbourne.
- Lamb, S. 1996, *Completing School in Australia: Trends in the 1990s*, Longitudinal surveys of Australian Youth, Report No.1, ACER, Hawthorn.
- McInnis, C. & James, R. 1995, *First Year on Campus: Diversity in the Initial Experiences of Australian Undergraduates*, AGPS, Canberra.
- McInnis, C., James, R. & Hartley, R. (in press), *Trends in the First Year Experience in Australian Universities*, AGPS, Canberra.
- NBEET (National Board of Employment, Education and Training) 1991, *Toward a National Education and Training Strategy for Rural Australians*, AGPS, Canberra.
- Parker, P., Cooney, G., Bornholt, L., Harman, K., Ball, S. & Scott, C. 1993, *Going on to University*, Higher Education Division Evaluations and Investigations Program, AGPS, Canberra.
- Stevenson, S., Maclachlan, M. & Karmel, T. 1999, *Regional Participation in Higher Education*. Occasional Paper Series, AGPS, Canberra.
<http://www.detya.gov.au/highered/occpaper/99B/1.htm#/5regionalparticipation>
- Volkoff, V. and Golding, B. 1998, *Drowning, not waving: equity target groups in the marketplace*. Paper to Australian Vocational Education and Training Research Association Conference 'The Importance of VET research influencing policy and practice', 16 & 17 February, University of Technology, Sydney.
- Western, J., McMillan, J. & Durrington, D. 1998, *Differential Access to Higher Education: The Measurement of Socioeconomic Status, Rurality and Isolation*, AGPS, Canberra.
- Williams, T., Clancy, J., Batter, M. & Girling-Butcher, S. 1980, *School, Work and Career: 17 year olds in Australia*, ACER, Hawthorn.
- Williams, T., Long, M., Carpenter, P. & Hayden, M. 1993, *Entering Higher Education in the 1980s*, AGPS, Canberra.
- Wyn, J. & Lamb, S. 1996, 'Early School Leaving in Australia: Issues for education and training policy', *Journal of Education Policy*, 11, 2: 259–268.

Appendix

The definition and measurement of socioeconomic background and location

The definition and measurement of rurality and SES 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 SES and geographical location available to the Department of Education, Training and Youth Affairs (DETYA) is derived from the postcode of students' 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 SES 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.

Prior to the present study, 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
- ❖ 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. Highest parental education was chosen as an appropriate measure of socioeconomic background as it was believed to be a better indicator of the likely encouragement and commitment of families to their children's education. It is recognised, however, that it may not be a particularly good indicator of family wealth and household capacity to support the various costs of university study.

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. These findings expose a serious limitation of the Western et al. proposals. Clearly, personal socioeconomic background and distance from a university are not the only factors leading to rural educational disadvantage—there are further differences in attitude and outlook between urban and rural students that accrue from community context. Because the measures recommended by Western et al. fail to capture 'rurality', they will not be adequate for identifying all individuals who possibly will experience genuine educational disadvantage.

In framing the study and defining student subgroups for data analysis, the principal assumption has been that the disadvantage of rural and isolated people may be the effect of three interrelated factors, which, individually or in combination, may limit aspirations or access to higher education. These are listed below.

- ❖ *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
- ❖ *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.
- ❖ *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 km to a university
- ❖ *High univ. access/rural* less than 150 km 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.

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.

‘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:

- ❖ ‘Your personal goals and priorities’;
- ❖ ‘Your views about school and further study’; and
- ❖ ‘Your thoughts about the possibility of going on to university’; to end with a section,
- ❖ ‘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.

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 New South Wales 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 SES as calculated by postcode indices. Table A2 indicates the strong correlation between the indices for location and SES. 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	1 800 (schools)	2 000 (central database)	2 000 (central database)	5 800
WA	1 800* (schools)	1 800* (schools)	2 000 (central database)	5 600
NSW	1 800* (schools)	1 800* (schools)	2 000 (central database)	5 600
Total	5 400	5 600	6 000	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 status 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 34.7%	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%	2 154 565 100.0%

Calculated from 1991 census data using postcode categorisation.

Questionnaire mailed to students

Since this study is principally a comparative analysis of population subgroups identified on residential location and SES, it was essential that the sampling technique generated an appropriate stratification across both dimensions. As discussed in chapter 2, 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 SES 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.

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 New South Wales) and the Western Australian Curriculum Council.

Again use was made of the ABS indices to identify the school and select the school sample. Schools were classified according to their geographical location and the SES 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 SES and geographical location. Sixty schools were selected from each State list, 30 rural/isolated schools and 30 urban schools. Each group of 30 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.

A summary of the school survey response patterns is presented in table A4. 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 New South Wales 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 A3: Distribution of schools in sample

Victoria						
Rural sample	HC	MC	LC	MD	LD	
government		11	7	2		
Catholic		5	2			
independent		3				
Total		19	9	2		
<hr/>						
Urban sample	HU	MU	LU			
government	7	7	6			
Catholic	3	2	2			
independent	1	2				
Total	11	11	8			
<hr/>						
Western Australia						
Rural sample	HC	MC	LC	MD	LD	
government		2	7	5	6	
Catholic		1	2	2	2	
independent		1	1			
Total		4	10	7	8	
<hr/>						
Urban sample	HU	MU	LU			
government	5	10	5			
Catholic	2	3	2			
independent	2	3	2			
Total	9	16	9			
<hr/>						
New South Wales						
Rural sample	HC	MC	LC	MD	LD	
government	1	7	8	1	3	
Catholic	1	3	3			
independent	3					
Total	5	10	11	1	3	
<hr/>						
Urban sample	HU	MU	LU			
government	6	11	3			
Catholic	2	4	1			
independent	2	1				
Total	10	16	4			

H= higher SES

U= Urban

M= medium SES

C= Country

L= lower SES

D= Distant

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%	1800	854	47%
WA	60	42	70%	3600	2031	56%
NSW	60	27	45%	3600	813	23%
Overall	180	119	66%	9000	3698	41%

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

LOCATION		SOCIOECONOMIC STATUS			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	376	580	323	1279
	Medium uni access	127	199	111	437
	High uni access	491	862	641	1994
Urban		811	1386	1116	3313
All		1805	3027	2191	7023

Table A6: Gender of respondents, by socioeconomic background and location

LOCATION		SOCIOECONOMIC STATUS			All
		Lower SES	Medium SES	Higher SES	
Rural	Isolated	245 F	327 F	173 F	745 F
		128 M	247 M	150 M	525 M
	Medium uni access	87 F	122 F	66 F	275 F
		38 M	77 M	45 M	160 M
	High uni access	332 F	483 F	351 F	1166 F
		157 M	377 M	287 M	821 M
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