Improving participation in higher education for young people from low socio-economic backgrounds: Changing beliefs about university

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A thesis submitted in fulfilment of the requirements for the award of the degree of
DOCTOR OF PHILOSOPHY

Faculty of Education and Social Work
The University of Sydney
November, 2010
Author’s declaration

This is to certify that:

I. this thesis comprises only my original work towards the Doctor of Philosophy Degree
II. due acknowledgement has been made in the text to all other material used
III. the thesis does not exceed the word length for this degree.
IV. no part of this work has been used for the award of another degree.
V. this thesis meets the University of Sydney’s Human Research Ethics Committee (HREC) requirements for the conduct of research.

Signature: ………………………………………………………………………………………………………

Name: ………………………………………………………………………………………………………

Date: ………………………………………………………………………………………………………
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Dedication

For Oliver.

You can do anything you put your mind to.
Abstract

After decades of initiatives aimed at addressing inequitable rates of participation in higher education, people from low socio-economic backgrounds remain under-represented. A growing body of work suggests that family attitudes are the dominant influence on young people’s academic success and aspirations for higher education. This research asks whether it is possible to intervene in the construction of young people’s aspirations. Specifically, it evaluates the impact of an intervention program on young people’s knowledge of, beliefs about and aspirations for higher education.

Drawing on theories of social and cultural capital, this study posits two central propositions. First, that a young person’s bonding social capital plays a significant role in shaping their embodied cultural capital; and second, that it is possible to intervene in the process of the accumulation of bridging social capital and embodied cultural capital and to raise aspirations. Through in-depth interviews with university students and school students from Years 8 to 12 \((n = 19)\), and a pre- and post-intervention survey of Year 8 to Year 10 school students \((n = 94)\), the research explores young people’s pre-existing knowledge of, beliefs about and aspirations for university, and identifies the key influences thereon. It then evaluates the impact of the intervention on participants’ habitus.

While bonding social capital emerges as the key influence on the construction of a young person’s habitus, the intervention demonstrably altered this habitus and raised expectations. The causes of these phenomena were multiple and interconnected, with interaction with academically successful role models, access to accurate information and experience of university life all having an encouraging effect. Based on these findings, the thesis presents a model for intervention programs comprising (a) ongoing partnerships between universities and school/s; (b) early intervention; (c) accurate information; (d) interaction with university students; and (e) experience of university life. Finally, the study outlines the implications of the research findings for student equity in higher education at the levels of research, policy and practice.
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<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACU</td>
<td>Australian Catholic University</td>
</tr>
<tr>
<td>ALP</td>
<td>Australian Labor Party</td>
</tr>
<tr>
<td>CAE</td>
<td>College of Advanced Education</td>
</tr>
<tr>
<td>CTEC</td>
<td>Commonwealth Tertiary Education Commission</td>
</tr>
<tr>
<td>DEET</td>
<td>Department of Employment, Education and Training</td>
</tr>
<tr>
<td>DEEWR</td>
<td>Department of Education, Employment and Workplace Relations</td>
</tr>
<tr>
<td>DEST</td>
<td>Department of Education, Science and Training</td>
</tr>
<tr>
<td>DETYA</td>
<td>Department of Education, Training and Youth Affairs</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HECS</td>
<td>Higher Education Contribution Scheme</td>
</tr>
<tr>
<td>HEEP</td>
<td>Higher Education Equity Program</td>
</tr>
<tr>
<td>HSC</td>
<td>Higher School Certificate</td>
</tr>
<tr>
<td>IQ</td>
<td>Intelligence quotient</td>
</tr>
<tr>
<td>NBEET</td>
<td>National Board of Employment, Education and Training</td>
</tr>
<tr>
<td>NCSEHE</td>
<td>National Centre for Student Equity in Higher Education</td>
</tr>
<tr>
<td>NESB</td>
<td>Non-English speaking background</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PD/H/PE</td>
<td>Personal Development, Health and Physical Education</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education</td>
</tr>
<tr>
<td>SES</td>
<td>Socio-economic status</td>
</tr>
<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
</tr>
<tr>
<td>TEAS</td>
<td>Tertiary Education Assistance Scheme</td>
</tr>
<tr>
<td>UAC</td>
<td>Universities Admission Centre</td>
</tr>
<tr>
<td>UAI</td>
<td>Universities Admission Index</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>VET</td>
<td>Vocational Education and Training</td>
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Chapter 1: Changing young people’s beliefs about higher education

Introduction

After decades of social policy and educational initiatives aimed at addressing the imbalance in rates of participation in higher education, young people from socio-economically disadvantaged backgrounds still make the transition to university at approximately half the metropolitan average, or around one-sixth the rate of those from Sydney’s North Shore and the Eastern suburbs (Steveson, Evans, Maclachlan, Karmel and Blakers, 2000). A growing body of work suggests that attitudes to education, developed in the family, influence young people’s academic success and aspirations for higher education.

This research asks whether it is possible to intervene in the process of young people constructing their beliefs about and aspirations for higher education. Specifically, the study evaluates the impact of an intervention program on a group of young people’s knowledge of, beliefs about and aspirations for higher education. The project in question – Australian Catholic University’s (ACU) ACULink – is an equity initiative that aims to improve rates of transition to higher education among young people from low socio-economic status backgrounds (low SES). Working with targeted secondary schools in Sydney’s outer west, ACULink incorporates a range of strategies which focus on early intervention and the use of positive role models in a bid to enhance the cultural capital of participants before key educational decisions are made. In evaluating and critically examining the intervention, the research asks three key questions: (i) in what ways does a young person’s bonding social capital shape their knowledge of, beliefs about and aspirations for higher education?; (ii) to what extent does the intervention effect change in the knowledge, beliefs and aspirations of disadvantaged school students?; and (iii) in what ways is the intervention making a difference to the young people’s beliefs and aspirations?
This chapter commences with an overview of the history of the phenomenon of under-representation, first from the perspective of Federal policy in equity in higher education, then through various explanations of the causes of under-representation. It then describes the nature of strategies that have been put in place to address the imbalance and finally locates the study in its specific socio-economic context.

The second part of this chapter applies the lens of the work of Bourdieu and Passeron (1977, 1986) and their theory of cultural and social capital to develop a model of an intervention strategy that might be effective in raising aspirations. Through this lens, I construct beliefs about university as a component of a young person’s embodied cultural capital, or habitus. I propose that an intervention can provide a young person with bridging social capital and, through this, alter their beliefs about higher education. I further propose that this provides a means to raise aspirations and ultimately to improve rates of transition to higher education among young people from low socio-economic backgrounds. Following this proposition, I expound the research problem and establish its significance through locating it in its current social and political contexts. The last section of this chapter provides an overview of the content and structure of the thesis.

The phenomenon of under-representation

A brief history of under-representation

The phenomenon of under-representation in higher education of people from low socio-economic backgrounds is by no means new. In Post-World War II Australia it was assumed that the massification of higher education, with the provision of scholarships for needy students, would automatically lead to improved participation of people from low socio-economic backgrounds. However, by the 1970s it was recognised that financial constraints still presented a barrier to equal access for the disadvantaged. In an attempt to provide equality of opportunity, the Whitlam government abolished tuition fees in all public tertiary institutions and introduced a system of financial assistance in the form of the Tertiary Education Assistance Scheme (TEAS). Again, expansion increased the number of students from low socio-economic backgrounds participating in higher education, but only at around the same rate as those
from the middle and high socio-economic groups. The end result was maintenance of the status quo in terms of proportional rates of participation.

In the 1973 report *Schools in Australia*, Peter Karmel wrote “The test of whether equality of opportunity existed would then be that those going on to higher education were drawn from all groups in the same proportion as each group was represented in the population” (Karmel, 1973, p. 17). Since then, the notion of equal representation in populations has been used as the primary indicator of equity in relation to participation in higher education. Thus, as low socio-economic status by definition makes up 25% of the population, equal representation would be achieved when 25% of university students come from low socio-economic backgrounds.

With the tabling of the 1988 discussion paper *A Fair Chance for All*, equity gained a place of renewed prominence in higher education policy. Since that time, the Federal government has funded a range of equity projects aimed at increasing the transition and participation of people from six groups identified as disadvantaged, including those from low socio-economic backgrounds. Policy recommended a combination of outreach programs, alternative access schemes and financial assistance. In response, universities across Australia developed strategies along these lines. Yet while these strategies improved access for other disadvantaged groups, participation among students from low socio-economic backgrounds remained virtually unaltered.

Over the past two decades there has been another increase in undergraduate university enrolments, largely due to continued expansion in the sector. The current attainment rate for bachelor degrees for 25 to 34 year olds stands at around 32% and in 2009 the Rudd Labor government announced its intention to increase this level to 40% by 2025 (DEEWR, 2009, p. 12)\(^1\). However, over the same period the proportion of low SES students enrolled in higher education has remained static at around 15%. (Refer to Figure 1.1). This is well below the target of 25% to match their proportion of the broader population.

\(^1\) This target has remained unchanged under the leadership of Julia Gillard.
Exploring the causes of under-representation

Policy directives since *Fair Chance* indicate a growing awareness that the persistent imbalance in rates of participation is due to a complex range of factors that are not readily altered. There is an extensive body of literature in Australia which addresses the association of low socio-economic background with under-participation in higher education. Historically, this literature has largely focused on structural barriers. In particular, it examines three factors which may in part explain differential participation rates: differences in academic success during schooling, financial constraints and proximity to a university campus.

More recently a number of studies have implicated not these structural barriers, but attitudinal factors, which offer the best explanation for the imbalance. (See, for example, Long, Carpenter & Hayden, 1999; Cairnduff, 2009; Steveson, Evans, Maclachlan, Karnei & Blakers, 2000; and Vinson, 2007). Together, their findings indicate that family attitudes, generally inferred from parental levels of education, play a greater role in transition to university than either proximity to a campus, parental occupation or family wealth. This section of the chapter now explores this literature in order to illuminate the role of attitudes in participation in higher education. It will commence by eliminating the usual suspects.

---

2 Note: Post-2001 is based on 2006 Census postcode allocations, whereas prior years are based on earlier Census SES postcode allocations.
First, it is clear that under-representation in higher education in Australia is not an indicator that this group is less academically able. This is evident in their performance at university once they do enrol. In urban areas, low SES students have similar patterns of retention, success and completion to those from other backgrounds (Universities Australia, 2008; Cairnduff, 2009). Students in remote areas and Indigenous students are the only exception to this pattern, with students from these groups experiencing lower levels of retention and success (Universities Australia, 2008).

Second, financial issues do not explain the full extent of the imbalance. Given the structure of the Higher Education Contribution Scheme (HECS) for the deferment of payment of tuition fees, for example, many have argued that low income should not present a barrier to participation for those from economically disadvantaged homes. Indeed, there is little evidence that financial constraints are the prime or even a contributory factor in determining a young person’s post-secondary destination in Australia. Numerous studies both in Australia and the United Kingdom have shown that while financial barriers play a part, they are not the sole, nor even the primary factor contributing to low participation rates. (See, for example, McCaig & Adnett, 2008; Bowers-Brown, 2006, and Chapman & Ryan, 2003).

Third, proximity to a university campus does not provide an explanation. A 1997 OECD report highlighted the fact the social, home and educational factors that combine to explain educational disadvantage do tend to be concentrated in particular geographical settings (OECD, 1997, in Steveson, Evans, Maclachlan, Karmel & Blakers, 2000, p. 1; see also Jones, 2002; Vinson, 2007). In 2000 Steveson and colleagues explored the relationship between SES, geographical area and university participation rates. They found that in metropolitan areas socio-economic characteristics had a far greater impact on university participation rates than proximity to a university campus. So proximity contributes, but is not the answer in urban areas.

Nonetheless, the results highlighted stark inequities between geographical regions. The average participation rate for metropolitan areas was 28%, yet participation rates varied from as high as 60% in some of Sydney’s affluent North Shore areas to less
than 15% in several socio-economically disadvantaged regions in Sydney’s outer West and South West. (Refer to Table 1.1). These include Penrith and Blacktown, which encompass the suburbs around Mountain View and Valley View\(^3\). This information was used in establishing ACULink to target schools in areas with the lowest transition rates.

Table 1.1

<table>
<thead>
<tr>
<th>Area</th>
<th>Participation Rates: %</th>
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<tr>
<td>Ku-ring-gai</td>
<td>60.5</td>
</tr>
<tr>
<td>Woollahra</td>
<td>56.1</td>
</tr>
<tr>
<td>Mosman</td>
<td>54.9</td>
</tr>
<tr>
<td>Waverly</td>
<td>38.0</td>
</tr>
<tr>
<td>Penrith</td>
<td>15.1</td>
</tr>
<tr>
<td>Campbelltown</td>
<td>15.0</td>
</tr>
<tr>
<td>Blacktown</td>
<td>14.7</td>
</tr>
<tr>
<td>Cessnock</td>
<td>9.8</td>
</tr>
</tbody>
</table>

(Selected statistics from Steveson, Evans, Maclachlan, Karmel and Blakers, 2000, pp. 21 – 21).

Thus far, financial barriers and proximity have been shown to contribute to, but to not fully explain, differential rates of participation. Clearly, factors other factors must be at play.

In his large-scale study, Richard Teese found that failure in mainstream school subjects such as English was unequally distributed on social lines, with students from semi-skilled or unskilled workers’ homes failing at two to three times the rate of those from professional and managerial families. He also noted that aspirations for university decline with the level of achievement in secondary school (Teese, 2000). He proposed that reducing these inequalities would require more systematic and targeted strategies, though does not elaborate on the shape such strategies might take.

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\(^3\) These suburbs are home to the two schools in this study. Names have been changed to protect confidentiality.
Several other Australian studies which investigated the relationship between socio-economic factors and access to/participation in higher education have had similar findings. Long, Carpenter and Hayden (1999) tracked three large cohorts of young Australians over time. Using parental occupation (father’s), parental education (mother’s) and family wealth (defined by size of house and material possessions) to measure socio-economic status, they found that all three factors had an impact on participation, with those from the highest SES categories around twice as likely to progress to higher education as those in the lowest category. Of the three factors, parental occupation and level of education were found to have a greater effect than family wealth, although finance played a significant role. This supports the notion that it is not financial barriers alone, but attitudes to higher education that are developed in the home, which affect transition to and participation in higher education.

In his study of school students’ aspirations and expectations, James (2002) found “appreciable social stratification in the opinions of senior secondary students about the relevance and attainability of a university education” (James, 2002, p. ix). In particular, he identified a gap between the post-secondary aspirations and expectations of low SES students. In his survey of 7000 Year 10 to 12 students on their attitudes towards school and aspirations for post-secondary study, two in every three respondents expressed a preference for university. However, while 70% of high SES students believed they were “likely to go to university”, only 42% of low SES students held this belief. James found that students from low SES backgrounds were less likely to believe that a university course would lead to an interesting rewarding career and held stronger beliefs that TAFE would be useful. They showed less confidence that their parents want them to go to university, and a stronger interest in earning an income immediately. Students from low SES backgrounds also had greater perceptions of barriers to their entering higher education. They were:

- less confident their results would get them into university;
- more likely to believe they were not studying the right subjects for university entry;
- more likely to believe the cost of university fees might stop them attending; and
- more likely to believe their families could not afford to support them while they studied. (James, 2002).
Like Long and colleagues, James found parental educational levels to be the most reliable indicator of the educational aspirations of young people – more so than parental occupation or family income and wealth. This supports the view that beliefs about higher education represent a more significant barrier to transition than financial factors. “The predominant effects appear to be psycho-social factors associated with the perceived relevance of higher education. These are not factors that can be rapidly changed through short-term measures” (James, 2002, p. xi).

Khoo and Ainley (2005) also noted an association between socio-economic background and aspirations for university, with 87% of young people from the high income group planning to go to university, compared to 54% of the low income group. They demonstrated how plans made comparatively early in secondary school are strong predictors of attainment, as 87% of those who indicated in Year 9 that they planned to proceed to Year 12 did so. Similarly, 52% of those who intended to go to university (in Year 9) did end up participating, whereas only 14 per cent of those who had not intended to go eventually participated, a moderately strong correlation of 0.59. This link between aspirations and outcomes indicates the importance of early intervention in nurturing favourable attitudes to learning in order to reach students before important educational decisions are made.

Several more recent studies add weight to these findings. Taylor and Nelms (2008) found that planning to go to university was associated with parents having high income and a tertiary education. They note the importance of aspirations in affecting educational outcomes and call for more support in schools for young people from low-income backgrounds. Jones (2002) and Cardak and Ryan (2006) both noted the strength of students’ achievement at Year 9 level in predicting participation in higher education. This suggests that the difference is not purely attitudinal, but that educational disadvantage in the early years of schooling plays a role. Early timing of interventions may therefore be a significant factor in their efficacy.

A clear conclusion that can be drawn from these studies is that young people from low socio-economic backgrounds have different beliefs about and aspirations for higher education than those from middle and upper socio-economic backgrounds. The
implication is that, in order to increase rates of transition, we must first alter these beliefs. This assumption has informed equity policy and practice over the past two decades.

A common recommendation is that universities, in collaboration with schools, focus on early intervention in order to affect young people’s aspirations at an early age. Many suggest that returns are greater in programs targeted earlier rather than later (for example, Carneiro & Heckman, 2003). The provision of accurate, timely information is generally seen as a vital ingredient to build awareness of the range of options available and to correct misconceptions such as those surrounding the costs of a university education. However, information alone is rarely sufficient to alter entrenched beliefs. Attitudes and beliefs are both cognitive and emotional and, as such, require high-impact, “real world” experiences to bring about fundamental change (Yair, 2003). This indicates that opportunities to experience university life would be effective. Further, social and cultural capital theory suggests that contact with positive role models or mentors is another key aspect of successful interventions.

**The nature and extent of equity intervention activities**

Higher education policy has taken up this theme, funding projects aimed at affecting attitudes (Commonwealth of Australia, 2007). Higher education providers across Australia and in other nations, particularly the United Kingdom, have responded to this, with many universities establishing access and outreach programmes in their communities.

The response of many Australian universities has often been to offer alternative pathways into university for those from disadvantaged backgrounds. Special access programs include, for example, the University of Western Sydney’s *Unitrack*, the University of Newcastle’s *Newstep*, Murdoch University’s *OnTrack* program and Australian Catholic University’s (ACU) *Pathway Programs*. These are designed to assist people from disadvantaged or disrupted educational backgrounds, including non-school leavers and those who did not attain the requisite marks in Higher School Certificate (or equivalent) examinations, through offering pre-university, non-award courses as alternative pathways to university entry.
Such schemes address issues of access to higher education. Of more pertinence to this study, however, are outreach schemes in which universities work with targeted schools and communities. Examples of outreach programs include (though are in no way limited to) Griffith University’s Uni-Reach program, the University of Newcastle’s Unilink program, the University of South Australia’s USANET program, and the Australian Indigenous Mentoring Experience (AIME) program which is currently running at four universities across New South Wales.

Published research into such initiatives is limited. In some cases, such as AIME, anecdotal evidence is highly positive but it is too early to record any long-term effects (Galvin, 2009). While there has been some evaluation of other initiatives, much of it is unpublished. The greater part of publicly available research is focused on projects targeting students in the later years of schooling, particularly in Years 11 and 12. The dearth of published literature in regard to early-intervention schemes is such that, in 2008, the Federal Department of Education, Science and Training (DEST) commissioned research into the efficacy of existing outreach initiatives, with a focus on those targeting school students prior to Year 11 (DEST, 2008).

The University of Newcastle runs an outreach program – Unilink – which uses a range of strategies including campus visits and presentations to parents and students to inform and motivate students about University. The intervention commences in Years 7 to 9 and utilises role models in the form of university students enrolled at the University of Newcastle who attended the participant schools. Similarly, the University of South Australia (UniSA) USANET scheme employs a series of outreach actions from the early years of secondary school through to Year 12. Ramsay and colleagues (Ramsay, Tranter, Charlton & Sumner, 1998) found that the intervention had produced changes in students’ attitudes and rates of enrolment. The combination of outreach, access and support were seen to contribute to the success of the scheme.

Like Australia, widening participation has been the focus of targeted policy directives in the United Kingdom (UK) since 2001 under the Excellence Challenge (now Aimhigher) program. The UK government provided funding to schools and higher education institutions to raise aspirations and participation among people from
disadvantaged backgrounds (DfES, 2003) and the Widening Participation agenda is now a core activity in universities across the country. An evaluation of Aimhigher found that the most effective activities were those which engaged young people in university experiences such as campus visits and residential schools; those which provided mentoring about progression to higher education; and those which provided advice and guidance prior to entry (Bowers-Brown, McCaig, Stevens & Harvey, 2006). These characteristics have been taken up by universities across Australia and in the UK.

Situating the study

The Mountain View and Valley View areas

This study is centred on two schools which are situated in outer western Sydney. Mountain View and Valley View4 are adjoining suburbs which lie over 40 kilometres west of Sydney’s commercial centre. Both suburbs are classified as low socio-economic status on a number of measures, including unemployment levels, occupation and levels of education. (Refer to Table 1.2). The population is made up of people from many diverse nationalities, with close to half the local population having been born overseas. In terms of educational attainment, there is a widespread impression of academic underachievement in the region.

Parental occupation and education

This research comprised two main data collection methods, one of which was a questionnaire administered at St Mary’s5 to their Year 7, 8 and 9 cohorts. The questionnaire contained a section on demographic aspects including parental occupation, and parent and sibling levels of education. In order to gain a picture of the socio-economic status of the participants in this study, the results of this section of the questionnaire are presented here. In addition, these figures will be compared to Australian Bureau of Statistics (ABS) 2006 Census data for the local Census districts of Mountain View and Valley View, and with the population of Australia as a whole. (Refer to Table 1.2 below). These figures demonstrate that the populations of Mountain View and Valley View are around twice as likely to have been born in a non English-

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4 Suburb names have been changed to protect the anonymity of schools and individual participants.
5 School names have been changed to protect the anonymity of schools and individual participants.
speaking country as the population of Australia as a whole. They are also significantly less likely to speak only English at home.

As measured by occupation, the parents of the students in the survey sample fall into the high socio-economic group at around half the national rate. Just over 18% of parents of the young people surveyed are employed in professional / managerial occupations, and the proportion is similar for the rest of the Mountain View and Valley View populations. This compares to 37.9% in the Australian population as a whole. Among the parents of the young people surveyed, 62% are employed in low SES occupations, compared to around 50% of the general population of Australia.

Table 1.2

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Australia* %</th>
<th>Mountain View* %</th>
<th>Valley View* %</th>
<th>St Mary’s School#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birthplace and Language</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons born overseas</td>
<td>22.2</td>
<td>45.7</td>
<td>42.2</td>
<td></td>
</tr>
<tr>
<td>English only spoken at home</td>
<td>78.5</td>
<td>40.3</td>
<td>52.6</td>
<td></td>
</tr>
<tr>
<td>Occupation and Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionals and managers</td>
<td>33.0</td>
<td>16.9</td>
<td>18.9</td>
<td>18.2 (34/187)</td>
</tr>
<tr>
<td>Workers in skilled, semi-skilled and unskilled occupations</td>
<td>50.1</td>
<td>62.9</td>
<td>58.7</td>
<td>62.0 (116/187)</td>
</tr>
<tr>
<td>Unemployed at time of census</td>
<td>5.2</td>
<td>10.3</td>
<td>6.3</td>
<td>N/A</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Aged 15 and over with a bachelor degree or higher qualification | 19.0         | 11.5             | 12.9           | 19.8% of parents have a university qualification. (37/187).
|                                       |              |                  |                | 11.7% have a sibling who went to university. (11/94). |

*Based on ABS Census 2006. Cat. No. 2068.0 – Non-School Qualification: Level of education (a) and 2006 Census QuickStats: Mountain View and Valley View.
# Based on results of the survey component of this study, Section 1.
(ABS Figures expressed as % of the population. St Mary’s School: n = 94 students / 187 parents).

6 For disaggregation by mother and father, see Appendix 7.1: Parental Occupations.
The statistics for education present quite a different picture. Respondents report that 19.8% of their parents have a university qualification, which is very close to the levels for the whole of Australia\(^7\). There are two possible explanations for this mismatch between parental education levels and occupation statistics. The first is that the young people may not know exactly what level of education their parents attained and some may mistakenly believe that one or both parents had completed a university degree. The second possibility is that many of the respondents’ parents may have been educated overseas – which is implied by the high percentage of those born overseas – and that these qualifications may not be recognised as the equivalent of an Australian degree. This may also partly explain why many have not been able to gain employment in the fields for which they were trained.

Only 11.7% of respondents report having an older sibling who had attained a university degree. This compares to 19% for the Australian population. These figures indicate that young people from St Mary’s School make the transition to university at a lower rate than the Australian population as a whole.

<table>
<thead>
<tr>
<th>Table 1.3</th>
<th>Role Models who have completed university (N = 94)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than one</td>
<td>One</td>
</tr>
<tr>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>14</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

When the figures for parents and siblings are combined, only 1 in 3 respondents reported having a role model in their immediate family who attained a university degree ahead of them. (Refer to Table 1.3). This builds a picture of a social world where going to university and becoming a professional is the exception, rather than a norm which most aspire to. Given that parental levels of education are the strongest predictor of post-secondary destinations, we would expect to see one in three young people from St Mary’s aspiring to a higher education. This chapter will now introduce a theoretical

\(^7\) For disaggregation by mother and father, refer to Appendix 7.2: Parental Educational Levels.
perspective regarding ways in which these characteristics might impact upon young people’s aspirations for university.

**Theoretical framework**

*Social capital theory*

In the course of this study, it will be proposed that the presence or absence of positive role models in a young person’s family plays a significant role in shaping their aspirations and beliefs. This suggests that one role of an intervention might be to provide participants with the role models that are missing from their lives, to act as *bridging* social capital to the unknown world of university. That is, to work with mentors from a social sphere similar to their own who have made the transition to university.

*Cultural capital theory*

This study proposes that one of the main ways in which a young person’s *social* capital influences their likelihood of going to university is through its influence on their beliefs and aspirations, here construed as components of a person’s *cultural* capital. According to Bourdieu and Passeron (1977), the accumulation of cultural capital starts early in a person’s life. Through the primary pedagogic work of the family, a basic predisposition towards learning is established in a child. These predispositions are defined as habitus, or *embodied* cultural capital. The core proposition is that a young person’s embodied cultural capital – specifically their knowledge and beliefs about and aspirations for university – is shaped early in their lives by their *bonding* social capital – the connections in their immediate social worlds.

The goal of ACULink is to assist young people to accumulate *institutionalised* cultural capital, that is, to increase their access to higher educational qualifications. However, it does so primarily by indirect means, through affecting their *embodied* cultural capital – their beliefs about higher education. The implications for the intervention program are considerable. Given the strength of family influences, altering embodied dispositions will likely require a significant investment of time, over an extended period, and suggests that beginning as early as possible in a young person’s education will be more efficient.
The research focus

Clearly, any strategy that aims to improve the participation of young people from low socio-economic backgrounds will need to address the pre-existing cultural capital and predispositions towards higher education that are developed within the family from a young age. An intervention is most likely to be effective in this if it works with mentors, and begins early. In summary, an intervention program that aims to address equity of participation for people from low socio-economic groups would comprise the following elements:

- sustained linkages: the development of long-term relationships;
- early intervention, in order to enhance young people’s embodied cultural capital before critical educational decisions are made;
- the use of appropriate role models to enhance young people’s bridging social capital;
- provision of access to, and training in the skills required to locate, practical information on course and university choice, subject options, a realistic estimate of costs and a realistic sense of what university life is like;
- a balance of ongoing, incremental strategies and intense episodes within the “real world” of university.

Australian Catholic University’s “ACULink” project is an example of a university-school linkage built upon these principles.

The ACULink Program

The ACULink program was developed in 2000 in partnership between Australian Catholic University (ACU) and five Catholic secondary schools in socially and economically disadvantaged areas within the Parramatta Diocese. These schools comprised one senior secondary college (Years 11 and 12 only); two junior secondary schools (Years 7 to 10 only); one boys’ 7-12 school and one co-educational 7-12 school. In order to obtain a manageable sample size, two sites were selected for this study: one of the 7-10 schools and the senior secondary college. It should be noted that the researcher was also the project officer for the ACULink project throughout the time of data collection for this research. This included visits to schools, addressing year cohorts, running class sessions and having oversight of group discussions. I was therefore a
familiar face to the majority of research participants. In the overview of the strategies which follows, the “project officer” referred to is the researcher. However, by the time of analysing the bulk of the data and drawing conclusions, I had handed the project over to others to administer.

Based upon the model outlined above, the ACULink program works with students from Year 8 through to Year 11, employing a range of strategies designed to enhance the knowledge of participants and to change their perceptions of university before critical educational decisions are made. These strategies are designed as follows.

**Year 8 Goal-Setting**

In Year 8, ACULink comprises a series of lessons around the notion of *Goal-Setting* in all facets of life, with a particular focus on career and study goals. The earlier lessons, generally delivered by home-room or PD/H/PE teachers, involve exploration of students’ life goals and a “Life Choices” board game. A final session on work and study goal-setting is run by a project officer from ACU. As in many careers programs, students are encouraged to reflect on their strengths and personal attributes and what they want from life, and to explore their career options. There is an explicit emphasis on the fact that, for many of the participants, gaining entry to the career of their choice will necessitate a university education. Thus, the strategy promotes conversation about post-secondary pathways.

**Year 9 Pathways**

The project officer visits schools again in Year 9 and conducts a session on *Pathways*, where possible accompanied by an ACU student from a similar background to the school students. This session provides more specific information around career options and alternative post-compulsory pathways, with an explicit introduction to the benefits of a university education. All Year 9 students take part – around 150 in each cohort. This whole-group session is followed up in PD/H/PE classes, where students have the opportunity individually to explore options within their chosen fields.

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8 Any potential influence on research results and the interpretation of data is canvassed in Chapter 4, in the sections on Reflexivity and the Hawthorne effect.

9 Developed by ACU.
**Parent Information Booklet**

In Year 10, the Pathways theme is explored further through in-school careers-based lessons, with an explicit focus on university as an option. Recognising the important role played by parents in influencing young people’s decisions, this is supplemented by an information booklet for students and their parents entitled *Is University for Me?* The booklet aims to stimulate conversation between school students and the most significant influences in their lives: their parents. It tries to fill in any gaps in students’ and parents’ knowledge about what going to university involves, and to correct any misconceptions they may have: for example, regarding the costs of attending university. Topics covered include: alternative post-secondary pathways; benefits of going to university; getting into university and the costs of university study.

**Year 10 Campus Visit**

The Year 10 strategies culminate in a visit to ACU’s Strathfield campus for around 50 – 70 interested students from each of the four partner schools. The visit is offered to all students who express an interest. The students experience guided tours, mock lectures and tutorials and meet university students who attended the same schools or came from the same area as the school student participants. A key feature of the campus visit is the emphasis on interaction with these students, who run small-group discussions about university life and conduct mock tutorials in their subject areas. The university students also run group sessions where they help students to navigate the Universities Admissions Centre (UAC) website and to explore their options with regard to universities and courses.

**Year 11 Role Modelling**

In Year 11, interested school students are offered the opportunity to participate in two strategies. ACU recruits university students to visit Year 11 students in their schools and take part in informal, small-group conversations. ACU students share their stories of their pathways into university and answer questions from the school students about getting into university and university life. Again, a key component is the recruitment of university students who went to schools in the region, to enable the school students to more readily identify with them.
**Year 11 Shadowing**

Year 11 students are invited to spend a day at ACU “shadowing” a First Year university student. They attend actual classes in a field of their choosing, gaining a more genuine taste of university life. As in the Year 10 campus visit, the aim is to demystify university and to demonstrate that university work can be both achievable and interesting.

**Step-Up into Teaching**

Following on from the ACULink strategies outlined here, Australian Catholic University offers a program entitled *Step-Up into Teaching* (SUIT) to students attending the ACULink schools. Year 11 and 12 students can opt to undertake two university units that, in addition to contributing towards their Higher School Certificate, count for credit if they proceed to an Education degree at ACU.

The structure of the ACULink project reflects a model of intervention that is founded on existing understanding about the conditions which influence the formation of young people’s beliefs. Thus some of the strategies, such as the Year 8 goal-setting, are incremental processes which increase school students’ awareness of alternative post-secondary pathways and develop their skills in researching career-specific information. Other strategies, such as the campus visits, are more intense experiences connected to the real world of university and to university student role models similar to the school students. These visits offer school students the opportunity to make a realistic appraisal of their post-secondary options. This has the potential to maximise their motivation and to empower them to break away from pre-existing perceptions and to re-think their futures. Indeed, preliminary evaluation data and informal feedback received to date indicates that the strategies often do have this effect. For example, 100% of participants reported that the campus visit made them more inclined to consider university as an option (Chesterton, 2000; 2001).

**Research questions**

This study interrogates two propositions. First, it tests that hypothesis that a young person’s bonding social capital plays a significant role in shaping – and in many cases, limiting – their embodied cultural capital with respect to their knowledge of,
beliefs about and aspirations for university. Second, it tests the hypothesis that it is possible to intervene in the processes of the accumulation of social and cultural capital and thereby to enhance knowledge, alter beliefs and raise aspirations. The study critically examines the impacts of the ACULink project described above with a view to determining the extent to which it enhanced participants’ knowledge of, altered their beliefs about and, ultimately, raised their aspirations for university. To that end, it asks two key questions: *does the intervention work?* and *in what ways does it work?*

Answering these questions necessitates first building an understanding of participants’ pre-existing knowledge, beliefs and aspirations, and of the key influences on their decisions whether or not to attend university. Thus, two key questions become four broader questions:

1. What is participants’ pre-existing knowledge of and what are their pre-existing beliefs about, and aspirations for university?
2. What are the key influences on the construction of participants’ knowledge of, beliefs about and aspirations for university?
3. To what extent does the intervention alter participants’ knowledge of, beliefs about and aspirations for university? and
4. In what ways does the intervention alter participants’ knowledge of, beliefs about and aspirations for university?

**Research approach**

This research is both qualitative and quantitative in approach. The role of the qualitative component was to gain an in-depth view of the participants’ lived experiences and of social phenomena, in this case the *processes* that operate as a young person constructs her/his knowledge, beliefs and aspirations. The quantitative component provided breadth by surveying a large number of students, and served to triangulate the data. The research was conducted in two Catholic secondary schools which took part in the ACULink program: one a Year 7-10 co-educational campus, the other a co-educational senior secondary campus. In addition, a number of students from Australian Catholic University, who had been involved in the program while at school, were included.
In-depth interviews were employed to provide participants with an opportunity to voice their own thought processes, experiences and influences with regard to their career and study decision-making. Interviews were semi-structured. Initial questions were open to allow participants to focus on factors and influences of most significance to themselves with minimum researcher influence. Questions became gradually more focused to ensure key facets were addressed.

For the interview component, non-representative, stratified sampling was employed to provide a group which contained four male and female students from all cohorts involved in the project, giving a sample of nineteen students from Years 8 to 12 and four university students. In-depth interviews were conducted before and some months after participating in an intervention strategy, to ascertain the impact of the intervention. Interview data was analysed using the three-stage method developed by Glaser and Strauss, and later revised by Strauss and Corbin. Categories were initially derived from the framework of social and cultural capital theory, and were revised as new concepts emerged from the data.

The quantitative component employed a questionnaire comprising a mix of closed-response Likert-scale style designed to highlight participants’ knowledge of and beliefs about higher education, the key influences upon their beliefs, and their post-secondary aspirations. The survey was administered to three school year cohorts of Years 8, 9 and 10 before and after the intervention to ascertain the extent to which knowledge, beliefs and aspirations had changed. Results are generally reported as percentages. A t-test was conducted on rating-scale questions to compare the mean of responses in the pre- and post-surveys and thereby ascertain whether any differences could be viewed as statistically significant. Finally, results from the qualitative and quantitative components were woven together under headings derived from the theoretical framework.

**Significance of the research**

This study into the under-representation in higher education of people from low socio-economic backgrounds is significant on a number of levels. First, it aims to make
a contribution to our understanding on grounds of social inclusion. A university qualification is increasingly a pre-requisite to enter many fields and thus can have an enormous impact upon an individual’s life-chances. Having a degree reduces the likelihood of being unemployed by 60% (Gillard, 2008b) and on average increases earnings by around 36% (Coates & Edwards, 2009; Marks, 2008). It can lead to increased job satisfaction (Smith, 2007; Fabria & Vila Lladosa, 2007) and improved health and well-being (Hillman & McMillan, 2005). We therefore have a moral obligation to address inequities in participation.

Second, equity occupies a position of prominence in current federal higher education policy. Increasing overall participation is viewed as an essential component of economic reform and it is claimed that an additional 0.15 years of education, on average, could boost productivity by 0.62% and economic growth by 1.1% by 2040 (Access Economics 2005, as cited in Australian Labor Party, 2007, p. 24).

Third, after two decades of federal funding of outreach initiatives, it is timely to evaluate the efficacy of the approach and there is a need for more research in this field, as stated by many policy developers (for example, DEST, 2008; Bradley, 2008). This study makes a contribution to the field, and adds to the small but growing body of evidence on the impact of intervention programs.

Finally, the strength of parental levels of education as a predictor of young people’s post-secondary destinations has led many to surmise that “attitudes” are the key. However, this notion remains largely untheorised. The contribution of this study lies in its theorising of how beliefs about and aspirations for higher education are formed, and in what ways they can be altered. It stands with a small body of inquiry that attempts to reach beyond statistics to ascertain not only why inequitable rates of participation persist, but also what can be done to redress the imbalance. Ultimately, it suggests a framework that is both theoretical and evidence-based on which to build future interventions.
Framing the study

This thesis comprises eight chapters which are based on the standard format for published studies in education research. Chapter 2 locates the study within its historical and political contexts through a narrative of Federal policy with regard to student equity in higher education, from the Post War era to the recent reforms of the Rudd Labor government. Chapter 3 theorises the area of the construction of young people’s embodied cultural capital, including the role played by their bonding social capital and the potential for intervention. Based on these theories, it develops a framework through which to analyse and interpret the data. Chapter 4 details the methodological approach and research methods employed in this study. The approach taken is essentially qualitative with a quantitative component.

The subsequent three chapters present the findings of the study. Chapters 5 and 6 present the results of the survey and the in-depth interviews under conceptual headings emerging from the theoretical framework provided by social capital and cultural capital theories. Pre-existing beliefs of participants are first identified, then the impact of the intervention is explored.

In Chapter 7 I draw on these observations to draw conclusions about the impact of the ACULink project on the bridging social capital and embodied cultural capital of the participants. This leads to the development of an abstract model describing key influences on the formation of intentions to undertake university study, with a particular focus on the role played by the intervention in this process. From this, I develop a practical model in which I propose essential elements of an intervention program.

The final chapter revisits the research problem and assesses the contribution this study makes to our understanding of the conditions and processes that account for the persistence in under-representation of young people from low socio-economic backgrounds at university. I then discuss the implications of the research findings both for higher education student equity policy, and for institutional practices in student access and equity. In addition, I propose future areas of research suggested by the findings of this study.
Conclusion

In this chapter I have outlined the purposes of this study, its methodology and its significance to the field of equity of access to higher education for young people from low socio-economic backgrounds. It commenced with an overview of the broad political and the local socio-economic contexts within which the study is situated, then explored various explanations of the causes of under-representation. Then, drawing on theories of social and cultural capital, two central propositions were put forward: first, that a young person’s bonding social capital plays a significant role in shaping their embodied cultural capital with respect to their beliefs about university; and second, that it is possible to intervene in the processes of the accumulation of bridging social and embodied cultural capital and to thereby raise aspirations.

Finally, it asked by what means it might be possible to intervene in the process of the construction of young people’s knowledge of and beliefs about university, in order to raise their aspirations and ultimately to improve the rates of transition to higher education. I mounted an argument for a model of intervention based on the principles of early intervention, the provision of timely information, experience of the world of university and interaction with academically successful role models. The remainder of the study elaborates these propositions theoretically and tests them empirically, before proposing an emerging theory of intervention.

In the following chapter I begin by reviewing the contribution that economic, social and political/ideological contexts have made to equity of access to higher education for people from low socio-economic backgrounds.
Chapter 2: Equity of access to higher education – the policy context

Introduction

Equity of access to higher education has been on the political agenda in Australia for over fifty years. The shape and extent of the emphasis on equity has been dependent on each particular government’s standpoint on the purposes of education in general and higher education in particular. Indeed, it has been dependent on their very constructions of equity. Not surprisingly, successive governments have understood equity in different ways. Changing social and economic contexts, as well as alternative political and ideological standpoints, have driven policy formulation and resulted in widely varying positions and emphases. These varying standpoints have created differing policies which have in turn been interpreted and enacted in varying ways by individual higher education institutions.

This chapter takes the form of a critical narrative of higher education policy with regard to equity of access, from the Post War era to the most recent round of higher education reforms. It undertakes an examination of the literature, from committee reports and policy statements to contemporary and historical critiques. Five key phases of student equity policy are identified and explored. Each phase is first presented in terms of the drivers – the social, economic and political/ideological climates of the time – and analysed in terms of the rhetoric of equity policy. Each phase is then critiqued for its effects – both in terms of government actions in higher education equity, and in terms of the distributional outcomes of these actions.

The chronological structure of the chapter is not intended to imply a direct linear relationship between policies and effects. It recognises that the unpredictable nature of government and policy formation creates contradictions and gaps between rhetoric, action and effect. This understanding of the relationship – between policy production, its enactment and its effects – is informed by Ball (1994). Ball understood policy as both processes and outcomes, as text, discourse and effects. As text, he notes that policy is produced through a process of negotiation and compromise. As discourse, he asserts,
policy formation reflects the asymmetrical nature of power and control. According to Ball, power is exercised through the production of “truth”, a process that privileges the dominant discourses, giving legitimacy to some voices while silencing others. Finally, Ball acknowledges that the effects of policy vary between contexts as the text is “read” and interpreted in different ways by those who act upon them. This chapter is organised along these themes: policy-as-text; policy-as-practice; and effects of policy.

In terms of policy-as-text, the chapter identifies a fundamental shift over time, from higher education policy that was driven by notions of re-distributive justice towards policy that is driven by economic rationalism and the ideology of the market. It observes that student equity has come to be conceptualised as important not merely for social justice’s sake, but as an indicator of systemic efficiency. In terms of policy-as-practice, the chapter then evaluates actions of successive governments in the equity arena and locates the gaps between rhetoric and deed. It observes that, while the rhetoric of the past two decades was of a renewed focus on equity, this has taken place against a backdrop of a general squeeze on spending in higher education, and of increasing financial burden on students.

The chapter then examines the effects of these policies and actions in terms of the implications for equity of access to higher education. It reviews research into the outcomes of successive reforms and finds that universities have not achieved a redistribution of the socio-economic composition of their student populations. Finally, it asks to what extent are new policy directions likely to impact on equity of access for people from disadvantaged backgrounds?

The phases of equity policy

Key phases of federal intervention in higher education have generally been marked by an inquiry (Davies, 1989, p. 2). Such reports provide a framework to this review of the shaping of higher education policy from post World War II to the present day. In order to understand the field of policy six key phases are identified. (Refer to Table 2.1 for an overview of these phases).
### Table 2.1
**Six phases of equity policy**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Drivers / contexts</th>
<th>Policy as text / understanding of equity</th>
<th>Policy as practice: selected features</th>
<th>Implications for SES equity</th>
</tr>
</thead>
</table>
| Origins of the Equity Agenda: Post WW2 | Class-based society  
University for the elite  
Post-War boom  
Population growth | Access based on “merit”  
Social mobility through expansion  
*Murray Report*  
Recognised social imbalance  
*Martin Report*  
Equality of Opportunity emerges | Scholarships for able needy students  
Introduced two-tier system  
Expanded the system  
Doubled enrolments twice | Increased scholarships  
CAEs more accessible  
Massively increased overall participation  
Little change in social composition of student populations |
| Age of Equal Opportunity: The Whitlam era | Population pressures  
Social justice focus  
Rising aspirations | Compensatory model: equal outcomes requires unequal treatment: | Further expansion  
Removed tuition fees  
Introduced TEAS | Increased numbers of students from disadvantaged backgrounds  
No significant shift in the balance of university populations |
| Recession and the Razor Gangs: The Fraser years | Economic recession  
Increased participation  
Labour market needs  
Need for efficiency | *Williams Committee of Inquiry*  
Recognises barriers are more than financial | Squeeze on funding  
Amalgamations and closures: No. of CAEs falls by 1/3 | Closure of some CAEs reduces accessibility  
No attempt to address inequities  
Did not materially alter the composition of the student body |
| Equity on the Ascendancy: Hawke / Keating | Globalisation  
“Clever Country”  
Rationalisation  
Economic growth to underpin social contract | *Dawkins papers*  
User-pays: students “invest”  
*A Fair Chance for All*  
Equity a component of systemic efficiency. Defined as participation rates reflect proportion of population | Unified National System  
Introduced HECS  
HEEP: incentive to institutions to attract disadvantaged students | Targeted disadvantaged groups  
HECS had no significant impact on enrolment.  
HEEP encouraged equity strategies |
| What Happened to Equity? The Howard years | Economic pressures  
Increased credentialism  
Federal control | Education market / competition  
Rhetoric of focus on equity: tension with market ideology | HECS re-structured: 3-tier system  
HEEP maintained  
Cost-cutting in sector | Equity marginalised  
Students experience increased financial pressures |
| Where to from here? 2007 - | Falling behind OECD Labour market needs | *Bradley Review*  
Egalitarianism | Increased funding overall  
40% of 19-35s degree by 2020  
HECS restructured | 20% low SES by 2020  
More targeted funding for equity programs and outcomes |
The second phase, *The Age of Equal Opportunity*, incorporates the Whitlam years of the early 1970s. In this time, equality of opportunity became a key goal for higher education and specific actions were initiated to address the financial barriers to the full participation of students from disadvantaged groups.

The third phase, *Recession and the Razor Gangs*, covers the years of Liberal Coalition government under Malcolm Fraser. This phase was marked by cost-cutting, labour market considerations which led to a drift away from a focus on equity.

The fourth phase, *Equity on the Ascendancy*, covers the years of Labor government from 1983 to 1996. In this phase, social justice became married to market liberalism and the notion of the student as investor in their own education took hold. Equity reappeared as a key goal, though reconceived as a component of systemic efficiency. Group disadvantage remained a key concept, and institutions were charged with implementing strategies to target specific groups.

*What Happened to Equity?* describes the fifth phase, from 1996 to 2007, an era in which student equity was marginalised. While the rhetoric was of a renewed focus on equity, it existed in a world of market ideologies and competitive practices that were incompatible with the goal of equity of access for all.

The final section asks *Where to from Here?* The Rudd Labor government and its new policy directions in higher education ushered in a new era for student equity in higher education, with a suite of ambitious targets for increases in the participation of under-represented groups and targeted funding to promote these targets.

**Phase 1: The origins of the equity agenda**

“Equal opportunity in education has long been a primary commitment of our society, even if the concept ‘equal opportunity’ has changed.” (Freeland, 2003, p. 123). Throughout the first half of last century it was generally considered that the equal provision of school facilities and curricula for all public school students constituted equal opportunity. However, vast inequalities emerged between school systems and within the public schools themselves. These inequities at the school level translated to
unequal participation in post-compulsory education. Equal provision failed to translate into equal outcomes.

The place of equity of participation in higher education in these times is best encapsulated in a statement of Ramsay, Tranter and others:

University study was once the almost exclusive domain of men, particularly from the social and economic elite of society. Access to university in Australia was not a possibility for most women, people from non-English speaking backgrounds or those from lower socio-economic sections of society until the middle of the century. Indigenous Australians were denied citizenship until 1967. (Ramsay, Tranter, Charlton & Sumner, 1998, p. 15).

Universities in Australia were based primarily on the English model that was, by definition, elitist. They formed but one level in an education system that was designed to educate the upper and upper middle classes and, as such, worked to maintain the social status quo. Student populations comprised the well off and a small proportion of very able students from the lower classes who survived on the limited scholarships that were offered. For a century and a half, the university as the domain of the elite went largely unquestioned. Equity was conceived as “dessert-based” (Gerwitz, Ball & Bowe, 1995, p. 9), whereby access should be according to merit. Merit was defined in terms of intellectual ability. That only one per cent of the school population appeared to possess this “intellectual ability” (Marginson, 1998, p. 71), and that they were concentrated in particular classes, was rarely questioned and no attempt was made to address this situation.

The Second World War and its aftermath wrought great changes in Australia’s social, political and economic development. It stimulated the growth of manufacturing industry in a time when Australia was cut off from its regular sources of supply. It encouraged the increase of federal powers in a time that called for national policies. The post-war baby boom, combined with an influx of immigrants, led to population growth on a massive scale. These three phenomena – labour shortages, technological change and population growth – placed new pressures on Australia’s education system and led to the first of many growth phases in the tertiary sector.
The Murray Report

In 1957 Menzies asked Sir Keith Murray to chair a national Committee of Inquiry into universities. The Report of the Committee on Australian Universities (1957) found Australian universities to be under staffed, under resourced and severely overcrowded and recommended expanding the system through a series of emergency grants. The Menzies government accepted the recommendations of the committee, involving a massive injection of funds, ushering in a second phase of growth in the period from 1957 to the mid-1960s. This represented a significant step towards Commonwealth funding of and policy in higher education.

Recognition of the imbalance in university populations, and a questioning of the lack of equity inherent in the system, first appeared in the Murray Report. The committee observed that only 4.4 per cent of students who entered high schools in Australia went on to university, although sixteen per cent were deemed to have the “intellectual ability” to do so (Murray, 1957, p. 22). The committee recommended that more scholarships be made available for the needy, noting that the pool of qualifying school graduates had risen by 50 per cent from 1950 to 1956 (Murray, 1957, pp. 65-66). The Menzies government increased scholarships, but only marginally, on the grounds that to provide more would only exacerbate overcrowding (Whitlam, 1985, p. 295). The Commonwealth’s prime concerns were the expansion of provision of places to meet demand and to ensure an adequate output of appropriately qualified professionals. After demographic and labour market considerations, equity ran a poor third.

The Martin Report

By 1960 children of the post-war baby boom were in secondary schools, forewarning an increased pressure for tertiary places in the near future. Menzies, concerned about projected cost implications, appointed Sir Leslie Martin to chair a new committee of inquiry. The committee reported on the future shape of tertiary education, with a specific instruction to propose a new type of institution to meet a large proportion of projected demand.

The main recommendation of the Report of the Committee on the Future of Tertiary Education in Australia, committee was for “the development of a broad
comprehensive system of tertiary education, with an emphasis different from but complementary to, tertiary education at present provided by universities” (Menzies, 1965, p. 2). Driven by the necessity to provide tertiary education in institutions that were cheaper than universities, the government accepted this recommendation. The government was very clear that the new colleges should not offer degree level courses. It was concerned that they should “resist the temptation to copy the educational processes and curricula of [the more expensive] universities” (Martin, 1965, as cited in Menzies, 1965, p.5). By 1976 there were 83 Colleges of Advanced Education (CAEs) enrolling 135,000 students (Karmel, 1989, p. 3).

While Menzies’ prime considerations were economic, the notion of a binary system was also driven by ideological considerations. It differentiated between institutions on the basis of the type of education that was offered. Universities were to be the home of pure research and the seeking of new knowledge, while CAEs were to be more applied and vocational. The creation of the binary system was viewed by some as facilitating equality of opportunity in bringing tertiary level education to the masses. The CAEs, designed to be more accessible both geographically and in terms of entrance requirements, catered for many students who had previously lacked the motivation or means to take degree courses (Commonwealth of Australia, 1979, p. 518). However, it can also be seen as a highly conservative attempt to preserve the unique function of the university (Davies, 1989, p. 137) by placing the more applied and vocational studies in the new colleges.

Another strong theme in the Report was the explicit linking of education to the economy and the national interest. It recognised that investment in education is a “source of national prosperity” (Marginson & Considine, 2000, p. 23). This points to another motivation behind the Report – that of increased Commonwealth control over higher education in order to provide graduates with appropriate skills to meet labour market demands.

The Martin Report ushered in a dramatic expansion of tertiary education and marked the most significant phase in the transition from the university as an elite institution to a system of mass tertiary education. At the same time, the theme of equity
of educational opportunity emerged more strongly than before. It commented on differences in rates of participation in tertiary education among various groups. In what can be seen as the seeds of the equal opportunity theme, it noted that “In Australia it is widely accepted that higher education should be available to all citizens according to their inclination and capacity” (1964, p. 1, as cited in Karmel, 1989, p. 3). It also commented on the relatively low participation rates of women. Here we see the beginnings of the conceptualisation of equal opportunity as more than equal provision at the school level. The notion of equal access to a public good – tertiary education – regardless of social, cultural or economic background, was emerging.

In addition to proposed expansion of the system, the Report recommended significant increases in the provision of Commonwealth scholarships, that the amount of the benefit should be raised and that the means test should be liberalised. Despite the increased number of scholarships, however, growth in the student body rapidly eroded the benefits of these increases, such that the percentage of students receiving Commonwealth assistance was reduced overall, rather than increased.

Massification, it was felt, with the provision of scholarships for the needy, was sufficient to improve life chances for all. “Higher education would now be seen as a means to lift the involvement of participants towards the goal of self-development” (Marginson & Considine, 2000, p. 23). There is no doubt that the binary system provided new opportunities for access to a tertiary education for the masses. However, throughout the whole of its existence there was little evidence of improvement in differential rates of participation. Nevertheless, the Report sowed the seeds for future thinking not only on financial and structural matters, but also for emerging notions of equality of opportunity. The two somewhat contradictory notions of efficiency and the national interest on the one hand and equity achieved via increased participation of the masses on the other, would become key themes in higher education policy in the decades to come.

**Phase 2: The Whitlam era and the age of equal opportunity**

The three major forces that drove the expansion of the 1950s and 1960s were demographic change, rising aspirations and the needs of industry for more qualified
workforce (Coffield & Williamson, 1997, p. 6). However, despite the massification of tertiary education, there was little change in the social class composition of student populations and little attention paid to the equity agenda.

With the election of the Whitlam government in 1973 equity became a central concern in education policy development. In rhetoric and deed, the Whitlam Labor government was deeply committed to distributive justice in Australian society.

*The Karmel Report*

During the late 1960s and early 1970s, progressive education reform movements emerged which challenged established notions of equal educational opportunity (Freeland, 2003, p. 116). The long-standing notion that equality could be achieved simply through equal provision for all was questioned. In its place the compensatory model, based on providing more of the same for disadvantaged groups, became the dominant model. The Report of the Australian Schools Commission, *Schools in Australia* (Karmel, 1973), encapsulated this idea. With the report “equal opportunity” came to mean *unequal provision* and legitimated the notion that “more equal outcomes from schooling require unequal treatment of children” (Karmel, 1973, p. 22).

While the Karmel report was concerned principally with schooling, the philosophy was profoundly influential in the Whitlam government. Karmel argued that “the standard of schooling a child receives should not depend on what his parents are able or willing to contribute.” (Karmel, 1973, p. 11). From there, it was a logical step to the position that access to tertiary education should also be free. (Marginson & Considine, 2000, p. 24).

In higher education, the Whitlam government’s achievements were transformational. Structurally, their policies comprised four major innovations. First, the Commonwealth Government took over responsibility for the funding of all forms of higher education (Karmel, 1989, p.3), paving the way for future governments to take more of the steering of higher education directions.
Second, the higher education system went through a second major phase of expansion. From 1973 to 1975 numbers participating in university grew from 109,600 colleges and in Colleges of Advanced Education grew from 69,800 to 109,700, an increase of over 57% (Whitlam, 1985, p.323). This expansion, a result of both increased population and increased participation rates, resulted in increased numbers of students from disadvantaged backgrounds proceeding to higher education.

The third and perhaps most significant step came in 1974, with the abolition of tuition fees for students at universities, Colleges of Advanced Education and Technical Colleges. In so doing, they achieved their stated aim of providing “free and equal education at all levels” (Whitlam, 1985, p. 293).

The fourth initiative was the introduction of the Tertiary Education Assistance Scheme (TEAS) – means-tested, non-competitive financial assistance for all tertiary students. The assumption implicit in these two initiatives appears to have been that the only barriers to the participation of people from disadvantaged backgrounds were financial, and that these two measures alone would lead to improved equity of access for people from disadvantaged groups. The focus was very much on finance, with little or no attention given to more specific equity outcomes or how they might be achieved (Marginson & Considine, 2000, p. 24). The approach also assumed that targeting funds to disadvantaged groups at school level would suffice to compensate for any further educational disadvantage.

Undoubtedly these innovations made higher education more accessible for those from lower income groups. Subsequently, in Karmel’s terms, “The test of whether equality of opportunity exists would then be that those going on to higher education were drawn from all groups in the same proportion as each group was represented in the population.” (Karmel, 1973, p. 17). Notwithstanding this increase in participation, the Whitlam government’s policies did not result in a shift in the balance of university populations. Young people from middle and upper socio-economic groups still had a much greater chance of attending university than those from financially and socially deprived backgrounds. Bourdieu & Passeron (1997, p. 124) defined true equality of opportunity as “presupposing that all subcategories should have a rate of opportunity
equal to the overall rate of enrolment for that age group”. Using this definition, what resulted did not constitute a redistribution of places. Rather, it was merely a translation of existing inequities onto a larger scale (Bourdieu & Passeron, 1997, p. 221).

The conceptual transformations that took place during the Whitlam era are perhaps even more significant. They achieved an enormous shift in mind-set. It became widely accepted that “free, publicly owned and operated institutions should play the major role in education” (Marginson, 1998, p. 71). Equality of opportunity came to be seen as compensatory, comprising additional and different provision for disadvantaged groups. The Whitlam government placed the ideal of equity firmly on the political agenda, and much of the equity rhetoric and practice we see and hear today has its roots in the policies first instigated in the 1970s.

**Phase 3: Recession and the Razor Gangs – the Fraser years and the Williams Committee**

By 1975 the proportion of school students proceeding to tertiary education had increased to 15% and participation rates were almost twice that if mature-age students are included. In 1977, the new Commonwealth Government created the Tertiary Education Commission to cover all three post-secondary sectors. Around this time the Borrie National Inquiry into Population projected a drop in the number of school children and judged that prospective numbers of post-secondary students could be accommodated in existing institutions (Williams, 1979, p. 1). In response, triennial funding was suspended and “clear signals were given that the growth in university enrolments was to be curtailed.” (Coaldrake & Stedman, 1998, p. 17).

“At about the same time the Commonwealth began to take a serious interest in the manpower aspects of graduate supply.” (Dawkins, 1989, p.3). The proportion of 15-19 year olds in full-time employment fell from 59 per cent in 1966 to around 15 per cent in the late 1990s. This, along with reported skill shortages in the trades, caused a “heightening concern to tie education more closely to the world and demands of employment” and provided the imperative for education and training reform from the 1980s to the present (Freeland, 2003, pp. 117-118).
In 1976 the Prime Minister appointed a new committee of inquiry under the direction of Professor Bruce Williams. The *Committee of Inquiry into Education and Training* (Commonwealth of Australia, 1979) was asked to advise on the overall provision of facilities in the sector, and the “relationship between the educational system and the labour market” (Commonwealth of Australia, 1979, p. 2). As its title suggests, a key theme in the Report is the adequate provision of vocational preparation to alleviate problems of industry skill shortages. Notions of ‘quality and efficiency’ emerge strongly, leading to a period of what was termed ‘rationalisation’ and ‘consolidation’. In addition, the Report addressed the issues of the governance and financing of the whole higher education sector and recommended that the co-ordination of the sector continue to be a Commonwealth responsibility.

Driven by harsh economic realities, the recommendations in the Report were based on economic modelling and on projections of slowed population growth and reduced spending on education relative to Gross Domestic Product (GDP). It recommended a continuing process of amalgamations and, through new governance and finance measures, the removal of unnecessary duplication of courses (Dawkins, 1989, p. 4). This led to a continued consolidation of higher education in the early 1980s involving mergers of CAEs and the absorption of some CAEs by universities. By 1983 the number of CAEs had fallen by one third (Karmel, 1989, p. 4).

The Fraser years offered little or nothing to advance the equity agenda. Declining economic growth, coupled with demographic change, acted against any major expansion of higher education (Karmel, 1989, p. 4). Driven primarily by cost considerations, this decline was accompanied by a squeeze on funding. For the first time in twenty years, expenditure on education relative to GDP was cut (Williams, 1979, p. 1).

Driven by the deterioration in the economy from the mid-1970s, the government imposed funding cuts wherein recurrent grants per full-time student decreased by 6 percent between 1980 and 1984. The 1981 *Review of Commonwealth Functions*, or “Razor Gang”, confirmed that these financial constraints would continue (Coaldrake & Stedman, 1998, p. 18). The *Review* also proposed replacing TEAS with a system of
student loans, and re-introducing tuition fees, but these proposals were blocked by the senate.

Equity did, however, make a brief appearance. Alongside labour market requirements and efficiency, the Williams Committee was asked to advise on “the accessibility of the provision including re-entry and transferability and the problems of special groups (for example, the handicapped, ethnic groups, Aboriginals [sic] and women” (Williams, 1979, p. 2). The Committee discussed the structural causes of under-representation of these groups and specifically noted the influence of socio-economic status on post-secondary participation (Commonwealth of Australia, 1979, p. 521). It noted that the causes were complex and became the first inquiry to identify the costs of staying at school, and family attitudes, as contributory factors.

The Committee did not, however, recommend strategies to address this imbalance at the post-secondary or policy/funding level, considering that “the processes of social selection in education have largely run their course by the time a student leaves school” (Commonwealth of Australia, 1979, p. 521). It suggested these issues were more appropriately dealt with outside the sector, before students were admitted, and proposed strategies be developed to address the affordability of schooling and the attitudes of working class families and their teachers. While this approach has some validity, it also acted as an easy escape route for the higher education sector, effectively absolving them of any imperative to create a sector that was more accessible to a broader representation of society.

Phase 4: Equity on the ascendancy – the Hawke era

The Hawke government, elected in 1983, attempted to reconcile neo-liberalism and economic realities with the more traditional Labor social-democratic concerns and a number of competing strands emerged. Human capital theory, with its notions of the “clever country”, was the main driver of policy in the 1980s and justified another wave of expansion in the system. The two themes of quality and efficiency that first appeared in the Williams Committee Report were also carried forward in moves towards the managerialisation and marketisation of the sector.
The Labor Party’s key concerns were economic restructuring and foreign policy. While they did not completely abandon Labor’s traditional emphasis on social justice, it was reconceptualised in the context of the need for a more productive economy and more efficient public service. The social contract, it was argued, would only hold if it was underpinned by economic growth, and that would only happen if Australia became more internationally competitive (Keating, 1999, ND).

The Labor Party sought to make Australia more economically competitive through such measures as the de-regulation of the Australian dollar, reductions in company tax and the removal of tariff barriers to free trade. These macroeconomic reforms were accompanied by microeconomic restructuring in many areas, including reducing Commonwealth public spending by creating a smaller, more “efficient” public sector. Evident in each of these reforms was a faith in the working of the market to promote economic growth. Inevitably, this ideology was carried into the funding and management of higher education.

The Dawkins Reforms

The Dawkins era is often referred to as a “revolution” in higher education (Charlesworth, 1998, p. 4). This involved both extensive expansion and major restructuring as economic rationalism and business oriented managerialism became two key themes. New sources were explored to fund the expansion, and the “user-pays” notion gained favour. These changes heralded the ascendancy of the ideology of the market, an ideology that continues to shape education policy today.

In their review of the influence of the OECD (Organisation for Economic Co-operation and Development), of which Australia is an active participant, on education policy in member countries, Taylor & Henry identified several common threads. Among these were the renewed importance of human capital investment (by governments and, increasingly, individuals) for successful participation in the global economy; increasing use of user-pays schemes; an increased emphasis on markets to drive educational provision; and a focus on outcomes rather than inputs (Taylor & Henry, 2000, pp. 1-2). In this context, equity of participation was not desirable solely for social justice’s sake, but also for the sake of flexibility in the system and to improve
the intellectual capital of the community as a whole. Equity was constructed as conjoined with, rather than in opposition to, efficiency and control (Taylor & Henry, 2000, pp. 1-2).

The Hawke government was committed to increasing participation in higher education, particularly for the disadvantaged, for three reasons:
- To reduce youth unemployment;
- To improve the skill levels of the workforce, particularly in applied science and technology, and thus raise Australia’s economic performance; and
- To improve the access of disadvantaged people to higher education and, through education, to enhanced life chances (Karmel, 1989, pp. 4-5).

In the 1987 *Green Paper* (1987a), changing economic contexts including globalisation, increased international competition, the balance of trade deficit and the rapidity of change, are all cited as justification for expanding higher education (Dawkins, 1987b, pp. 7-11).

The Keating Labor government viewed education as the “keys to the kingdom” (Keating, 1999, p. 1). Their version of human capital theory is outlined in the *Policy Discussion Paper* of 1987 (Marginson, 1993, p. 50). In it, Dawkins utilises human capital theory to justify restructuring and expanding higher education:

An expansion of higher education is important for several reasons. A better educated and more highly skilled population will be able to deal more effectively with change. A major function of education is, after all, to increase individuals’ capacity to learn, to provide them with a framework with which to analyse problems and to increase their capacity to deal with new information. At the same time, education facilitates adaptability, making it easier for individuals to learn skills related to their profession and improve their ability to learn while pursuing their profession. (Dawkins, 1987a, p. 1).

Here, higher levels of education are regarded as necessary for the workforce to increase their capacity to cope with rapid technological change, which would in turn lead to improved productivity.
While arguing the need to expand higher education provision, less favourable economic circumstances by 1985 meant the government was looking for ways to “do more with less” (Marginson & Considine, 2000, p. 27). Needing to find new ways to fund this expansion, the minister undertook to “explore the possibility of broadening the resource base” (Dawkins, 1987a, p. 3). While this included exploring avenues for the private sector to invest in universities, particularly through research partnerships, the major new contributor to costs would henceforth be the individual student. Herein lies another tension: between the view that higher education is a public good which the government should pay for on the one hand and, on the other hand, the view that it is a private good for which the user must pay (Charlesworth, 1998, p. 7).

Also of concern to the Federal Government was the gap between Australia and other OECD countries in terms of participation rates. Australia’s participation rates in all forms of education were among the lowest of OECD countries until 1980s, with rates of participation in higher education around 75 percent of the USA and Canada. In some graduate fields Australia lagged behind leading countries by up to 45%. Again, higher education was seen as vital to international competitiveness.

Thus at the macro level, the White Paper (Dawkins, 1988) aimed to increase participation, without incurring excessive additional expenditure. At the institutional level, it aimed to increase the responsiveness of universities to Australia’s economic and social needs (Karmel, 1989, p. 8). These aims were achieved through four key changes in the size, structure, governance and funding of the system.

First, the binary system was abolished and replaced with a unified national system which aimed to enable more students with the skills needed for the ‘clever country’ to participate and which would also limit the rising costs of higher education. All CAEs were amalgamated with each other and/or existing universities to become universities. This process of rationalisation was aimed at improving the efficiency and cost-effectiveness of the system as a whole.

Second, in order to raise participation and to improve access for people from disadvantaged groups, higher education underwent another major phase of expansion.
Participation increased dramatically, from 20 per cent of 17 to 19-year-olds in 1980 to 38 per cent by 1994 (Long, Carpenter & Hayden, 1999, p. x).

Third, in a continuation of the shift towards greater government control of the agenda, a new portfolio – the Commonwealth Department of Employment, Education and Training (DEET) – was created, of which higher education was now just a ‘sector’. The very name of the department highlights the growing link to the interests of the labour market. The Commonwealth Tertiary Education Commission (CTEC) was disbanded and replaced by the National Board of Employment, Education and Training (NBEET), comprising four councils of which the Higher Education division was one. These councils had a purely advisory role, leaving policy making and management in the hands of the DEET.

The fourth major innovation – and the one most likely to have an impact on equity of access – was the introduction of the Higher Education Contribution Scheme (HECS), whereby individual students were charged a portion of the cost of their higher education. The HECS charge amounted to around 20 per cent of the cost of tuition (Karmel, 1989, p. 21) and was initially set at the same level across all courses and institutions. Again, human capital theory was enlisted to support its introduction. That is, as society reaps some benefits from a more highly educated workforce, the public sector should continue to fund higher education, at least in part. Now, however, the “user-pays” notion was extended to the individual beneficiaries – the students themselves. Graduates, it was argued, receive substantial personal and financial benefits from higher education, and should therefore bear some of the cost.

In an attempt to reconcile what was essentially the reintroduction of fee charging with the traditional Labor ideology of equity of access for all, the HECS system had two key features built in. First, it was not an up-front payment. Students could elect to defer payment until after graduation. (Unlike the loans system employed in other countries, HECS payments would not attract commercial rates of interest). No one, it was asserted, need miss out on a higher education due to an inability to pay. Second, repayment of the debt was contingent upon graduates’ income reaching a given threshold. Those who could not afford it would never be asked to pay.
Whether or not the introduction of HECS impacted on the participation rates of people from low-income backgrounds is much contested. Given the structure for the deferment of paying tuition fees, low income should not present a barrier for those from economically disadvantaged homes. In his study of the *Factors Affecting University Participation by Low SES Groups*, Andrews (1999) found that HECS was a minor influence, if any, on the decision to attend university. He concluded that the main influence appears to be the attitudes of low SES groups towards higher education. Similarly, Chapman and Ryan found no apparent differences between the proportionate increases in the participation of all socio-economic groups (2003, p. 29). They suggested that the income contingent charging system protects the access of the financially disadvantaged.

Cardak and Ryan (2006) also found no evidence that financial constraints deterred high achieving students from attending university. However, they found that a student’s socio-economic status impacted on their ability to convert school performance into university entrance, with students from higher SES backgrounds more likely to achieve higher university entrance scores. Cardak and Ryan established a strong link between school achievement and socio-economic status, apparent from as early as year 9, with the gap widening to year 12 and suggested that policy needs to address the schooling and decisions of these students well before the beginning of their twelfth year of schooling. They concluded that scholarships are unlikely on their own to bring low SES students into the university system in greater numbers.

In contrast, Birrell and colleagues (Birrell, Calderon, Dobson & Smith, 2000), citing evidence from the Longitudinal Surveys of Australian Youth (Long, Carpenter & Hayden, 1999), concluded that family income is a contributing factor in the decision to enter university. They suggest that the argument that family attitudinal influences are the strongest factor provides a convenient excuse for a government looking to contain costs, laying the “blame” at the feet of the parents. However, given the lack of evidence implicating financial constraints, and the strong association between parental levels of education and a young person’s post-secondary destinations, it seems reasonable to infer that social and cultural factors do play an important role in shaping a young
person’s post-secondary destinations. Clearly this is an area that requires further investigation.

**Equity under the Dawkins reforms**

Amidst the evident tension between these neoliberal tendencies and the more traditional Labor social democratic concerns, the White Paper attached great importance to access and equity. It recognised that, despite all former attempts to address equity of access, “significant barriers still exist to the full participation of disadvantaged groups in higher education. Individuals with relatively low income levels draw less on the benefits of higher education than others” (Dawkins, 1988, p. 2). As in former reforms, equity measures were heavily dependent on growth in the sector. This time, however, it was recognised that growth in the system alone would not be enough.

The subsequent two decades saw a succession of discussion papers, policy statements and reforms whose specific focus was on equity. Unlike in the Whitlam era, however, the key justification for the renewed emphasis on equity lay not only in the promotion of a more just society. Now, equity of access became part of the need to develop a more highly skilled workforce and inclusivity was conceived as a component of systemic efficiency. This conceptualisation implies that everyone must have access to university study “in pursuit of the optimal intellectual development of the population as a whole” (Ramsay, Tranter, Charlton & Sumner, 1998, p. 16). Social justice did, however, rate a mention: “[Higher education] promotes greater understanding of culture, often at odds with majority attitudes and, in so doing, supports the development of a more just and tolerant society” (Dawkins, 1988, p. 7).

These dual philosophies of inclusivity and efficiency were embodied in several initiatives, including the establishment of the Higher Education Equity Program (HEEP) and the Aboriginal Participation Initiative (API) in 1985 (Ramsay, Tranter, Charlton & Sumner, 1998, p. 16). HEEP was designed to establish equity goals as integral to higher education planning and review. Key emphases of the scheme were the need for small-scale, institution-level initiatives and the requirement for institutions to set, measure and report on progress towards specific equity targets. In this way, equity came to be seen as conjoined with, rather than contradictory to, considerations of efficiency and the needs
of the labour market (Taylor & Henry, 2000). Equity became inseparable from the managerialism of other Dawkins reforms.

A Fair Chance for All

In the decades following the Second World War it had become abundantly clear that policy measures such as scholarships, expansion, free tuition and living allowances had not achieved a redistribution of participation – a new, more focused approach was required. With the tabling of the 1988 discussion paper A Fair Chance for All, equity in higher education became a “systematic and monitored component of the planning and reporting processes of all higher education institutions within the Unified National System” (Ramsay, Tranter, Charlton & Sumner, 1998, p. 16). The aim was to bring about significant changes in the participation rates of people from all identified subcategories, such that their participation more closely reflected that of the general population. Improved participation rates would be achieved by a range of small, targeted projects that were designed and implemented at the institutional level.

A Fair Chance for All identified six groups still found to be disadvantaged in their participation in higher education. These were; People from Socio-Economically Disadvantaged Backgrounds; Aboriginal and Torres Strait Islander People; Women, especially in non-traditional areas; People from non-English Speaking Backgrounds; People with Disabilities; and People from Rural and Isolated Areas. Specific access targets were outlined for each of these groups. The discussion paper also explicitly defined the respective responsibilities of Higher Education institutions in achieving equity targets, and for the first time, general funding allocations were linked to the progress made by institutions towards achieving equity goals (DEET, 1990, pp. 2-5).

An accountability framework was an important feature of Fair Chance. For the first time, it came to be in an institution’s best interests to attract and retain students from identified disadvantaged groups. This accountability, together with HEEP funding, prompted many universities to take responsibility for changing the balance in their own student populations. A myriad of strategies and equity projects sprang up in response.
In the early 1990s, the Australian economy took a downward turn. The collapse of the Asian ‘tiger’ economies led to severe recession which placed renewed pressure on government expenditure and this was passed on to university budgets. To help fund a growing sector, the HECS charge was increased from $2,300 per full-time year of study to $2,600, an amount that it was believed would have little impact on deterring entry to higher education for people from low and middle income groups. In addition, universities were asked to become more entrepreneurial in their approach to revenue raising. One option was the promotion of full-fee paying options, in particular for graduates and overseas students. By 1995, over 20 per cent of domestic postgraduates paid fees (Marginson, 1997, p. 245).

Notwithstanding Keating’s faith in market forces in the operation of the economy, and the growing trend towards the marketisation of education in general, the higher education sector did not, at this stage, adopt a true market model. To operate as a true market would involve charging full fees that genuinely reflected costs; institutions would have to be free to determine the fees they charge, and to expand or contract their enrolment capacity (Karmel, 1989, p. 23). But the notion of the market had begun to take root and became a powerful force in the shaping of thinking and policy in the years to come. In turn, market logic would have a profound impact on the capacity of the sector to make any real headway towards the achievement of equity targets.

Phase 5: What happened to equity? – Equality, Diversity and Excellence

In 1996 a review was undertaken to assess the success of the Fair Chance approach in improving participation rates of people from the six targeted groups. The report: Equality, Diversity and Excellence: Advancing the National Framework (NBEET, 1996) affirmed the progress made since 1988 in increasing access to higher education for women, people with disabilities, Aboriginal and Torres Strait Islanders, and people from non-English speaking backgrounds. It reported that the most under-represented groups in the student population were now people from socio-economically disadvantaged backgrounds and people from isolated areas (NBEET, 1996, p. ix). It found that little progress had been made in these two groups, with participation rates hovering below 15% (Department of Education, 2000). (Low SES, by definition, forms
25% of the general population). These two groups were identified as priority areas for action, and the report emphasised the need to address equity issues at a systemic level, and provided a new framework for doing so (DEET, 1996).

In Equality, Diversity and Excellence, the principle of the institutionalisation of equity and the accountability component were further developed. The government’s fondness for managerialism was again apparent. Institutions were required to write triennial equity plans, setting goals and targets and reviewing performance as part of annual profile negotiations (NBEET, 1996, p. xiv). HEEP funding remained, but became contingent on the implementation of equity strategies and the achievement of a student profile representative of their catchments. Independent evaluation and reporting was a further condition. Funding for projects was also offered on a seeding basis with the intention that equity strategies become embedded in the operation of universities. It was recommended that funding be focussed on the two new priority areas, and proposed a range of targeted strategies including awareness programs developed in partnership with other sectors of education and systems of financial and social support (NBEET, 1996, pp. 80 - 81).

While the more specific focusing of funding on particular groups has made significant impact in some areas, the targeted approach is not without its detractors. In their critique, Ferrier and Heagney (2001) argue that the approach presents disadvantage as static, whereas the barriers some people face in accessing higher education are more dynamic and complex and that simply focusing on target groups alone is inadequate. They acknowledge that the approach has its strengths in that it focuses the attention of policy-makers, institutions and practitioners more clearly, enabling actual progress to be measured and evaluated, and that this is a critical aspect if any improvement is to be made. They note that there has been a significant increase in the rates of participation of Indigenous people, of people with a disability and of women in non-traditional fields. However, it is not established to what extent these changes are the result of higher education policy or other initiatives that take place at the school and community level.

An important weakness of the targeted approach, however, is that it is open to misuse by some for political purposes and has contributed to a growing perception of
“competing victims” arguing over which group is most needy (Ferrier & Heagney, 2000, p. 86). Indeed, in the current round of reforms, the inclusion of women and people from non-English speaking backgrounds (NESB) has come into question (James, Baldwin, Coates, Krause & McInnis, 2003). It also ignores within-group diversity, for example, the great difference in participation rates of different ethnic sub-groups within the NESB group. The targeted approach also tends to confine equity to the margins, where it is perceived as an “add-on”. While policy makers and institutions espouse the institutionalisation of equity, it allows many practitioners in higher education to continue to pass the buck to those employed in specific equity roles.

These perceived weaknesses help to explain some aspects of poor equity performance of the sector as a whole. While more Indigenous people were entering higher education, their rates of success and participation remained poor and students from rural and isolated backgrounds remained under-represented. There was also no apparent improvement in the access and participation of people from low socio-economic backgrounds in the years from 1992 to 1996, with participation rates still at 14.6 – exactly where they had been five years earlier (DETYA, 2000). Clearly, the achievement of equity required more than the removal of barriers that inhibit access. Rather, it required a “comprehensive examination and possible re-casting of education systems, structures, cultures and practices” (Ferrier & Heagney, 2000, p. 87). Nonetheless, A Fair Chance for All continues to shape equity activity to this day.

The Howard years and the marginalisation of equity

1996 ushered in a time of tight economic control in many areas, and higher education was no exception. In addition to fiscal restraint, the Howard years were characterised by privatisation, and a trend towards marketisation became apparent in education at all levels. The ideology of choice was espoused and universities were expected to compete for students in a more open market.

Population pressures were no longer a pressing issue but they had been more than replaced by increased credentialism. Higher retention to Year 12, and higher expectations from employers for higher qualifications, created a rising need for higher education as a “defensive necessity” (Marginson, 1998, p. 73). These factors further
strengthened the tendency to mass participation (Marginson, 1998, p. 76), such that by 1977 there were over 650,000 students enrolled in Australian universities (Karmel, 1998).

The period from the mid 1990s marked what many view as a serious decline in higher education funding (Karmel, 1998; Sheahan, 2003; Schreuder, 2003, for example), bringing with it further rationalisation and increased commonwealth control. In 1996 there was a six per cent across-the-board funding cut, accompanied by a lack of indexation to inflation, which further eroded spending in real terms. Commonwealth funding declined by about one third relative to GDP between 1976-77 and 1997-98 (Karmel, 1998, p. 2). This financial squeeze meant fewer funded student places, despite increased numbers participating in higher education.

**Equity versus choice**

The 1996 higher education policy paper produced by the Labor government was entitled *Equality, Diversity and Excellence* (NBEET, 1996). When the coalition government came to power that year they released a discussion paper on higher education entitled *Quality, Diversity and Choice*. In the space of a few words, consumer choice had supplanted social justice and equity. Indeed, the title of the discussion paper provides an excellent insight into the priorities of the new government as market based conceptions of competition and consumer choice became the dominant discourse.

One major change was the new structure of the HECS charge. In 1997, in a further step in the fundamental shift from the view of state as provider to the student as “investor in the self” (Marginson, 1998, p. 238), a three-tier structure was introduced wherein charges reflected both course costs and an assessment of potential future earnings. Students who chose to pay up-front received a 25 percent discount but the option for deferred repayment remained. However, the repayment threshold was lowered and the percentage rate at which it was repaid was doubled from two to four percent, to four to eight percent, thereby increasing the financial burden on students. This combination meant that graduates were now effectively paying back twice as much as when HECS was first introduced (Chapman & Ryan 2003, p. 8). In real terms, the
charge was increased from the original average of 20% of real costs of tuition, to an average of 25 to 44% (Kniest, 2003, p. 25).

While the new structure unquestionably placed a greater share of the cost burden on students and their families, it was argued that this constituted a more equitable distribution of charges as those who received greater benefit from higher education – and who could therefore afford to pay more – would make a greater contribution to its costs. A Department of Education, Training and Youth Affairs (DETYA) study (Andrews, 1999) specifically addressed the question of whether the introduction of HECS discouraged persons from low SES backgrounds from undertaking higher education. His findings point to HECS being a minor influence, if a factor at all, on the low participation by low SES groups and that attitudes and values of low SES groups towards higher education were of more significance. However, while the introduction of HECS in 1989 appeared to have little impact on application rates, the changes in 1997 were followed by a fall in application rates of around 5.7 per cent (Andrews, 1999, p. 11). As this effect was the same across the board it had little effect on the composition of the student body.

It could also be argued that the new arrangement presented a greater barrier to entry into the more prestigious professions (for example, Medicine and Law) for those from less wealthy backgrounds. This view is somewhat contested. Andrews (1999) found little alteration in the socio-economic composition of students in any of the bands. He also found no evidence that lowest SES groups are any more averse to debt than those from middle and upper SES groups. Chapman and Ryan (2003) also found no differences between the proportionate increases in the participation of all socio-economic groups in the student population as a whole. Chapman, however, did find a drop in the participation rates of those from low SES backgrounds in Band 3 (Medicine and Law) courses (Chapman, 2003b), indicating that the changes to HECS did act to perpetuate existing social inequities.

A second notable shift was in the growth in the charging of tuition fees. In addition to the HECS charge, from 1989 universities had been allowed to charge fees for certain vocational post-graduate courses. Under the Howard government regulations
were relaxed further, so that by the late 1990s fees were charged in the majority of postgraduate courses (NBEET, 1997, p. 111). While HECS has been shown to have little impact on undergraduate enrolments, the same cannot be said for postgraduate study. Despite the enormous growth in postgraduate numbers, a study of the effects of fee-paying on access for minority groups showed that some groups (e.g., women and those from lower socio-economic groups) were disproportionately choosing courses that are eligible for HECS over those that charge full fees (NBEET, 1997, p. 69). The same study found that men are more likely to receive assistance from employers towards fee payment and HECS liability. As many full fee courses are vocational, this had the effect of directing some people away from certain career options – often the more prestigious – and towards others – generally those with less earning potential. In addition, a large proportion of postgraduate courses provides extra qualifications for those already in employment. The imposition of fees presents a barrier to those not already employed, such as women wishing to re-enter the workforce after a career break, thus impacting on those already most disadvantaged.

These two key strategies – the tiered HECS structure and the widespread introduction of tuition fees – must be conceived as elements in the marketisation of the sector. Higher education, now more than ever, came to be understood in terms of a private investment in human capital. Together, the changes “translated the government of inclusive participation onto the market liberal plane” (Marginson, 1997, p. 236). By including the issues of short-term financial costs and anticipated future earnings in the decision on whether or not to enroll and choice of course, students became increasingly constructed as “investors in the self”.

A third action that adversely affected economically disadvantaged students was further reductions in government financial assistance. The TEAS, set up under Whitlam, was incorporated within the Youth Allowance system and access to the allowance was dependent on a stringent means-test based on family income. This excluded all but those from families whose annual income was less than $35,000. In addition, the age of independence from parental income was raised to 25 years. This resulted in fewer students receiving income assistance such that by 1998 only one third of full-time undergraduates were receiving the allowance – and many of these received only a
partial allowance (Birrell, Calderon, Dobson & Smith, 2000, p. 51). While many government sponsored reports have found financial influences to be an insignificant factor, Birrell et al propose that the most negative impact is on the working poor with annual incomes in the $30,000 to $50,000 range. It is likely that the ability or otherwise to receive the Youth Allowance became a significant influence on the decision to attend university.

In terms of the impact on equity, these changes exacerbated existing inequities not only between individuals, but also between universities. The 1996 policy changes further strengthened the position of the elite universities which “were best placed to withstand the reduction in Commonwealth operating funds, and secure revenue from fee-based undergraduate and post-graduate places.” (Marginson, 1997, p. 251).

The West Report

Commissioned in 1998, Learning for Life signalled the “arrival of pervasive market logic in the organisation of higher education” (Marginson & Considine, 2000, p. 36). In the Report, the conflicting threads of economic rationalism and market liberalism on the one hand are juxtaposed with educational and equity goals on the other. While espousing social justice and proposing measures to advance equity, the Report simultaneously recommends structural reforms that run counter to these ends. For the first time the language and ideals of the market took primacy.

Many of the themes that appeared in earlier reviews were developed in Learning for Life. It cited population pressures and increased community expectations as necessitating further expansion. While acknowledging the need for adequate resourcing, it saw more room for further efficiency savings and rationalisation. Its key argument, however, was that funding alone would not solve the crisis in higher education. What was needed was to “rethink fundamentally the way that we finance and regulate our universities” (West, 1998, p. 15).

Learning for Life envisaged new forms of governance and financing that would provide the funding that was urgently needed, while freeing universities to be more responsive to the needs of students. It argued forcefully for the maintenance of at least
current levels of public funding and suggested changes to tax laws to facilitate philanthropy (De Angelis, 2002, p. 2). It saw in communications technology the promise of delivering both quality and cost-efficiency. In a continuation of existing trends, it supported the notion of priorities for research funding, thereby allowing greater central control over the research agenda. Finally, it proposed that universities institute new forms of governance based on the executive decision-making style of business boards.

The dominant language of the West Report is the language of the market. Notions of choice, diversity and competition dominate. It offered a vision of a new ‘student-centred’ approach to funding, where the flow of funds would be driven by students’ choices. This would provide a powerful incentive to institutions to respond to students’ needs and preferences. It recommended the deregulation of tuition fees to introduce an element of price competition between institutions and to act as a further incentive for universities to control their costs.

Alongside cost-cutting measures and market reforms, the equity theme runs strongly through the Report. Central to its vision is the importance of ensuring that “no Australian is denied access to a high quality education at any level merely because of his or her social background or financial circumstances” (West, 1998, p. 16). It recalls the introduction of Commonwealth Scholarships in the 1950s and the innovations of the 1990s to illustrate how Australia has “embraced affordable accessibility to higher education as fundamental to its national development” (West, 1998, p. 16). It remarks on the increased participation of women, which was now greater than men’s. It also comments on the improvement in access rates for Indigenous students, but notes their over-representation in sub-degree courses and their low success rate (65 per cent as compared to 85 per cent in the general population) (West, 1998, p. 20). Lastly, it identifies people from low SES backgrounds and those from rural and isolated areas as the two groups most under-represented and still in need of focused strategies.

To address these persistent inequities, Learning for Life recommended that targeted funding should be maintained, that a number of funded places should be reserved for targeted equity groups and that supplementary grants should be provided to
members of these groups. Other equity-based measures include the recommendation to maintain the no up-front fees and income-contingent repayment features of the HECS, and the proposal for every student to receive a ‘learning entitlement’ of 5 years that could be used, much like a voucher, at the institution and course of their choice.

The emphasis on equity notwithstanding, a set of basic tensions is embedded in *Learning for Life*. It fails fully to identify and analyse the potential effects of a deregulated sector. Nor does it acknowledge the inherent contradiction in the impact of its over-reliance on communications technologies to deliver courses when those from low SES groups have lower access to computers and the worldwide web. Similarly, apart from a brief reference to the need to monitor the impact on access and equity objectives of allowing institutions to set their own fees, it makes no further mention of the inequities that would likely be perpetuated by an American-style system (DeAngelis, 2002, p. 3).

Many of the recommendations became policy almost immediately (DETYA, 1998). Tax reform incentives were instituted and the emphasis on research was embodied both in the priorities and in increased funding for “Strategic Partnerships” with industry. In response to the call for expansion, there was some limited increase in fully-funded places. The government also made some attempt to institute the equity recommendations. Youth Allowance was increased by 4%, the income threshold was raised by 2.5% and HEEP funds were directed towards projects targeting low SES, rural and Indigenous groups. While not fully adopting the student-driven funding approach, the charging of tuition fees did take a step closer to full deregulation as universities were allowed to offer a proportion of full-fee paying positions to undergraduates in addition to HECS funded places (DETYA, 1998, p. 10).

Many believed open competition in the higher education market place would fragment the sector, resulting in major variation in the quality of institution. This would in turn have a detrimental effect on equity of access and opportunity. Institutions would need to work harder to ameliorate these effects, while government would need “to ensure that market forces (did) not entrench social inequities by restricting access to higher education” (Coaldrake & Stedman, 1998, p. 207). From now on, universities
would feel the imperative to “couple competitive positioning within the learning market with a commitment to social justice – providing an affordable and accessible higher education for groups which would otherwise be excluded from universities” (Coffield & Williamson, 1997, p. 79).

**The Nelson reforms**

By the time Nelson took on the portfolio of Education and Training, the issues of funding for universities and ever-increasing demand had once again reached crisis point. Public funding of higher education in Australia had fallen well below OECD averages such that by 2003 the government committed only 1.4 per cent of GDP, including student contribution. Public investment in universities declined 11%, while the student contribution rose from 20 per cent in 1991 to nearly 33 per cent in 2002.

Another consultation process followed around the issues presented in the discussion paper *Higher Education at the Crossroads* (Nelson, 2002). The government acknowledged that “The case for reform of Australian universities (could) no longer be avoided” (Nelson, 2003, p. 3). While acknowledging that universities needed longer-term access to resources, it asserted that money was not the only problem. Making best use of funds, it was argued, would require sweeping changes to the administration and regulation of the sector.

*Crossroads’* (2002) case for reform included economic considerations, international positioning and human capital theory. Notions of public and individual investment in the future remained strong, as did the need for “lifelong learning”. In terms of international comparisons, Australia was also lagging behind. Some 17 per cent of Australians possessed a degree, which was well behind the 27 per cent in the United States (Schreuder, 2003, p. 7). What was also clear was that the reforms would need to take place without increasing the burden on the budget.

**Higher education wars**

Ball (1994) describes the policy formation process as one of negotiation and compromise. Not since the Dawkins era had this process been so hotly contested, to the extent that many characterised this time as one of higher education ‘wars’ (Schreuder,
At stake were such fundamental issues as university autonomy and academic freedom. *Crossroads* introduced an unprecedented degree of government intervention that many saw as excessive. While no-one argued with the injection of new funds, many viewed the link between funding and industrial relations as more indicative of a government’s ideological stance than of any need to improve efficiency or quality.

In addition to industrial processes and working conditions, government intervention carried over to control of student numbers, what was taught, research priorities and management structures, to an extent that many felt was an impingement upon university autonomy. The most significant concern, however, was the lack of indexation of the government contribution. The proposals, it was felt, were “not sustainable in the medium to long term and there will continue to be an inbuilt degradation factor and an ongoing need for episodic injections of additional funding.” (University of Sydney, as cited in Sheehan, 2003, p. 5).

The most notable feature of the legislation was the provision of significant extra money for universities – a total package worth $2.4 billion over 5 years. Universities would receive $404 million more in base funding over four years, with another $52 million available to those willing to implement industrial reforms. Despite the hype surrounding these increases, in reality they merely returned funding to 1996 levels, with no indexation to keep pace with inflation (Sheehan, 2003). The funds allowed a large increase in student numbers, creating 9,000 additional fully funded HECS places over the next five years (Doherty, 2003).

On top of additional base funding, the charging of tuition was further deregulated to allow universities to access increased revenue from alternative sources – primarily the students. First, universities were given the right to charge a “top-up” to HECS, by a maximum of 25 per cent. The only exceptions were “shortage” courses of teaching and nursing, where fees were capped at the HECS contribution. Second, the income threshold for repayment of HECS was raised from $24,365 to $36,184 (or the average wage). Third, for the first time in thirty years, universities would be allowed to offer full-fee-paying places to local students at undergraduate level.
In a return to the pre-Whitlam approach, the reform package included a number of new scholarships designed to ameliorate the impact of the increased cost of higher education. In the final package this number was increased to 17,600 scholarships by 2007. In targeting groups suffering the greatest disadvantage, there was an emphasis on Indigenous people and regional students. After yet more pressure, these scholarships were classed as non-taxable income.

A renewed focus on equity?

The Nelson policy process privileged the language of economics and managerialism. For the first time, market ideologies became the dominant discourse as other agendas – particularly the equity agenda – were effectively sidelined. Ostensibly, the rhetoric of social justice and equity remained prominent in the discourse. Yet it is difficult to see how the reforms, with their reliance on small-scale targeted strategies and limited scholarships, could disrupt the injustices reinforced by their commitment to marketisation and managerialism. Overall, the reforms were more likely to exacerbate than to ameliorate existing inequities.

Since the end of the second World War, quantitative expansion of higher education around the world has provided “tangible evidence of a government’s commitment to increasing educational opportunities” (Eisemon & Salmi, 1995, p. 67). Expansion has generally been the most successful – and the least politically controversial – strategy for increasing access to higher education for educationally and economically disadvantaged groups. It would therefore be reasonable to expect that this latest increase in places in the Australian system might have reduced inequities. However, international experience has shown that fee-paying with student loans tends to benefit the more advantaged groups. The poor and most disadvantaged benefit more from selective state support allocated on the basis of merit (Eisemon & Salmi, 1995, p. 72). The question, then, is whether the level of provision of financial support was sufficient to overcome the detrimental effects of the fee-paying regime.

Another difficulty lay in the source of the expansion. A significant proportion of the increase came from the additional fee-paying places. Despite the Howard government’s assurances, it cannot reasonably be argued that this was equitable.
However it was expressed, the result was increased access for those who could pay. In addition, the introduction of the HECS top-up created new inequities between institutions, which was also disadvantageous for those from low SES backgrounds. As well as increasing the burden on students and their families, it severely restricted their choices of both course and institution thereby strengthening the existing advantage of those with resources, financial and otherwise. Against this backdrop, increased equity measures had little hope of making a difference.

The Nelson reforms claimed a renewed emphasis on equity and the package contained a number of measures directed at improving access for students from disadvantaged backgrounds. The first of these measures was the retention of the HECS with its features of no up-front fees and income-contingent repayment. Also included was a system of loans for full-fee paying places. In theory, it remained true that no-one needed to pay fees up-front. In reality, however, the prospect of the burden of a mortgage-sized loan for a fee-paying place in Medicine or Law may have presented an insurmountable barrier to aspirants from economically disadvantaged backgrounds. In the context of the HECS top-up and significantly increased costs of tuition, loan arrangements could no longer be regarded as an “instrument that is likely to increase equity in participation in higher education of students from more needy families” (Eisemon & Salmi, 1995, p. 69).

A second equity measure was the increase in scholarships for students from targeted groups. As the costs of higher education have been shown to be a factor in the decision to attend university, the offering of grants to needy students is an effective instrument for increasing participation in higher education (Eisemon & Salmi, 1995, p. 67). Unfortunately, the increased number notwithstanding, the package offered nowhere near enough scholarships to compensate adequately for the impact of the package overall.

A third area in which the package espoused a focus on equity was in maintaining the targeted approach. After financial assistance, targeted strategies have been shown to make a significant difference at the institutional level. By their very nature, targeted strategies operate on a small scale within local communities. While their impact may be
powerful, without expanding the breadth of their reach they had little chance of making a difference in overall patterns of participation.

Finally, the new HEEP funding arrangement, with its performance-based approach, directed funding to universities making real progress towards equity targets. While some institutions – and their potential students – benefitted from the new arrangements, the danger was that many existing strategies in universities that struggle with the socio-economic composition of their student populations may not be provided with the funds to continue. This attempt to further institutionalise equity could be seen as a genuine attempt to move equity in from the margins and to support institutions in their efforts to improve performance. Alternatively, through handing responsibility for improving equity performance to individual institutions without guaranteeing continuity of funding for projects, it could be interpreted as a government handing responsibility for the equity agenda over to institutions while instituting retrogressive policies in the sector as a whole.

Equity in the higher education marketplace

Since the publication of the West Report, the Coalition government remained committed to the ideas of choice and competition. Given the increasing pervasiveness of market logic in higher education, it is difficult to see how the targeting of resources on specific groups or projects would “be able to interrupt the processes of segregation and polarization which markets seem to produce” (Gerwitz, 2000, p. 311). Associated mechanisms of the market, including corporate decision-making, competitive bidding, fee charging, league tables of institutions and the like, have become the primary mode of operation in the sector (Marginson, 1998, p. 74). The further moves towards market operation that the Nelson reforms brought served to strengthen existing hierarchies among institutions, and among the individual consumers of education. Thus, although participation continued to expand – in 2007, over 925,000 students were enrolled in Australian universities, around 75% of which were domestic students (DEEWR 2009) – the forms of participation did not become more unequal in value and participation rates for those from low socio-economic backgrounds remained below 15%. This may be explained, in part at least, by the fact that students from advantaged backgrounds gained access to a far broader range of options such as full-fee paying.
A key feature of any market place is the notion of consumer choice. It is argued that presenting a range of options provides students with the best opportunity to enter the course and institution most suited to their needs and aspirations. Yet the very process of choosing can privilege some students over others. Particular cultural capacities which are critical in exploiting the education market – the inclination and capacity to exercise choice – are unevenly distributed in the population. The privileged are more likely to possess a strong inclination to choose, a capacity to engage with the possibilities of choice, and the financial resources to be able to move around the system. Those with lower levels of education are likely to possess a limited capacity to engage effectively with the market. “Their cultural capital is the wrong sort of currency and they are less able to accumulate the right sort” (Gerwitz, Ball & Bowe, 1995, p. 40).

Attending the most prestigious institutions of higher education confers considerable educational and career benefits on graduates. Such institutions have access to more resources and are generally more sought-after by employers. In their analysis of three decades of American data, Astin and Oseguera (2004) found substantial socio-economic inequities in terms of who gains access to the most prestigious universities. Reay and colleagues also found the experience of the choice process of non-traditional applicants in the United Kingdom to be different from those of their more privileged counterparts, such that working-class students were much more likely to end up in the less prestigious institutions. (Reay, Davies, David & Ball, 2001). In Australia, these inequities have increased in recent decades, despite the expansion of remedial efforts such as student financial aid, affirmative action, and outreach programs. This increase is attributed to a range of factors including poorer performance in standardized entry tests by students from poorer backgrounds, and the increased fiscal pressure institutions have experienced leading many to raise tuition fees. The new face of Australian higher education came to resemble the American system more and more in its fee-paying hierarchy, so it is no surprise that no narrowing of the gap occurred here.

The majority of universities quickly opted to raise fees by the maximum of 25%, in most cases across the board (with the exception of the exempt areas of teaching and nursing). Some opted to exempt other subject areas but these gestures have been dubbed “little more than a nod in the direction of variable fees” (Yaman, 2004, p. 33). Some
institutions – the University of New England and the University of Southern Queensland, for example – chose to raise fees but by the lesser amount of 20%. At least one university – Queensland University of Technology (QUT) – acknowledged the pressure to charge the maximum allowable amount as not to do so would “send the signal that QUT was somehow lesser among equals” (Yaman, 2004, p. 34). Starved for funds, there was little incentive for universities to pursue equity group students as valued customers.

Only six universities initially voted not to raise fees – Australian National University (ANU), Australian Catholic University (ACU), James Cook University, Central Queensland University, Charles Sturt University and the University of Tasmania. Some cited an altruistic rationale (ACU & ANU for example). ACU professed to be “guided by a fundamental concern for justice and equity, and for the dignity of all human beings” (ACU National, 2004). Others were more pragmatic and were possibly awaiting the results of the looming federal election and waiting to see how students would react to variable fees. Within one or two years, however, almost all universities were charging the full additional 25%. Well-resourced, “sandstone” universities continued aggressively to hunt the best students and, in a climate of increased costs to the student, “best” came to mean “best able to pay”.

State of the higher education sector by the end of the Howard era

As many had predicted, the Nelson reforms had little or no impact on participation rates of people from low socio-economic backgrounds. Given the significant emphasis on student equity in higher education policy from 1994, incorporating both increased funding for equity initiatives and greater accountability for institutions, this is at first view somewhat surprising and disappointing. The phenomenon can be better understood, however, in the light of the broader higher education policy context of the period between 1994 and 2007. An examination of OECD statistics (OECD 2007) sheds some light on the situation.

OECD figures on higher education financing in 2007 paint a clear picture of the state of the sector in Australia. While in the vast majority of OECD countries young people’s participation in higher education was increasing, participations rates in
Australia had plateaued. Most striking was the level of public funding of the sector. Among OECD nations, the average public investment in tertiary education was 1.0% of GDP: in Australia it had fallen to 0.8% (OECD, 2007). Australia ranked 25th of 29 OECD countries in its level of public funding as a proportion of GDP. The period from 1995 to 2004 was a time when most OECD – and other – nations were increasing their investment in higher education. During this time, Australia was the only OECD country where the total level of public funding of tertiary education decreased: it fell by 4% while the average among OECD countries rose 49% (Marginson, 2007, p. 3). In terms of public funding per tertiary student, in OECD countries it grew by an average of 6%, while in Australia it fell by 27%, the second largest fall in the OECD. This fall in public spending took place while student numbers rose by 31% (Marginson, 2007, p. 17).

While public spending was falling, the dependence on alternative sources of funding was growing. From 1995 to 2004, the proportion of tertiary education funding that came from private sources rose from 35.2% to 52.8%. This represented the largest shift in the OECD, where the average increase was 24.3% (Marginson, 2007, p. 17). A large proportion of this private funding came from students paying tuition fees and, in 2007, Australian fee levels were third highest in the OECD, behind only Japan and the USA (Marginson, 2007, p. 19). This signified a large scale shift of the financing of tertiary education, from government to students and their families.

**Impact of the Howard years on student equity in higher education**

The challenges facing the attainment of educational equity at this time were substantial indeed. The fall in public investment, the move towards user-pays and the impact of fee deregulation, all contributed towards the marginalisation of the equity agenda (Clarke, 2003). As public investment fell, universities had to sharply increase course fees, creating “a growing disincentive to study for those who can least afford the debt burden.” (Australian Labor Party, 2007, p. 21). At the same time, tighter eligibility demands saw the average amount of income support for full-time undergraduate students falling from almost $2500 a year in 2000 to $2170 a year in 2006, and saw fewer undergraduates receiving income support: down from 38.7% in 2000 to 35.2% in 2006 (James, Bexley, Devlin & Marginson, 2007).
In their study of student finances, James and colleagues found that students were increasingly feeling the burden of these financial demands (James, Bexley, Devlin & Marginson, 2007). With less government assistance, full-time students developed a growing reliance on paid employment and debt, with over 70% of full-time undergraduates engaged in paid work during semester for an average of 15 hours a week. The proportion of students taking out repayable loans also grew – from 10.7% in 2000 to almost 25% in 2006 – and the average loan commitment grew from under $4000 in 2000 to $4720 in 2006 (James, Bexley, Devlin & Marginson, 2007). A significant proportion of undergraduate students reported that their financial circumstances adversely affect their capacity to study and/or that financial considerations impacted on decisions about study options. For example, 37.4% of students reported that they “regularly” missed classes to attend paid employment, and one in eight reported going without essentials as they couldn’t afford them.

Small wonder that, despite the overall expansion of access to higher education during the last 15 years, and despite all the funding and effort that had been put into improving participation rates (Martin, 2009 p. 19), participation levels of people from low socio-economic backgrounds remained virtually unchanged (refer to Figure 1.1, Chapter 1). In 2007, people from low socio-economic backgrounds still constituted only around 15 per cent of domestic students, and remained about one-third as likely to go to university as people from high SES backgrounds (James, 2009, p. 2). The compounded effects of rising fees and living costs, with narrower access to financial support, appeared to have taken their toll. In this context, neither the rhetoric nor the practical equity initiatives were able to gain ground.

**Phase 6: Where to from here? Rudd Labor policies and initiatives.**

In November 2007, the new Labor government came to power. They were elected on a platform that included calls for an “Education Revolution”, including in higher education. Labor attacks on the “Liberal legacy of neglect” (ALP National Policy Committee, 2009, p. 46) of the higher education sector emphasised their failure to advance student equity.
The Labor rationale for improving the performance of the higher education system was based on the dual principles of human capital theory and social inclusion. First and foremost, they cited investment in human capital as “at the heart of a third wave of economic reform that will position Australia as a competitive, innovative, knowledge-based economy that can compete and win in global markets.” (Australian Labor Party, 2007, p. 3). They noted the correlation between the recent fall in productivity and the fall in investment in tertiary education, asserting that “higher education leads to higher productivity which leads to higher economic growth” (Gillard, 2008a). Labor claims were supported by Access Economics figures which calculated that an additional 0.15 years of education, on average, could boost productivity by 0.62% and economic growth by 1.1% by 2040 (Access Economics 2005, as cited in Australian Labor Party, 2007, p. 24).

In addition to an economic rationale, the government claimed a social justice foundation to its policies, stating that “A nation that thinks of itself as essentially egalitarian can’t sit by idly while those from disadvantaged backgrounds are denied the life opportunities that come from higher education – things like higher incomes, career progressions, intellectual fulfilment and self-knowledge.” (Gillard, 2008b). Indeed, one of its first actions in the sector was to begin phasing out full fee-paying places in public universities for domestic students from 2009, and to introduce a compensating increase in Commonwealth funded places. Around the same time, it commissioned a large-scale study into the efficacy of early school intervention in improving higher education outcomes for students from low socio-economic backgrounds (DEST, 2008). Soon after, it established a National Centre for Student Equity in Higher Education (NCSEHE, 2009), to lead research and provide an evidence base around student equity in higher education.

In March 2008, the Federal Government commissioned a major Review of Australian Higher Education, with one of its explicit terms of reference being “Underpinning social inclusion through access and opportunity” (DEEWR, 2008). The Review was charged with examining ways to widen participation and to improve student support programs so as to “promote social inclusion and individual opportunity” (Gillard, 2008a). It is notable, however, that even within this social inclusion agenda,
economic imperatives were not far away. A significant justification for widening participation was the need to increase overall participation, coupled with the demographic prediction that there would be little increase in overall demand for university places if current patterns continued. In purely logistical terms, increasing overall participation would “inevitably require concentration on those groups that currently [had] low levels of engagement” (DEEWR, 2008b, p. 6).

**The Bradley Review of Australian Higher Education**

The review was chaired by Professor Denise Bradley, who had been Vice Chancellor of the University of South Australia – a university with a strong record in student access and equity initiatives, and the site chosen for the National Centre for Student Equity in Higher Education. In the wide-ranging *Review of Australian Higher Education: Final Report* (Commonwealth of Australia, 2008), student equity occupies a place of some prominence: in the vision, in the strategic goals and participation targets, in the arguments for growth, in the need for improvements in teaching and learning, and as an explicit focus of one in five of the recommendations (Noonan, 2009, p. 27).

The *Review* identified “an urgent need for both structural reform and significant additional investment” (Commonwealth of Australia, 2008, p. xii). It proposed sweeping reforms, including large scale expansion of the sector, and that the government set a national target of at least 40% of 25-34-year-olds having attained a qualification at bachelor level or above by 2020. It recommended an immediate injection of funds, an increase in both teaching and research funding of 10% by 2010, and a plan to provide $130m over the next four years. Other recommendations included the de-regulation of funding of student places, such that the funding would follow the student rather than being allocated to institutions; changes in the funding of research; and changes to the regulatory and quality assurance frameworks.

The review noted that equity had been funded at marginal levels in the past and that there was a need to increase funding levels significantly in order to improve participation rates (Martin, 2009, p. 22). It proposed a new framework for equity, making several recommendations specifically targeting student equity. These included that the Commonwealth government:
1. Set a national target that, by 2020, 20% of higher education enrolments would comprise people from low socio-economic backgrounds;

2. Work on the measurement of the socio-economic status of students in higher education, to move away from the current postcode methodology;

3. Improve equity funding through directing 4% of teaching and learning grants to outreach and retention initiatives for students from disadvantaged groups and allocating an additional loading to institutions related to the number of low SES students they enrolled;

4. Introduce a package of reforms to the student income support system including raising the parental and personal income thresholds, changing the indexation and taper rates, changing the conditions for eligibility, and a regular review of the effectiveness of the system; and

5. Maintain the existing income contingent loans schemes.

The Rudd Government’s response to the Bradley Review

The Rudd government accepted and acted quickly upon many of the major recommendations, in particular those which would have a direct impact on student equity outcomes. It set out its new vision for higher education in the policy document Transforming Australia’s Higher Education System in 2009 (Commonwealth of Australia, 2009). Here, it restated its philosophy of “opportunity for all, especially those from groups under-represented in higher education” (Commonwealth of Australia, 2009, p. 8). It laid out an agenda for sweeping reform which included setting a national target of 40% of 25-34-year-olds to attain a bachelor degree by 2025 (Gilmore, 2009). It also committed to an immediate injection of funds and a plan to increase funding over the next ten years.

Top of the list in the reform agenda was the promise of “transforming access to higher education through a major package designed to radically improve the participation of students from low socio economic backgrounds … in higher education, and enhance their learning experience” (Commonwealth of Australia, 2009, p. 9). It accepted the Bradley target that by the year 2020, 20% of higher education enrolments at undergraduate level will be people from low socio-economic backgrounds, and significantly increased equity funding, in line with Bradley recommendations, to
promote this aim. To this end, 2% of teaching and learning grants in 2010, 3% in 2011 and 4% in 2012, were earmarked as equity funding.

A number of initiatives were put in place to support the new participation target. First, universities were provided with funds to build long-term relationships with schools and communities in disadvantaged areas (NTEU, 2009, p. 7). Second, additional funds were allocated, linked to institutional equity performance targets, as a loading to reward universities for enrolling more students from low socio-economic backgrounds and to provide the support needed to improve their retention and completion rates. Third, the system of income support for students underwent several changes, including: raising parental and personal income thresholds, reducing the age of independence and introducing Start-up and Relocation scholarships. Finally, the existing income-contingent repayment method of student loans was maintained, with only slight restructuring in the manner of providing additional support for those studying and taking employment in areas of need such as teaching and nursing (Commonwealth of Australia, 2009).

The Bradley recommendations and Rudd reforms: Implications for equity

Whether these reforms will have a real impact on student equity in higher education remains to be seen. Certainly there is now widespread recognition at policy level that under-representation is a result of a combination of factors such as lower levels of school achievement and completion rates, lower educational aspirations, and financial factors (Universities Australia, 2008, p. 2) and that major improvement in access for low SES is not readily achievable. The Bradley review and subsequent reforms recognised that to improve the participation of people from low SES backgrounds in higher education, the policy framework must consist of a package of inter-related policies rather than any “magic bullet” (Universities Australia, 2008, p. 3). With equity policy in higher education now “an integrated package involving growth, a new and improved funding base, targeted equity funding linked to performance targets at the national and institutional level” (Noonan, 2009, p. 28), we now stand the best chance we have had to see real improvement in rates of participation of young people from low socio-economic backgrounds.
One element which is becoming increasingly important in the change agenda is the role of research in informing government and institutional activity. The need for dedicated research in student equity in higher education “is mentioned no less than five times in the Bradley review” (Gale, 2009, p. 4). There is a growing awareness not only that action is required at every level, but also that such action must be informed by the findings of research (Bradley, 2009, as cited in Gale, 2009, p. 5). While we have a reasonable knowledge of the factors that can encourage or discourage entry to higher education, we have less of an understanding of the types of interventions that are most likely to be efficacious in changing these factors. It is the aim of this research to contribute to the growing body of research into interventions in order to inform future policy and practice in student equity in higher education.

Conclusion

Policy does not take shape in a vacuum. It is by definition a political creation, an embodiment of political ideologies. These ideologies are in turn shaped by the social and economic climates of their time. This chapter has presented an analysis of the changing shape of higher education student equity policy over a sixty year period through an exploration of the drivers, policy-as-text, policy-as-practice and the effects of policy on the participation of those from low socio-economic backgrounds.

Notions of social justice and equity have come in and out of vogue and conceptions of equity have altered dramatically to the extent that, where once university as the domain of the elite went virtually unquestioned, equity came to occupy a central place in higher education policy. However, the last two decades of the twentieth century saw a shift from notions of social justice and equality of opportunity as the dominant discourse, to those of economic rationalism and the ideology of the market. Alongside this discourse, successive governments implemented a range of strategies to address inequities in participation, from the massification of the system, through the provision of financial assistance and the abolition of fees, to the targeting of disadvantaged groups.
Thirty-five years after the Whitlam era and twenty years since *A Fair Chance for All*, however, the inequalities remain virtually unchanged and the proportion of people from low socio-economic backgrounds in university student populations remains much as it has been for decades. The challenge to student equity created by decades of underfunding and the marginalisation of the equity agenda has created a pressing need for universities to take action to address this persistent inequity. The current policy climate and targets for higher transition rates further strengthen the imperative for universities to act.

In tandem with the need for action, there is a need for more research into the most effective strategies for addressing the imbalance and for an evidence base on which to found future directions in higher education student equity policy and practice. This study aims to make a contribution to such a body of evidence.

This thesis will develop two key propositions: that a young person’s knowledge of, beliefs about and aspirations for higher education are primarily shaped in the family; and that it is possible to intervene in the construction of this cultural capital. In interrogating these propositions, the study will critically examine the impact of an intervention that is designed to raise aspirations for higher education among a group of young people from low socio-economic backgrounds. It asks: to what extent does the intervention change the young people’s knowledge of, beliefs about and aspirations for university? In this way, the study aims to inform student equity policy in higher education. The following chapter will develop a theoretical framework through which to understand the processes of the construction of young people’s embodied cultural capital, and the means through which an intervention might best operate to alter this habitus.
Chapter 3: Theorising the role of the family and education in transition to university

Introduction

This study addresses two key questions which arise from the literature: (i) in what ways does family influence young people’s beliefs about higher education? and (ii) how might it be possible to intervene in order to change the beliefs of young people from low socio-economic backgrounds? This chapter examines these questions through a framework that identifies the factors that influence the construction of young people’s knowledge of, beliefs about and aspirations for higher education, and the scope for changing this habitus. Based on theories of social and cultural capital, this framework leads to the development of a theory of how interventions can work to enhance the habitus of young people from low socio-economic backgrounds.

For the purposes of this thesis, I construct knowledge of post-secondary alternatives and entry requirements, beliefs about the relevance and attainability of a university education, and aspirations for higher education, as components of a young person’s embodied cultural capital, or habitus. I first contend that a young person’s bonding social capital plays a significant role in shaping – and in many cases, limiting – this habitus. This influence, I propose, operates through the presence or absence of academically successful role models, through differential modes of parental support, through experience of the world of university, and through conversations among family and peers. These factors compound such that those from low socio-economic backgrounds are likely to acquire incomplete or inaccurate knowledge of higher education, negative beliefs about university, and low expectations that they might go to university. Entrenched as it is, I propose that changing this habitus requires means that are both powerful and sustained.

Second, I contend that it is possible to intervene in the processes of the accumulation of bridging social capital and embodied cultural capital and thereby to raise expectations. I suggest that this can operate through the provision of information, through experience of the world of university, and through interaction with university
students from low socio-economic backgrounds. These elements combine to enhance knowledge, change beliefs and raise aspirations such that the young people come to view university as a viable alternative for themselves.

This chapter comprises three main sections. The first defines the types of cultural capital and explores processes by which embodied capital is acquired. The second theorises the roles of bonding and bridging social capital in the construction of young people’s habitus with regard to higher education. The final section explores the potential for changing the habitus of young people from low socio-economic backgrounds. This culminates in the development of a model of intervention, both theoretical and practical, by which it might be possible to affect this change. The remainder of this thesis presents and analyses the data which tests this proposition.

Understanding family, schooling and transition to university

Chapter 1 established that socio-economic background, in particular parents’ levels of education, is the strongest predictor both of school performance and post-secondary destinations. In order to understand differential rates of transition to university, and to propose means by which it might be possible to increase transition rates among disadvantaged groups, it is first necessary to develop an understanding of the roles played by family and schooling in the post-secondary choices of young people from disadvantaged backgrounds.

There are many ways in which to understand the influence of family and schooling on young people’s post-secondary choices. It has been variously argued that a person’s academic success is the natural consequence of her or his inherent abilities and efforts, that it is the result of family characteristics and deficits or, more recently, of structural and cultural inequities within the education system. Approaches to interventions that might improve young people’s life chances have therefore ranged from notions that such measures are unnecessary and irrelevant, through those that address deficits in the family, to those which assert that the entire education system needs to be reconceptualised. This chapter explores one theory in depth, that of social and cultural capital, and mounts an argument for its application to this thesis.
As established in Chapter 1, the meritocratic notion that lower rates of transition are due to lower academic ability among students from lower socio-economic backgrounds has largely been debunked. Several recent studies have demonstrated that, once at university, people from disadvantaged backgrounds have similar levels of success and completion to their counterparts from middle and upper socio-economic backgrounds. (Hillman, 2005; Universities Australia, 2008; Cairnduff, 2009).

During the 1960s and 1970s the meritocratic model lost ground and was replaced with the notion of cultural deprivation. Attention turned to characteristics in the individuals’ backgrounds, such as material circumstances and the extent to which education is valued in the home. The family environment came to be seen as “deficit” in terms of access to economic resources, cultural values and motivation (Germov, 2004) and the notion of compensatory education as a means of changing outcomes for disadvantaged children arose (Bernstein, 1971, p. 190). The Disadvantaged Schools Program (DSP), the abolition of university tuition fees and the introduction of the TEAS are all examples of compensatory measures which directed additional resources towards socially and economically disadvantaged individuals and groups.

The failure of these compensatory measures to raise participation in higher education among those from low socio-economic backgrounds shows the deficit model to be over-simplistic and not sufficient to explain low transition rates. More recent approaches view educational outcomes as resulting from a complex interplay of factors including family influences, characteristics of schooling, educational structures and individual agency. Among these is social and cultural capital theory.

I argue that social and cultural capital theory provides a useful framework – one that goes beyond the discrete effects usually considered determinants – within which to analyse and understand the interaction of young people with their families and their schools in the construction of their habitus with regard to higher education. In addition, it reminds us that social and cultural capital are available outside the home and therefore a young person’s post-secondary destination is not entirely pre-determined by family background (Coleman, 1997), but is open to transformation in certain conditions.
The Forms of Capital

The conceptual framework within which this study is located is based on the work of two French writers of the 1970s and 1980s, Bourdieu and Passeron (Bourdieu & Passeron, 1977 and Bourdieu, 1986, 1990, 1999). In explaining the reproduction of social class, Bourdieu and Passeron identified two forms of capital – cultural and social – that families and individuals invest in education and which can ultimately be converted into economic capital. The distribution of capital, they argued, acts to preserve the existing social hierarchy. Economic capital, comprising money and that which is directly convertible into money, may be institutionalised in the form of property rights. Cultural capital, comprising symbolic wherewithal, knowledge and possessions, may be converted into economic capital via enhanced educational outcomes. It may be institutionalised in the form of educational qualifications. Social capital comprises social connections and provides access, in certain conditions, to economic capital (developed from Bourdieu, 1986. p. 243).

This section describes these notions of cultural and social capital. Cultural capital is expressed through three forms, namely institutionalized, objectified and embodied. It is embodied cultural capital which is of particular relevance to this study. Social capital takes two forms – bonding and bridging – and this section explores the influence of each type on young people’s cultural capital.

Cultural Capital

The concept of cultural capital originates in the work of Bourdieu and Passeron (1970, translated into English in 1977). They defined cultural capital as “the cultural goods transmitted by the family pedagogic actions” (Bourdieu & Passeron, 1977, p. 30). These cultural differences include language and other symbolic aspects such as knowledge of high art, possession of credentials, and dispositions. Just as economic capital is distributed unequally in society, so it is with cultural capital: the upper classes possess more of the “right” kind of cultural capital which raises academic achievement and facilitates transition to university. Bourdieu and Passeron saw that school “contributes to cultural reproduction, and through it, to social reproduction, by enabling the possessors of the prerequisite cultural capital to continue to monopolise that capital”
(Bourdieu & Passeron, 1977, p. 47). They argued that initial advantages in cultural capital, linked to a person’s social class, are rewarded by schools. The result is that those who already possess, by virtue of their family background, some of the cultural capital that is valued by schools, are most often those who are successful. Cultural capital is progressively translated into school capital in the form of good marks (Teese, 1997, p. 94), which in turn provides access to the most sought-after higher education institutions and degrees. While economic factors connected with family and social class have an impact on a person’s educational outcomes, it is cultural factors which Bourdieu and Passeron viewed as the “most determinant educational investment” (Bourdieu, 1986, p. 244).

Bourdieu distinguished between three forms cultural capital. First, it can be present in the objectified state, which comprises possession of material cultural goods such as pictures, books and instruments. Objectified cultural capital is transmissible as economic capital, but it is not the economic value that has the greatest impact, but the usage of such possessions. Second, it can exist in the institutionalised state, in the form of academic qualifications. Institutionalised cultural capital can be converted to economic capital by providing access to the more prestigious professions. Finally, cultural capital can exist in the embodied state, defined as long-lasting dispositions of the mind and body. It is the embodied form of cultural capital that is of most interest to this study.

**Embodied cultural capital**

A crucial aspect of an individual’s cultural capital, developed in the family, is that of a collection of durable dispositions which become embodied – an integral part of the person – in what Bourdieu referred to as embodied cultural capital, or “habitus”. Embodied cultural capital, or habitus, by definition “cannot be transmitted instantaneously” (Bourdieu, 1986, p. 245). The acquisition of habitus – self-improvement – requires an investment of time, effort and, directly or indirectly, economic capital. The accumulation of cultural capital starts early in a person’s life and works most efficiently for the offspring of families endowed with the sort of cultural capital that is valued by schools. Through the primary pedagogic work of the family, basic predispositions, such as towards learning, are established in a child.
This study focuses on those components of embodied cultural capital which are relevant to transition to higher education: knowledge and beliefs about, and predispositions towards, university. This includes knowledge of post-secondary alternatives, understanding of university work and life, the ability to imagine that university might be for people “like me” and the consequent aspiration to go there. I posit that the possession of the “right” kind of cultural capital in these areas facilitates the development of aspirations for higher education, which potentially facilitate transition to university.

The strength of parental levels of education as a predictor of young people’s post-secondary destinations has led many to surmise that family “attitudes” are the key. However, this notion remains largely un-theorised, and assumptions that working class parents hold negative attitudes should be treated with caution. Connell and colleagues, for example, found that most working class parents valued education highly, and that they often “strongly desire to see their children receive more education than they received themselves” (Connell, White & Johnstone, 1991, p. 11). Coleman (1988) also noted that families with low levels of education lack not a regard for education, but the means to make such regard “work” effectively. For example, working class parents may feel less equipped to diagnose their child’s progress, to liaise effectively with education professionals, or to provide specific educational support.

Similarly, Collins & Thompson (1997) found not attitudinal differences, but other differences in the cultural capital held by lower class families. They observed that upper and middle class families tended to have more cultural capital in the form of level of education and status. Higher levels of education helped parents to better understand school cultures and expectations, while higher status brought with it the confidence to interact with schools to get what they want for their children (Collins & Thompson, 1997, p. 260).

For these reasons, this researcher believes it is more helpful to cast differential family characteristics not as “attitudinal”, but as differences in cultural capital. It is therefore necessary to examine other entrenched perceptions and predispositions, such
as knowledge, beliefs and aspirations, which might impact on transition to higher education.

Embodied cultural capital: Knowledge and beliefs

There are three areas of knowledge and skills which, I propose, may well enhance a young person’s prospects of going to university. First, knowledge of a range of post-secondary alternatives, and the training requirements of various careers: primarily, that many of the careers they are considering require a university-level qualification. Second, an understanding of university entry requirements in terms of subject pre-requisites and entry mark cut-offs. Third, the requisite skills to undertake research into their career and study options. Acquiring this knowledge and these skills at an early age allows young people to make informed choices and ensures that the educational decisions they make do not preclude them from gaining entry to their desired course of study.

There are three key beliefs about university which I posit may be helpful in raising young people’s aspirations. First, the belief that university is relevant, in terms of entry into desired careers and in terms of personal interests. Second, the belief that university work and life are desirable: that is, interesting, socially supportive and challenging. Third, the belief that a university education is attainable: this incorporates the self-efficacy beliefs that one is capable of gaining entry to university and of coping with university work, and the belief that people “like me” can, and do, go to university.

Bourdieu and Passeron suggest that a young person’s habitus reflects, predominantly, the habitus of those in their close social worlds. Bourdieu observed that the dispositions which make up this habitus are the products of “opportunities and constraints framing the individual’s earlier life experiences.” (Reay, 2004, p. 433). As a result, he argued, “the most improbable practices are rejected as unthinkable, but, concomitantly, only a limited range of practices are possible.” (Reay, 2004, p. 433). Thus, in the case of higher education, a young person’s knowledge, beliefs and aspirations to a large extent will reflect the educational experiences of their parents and close family members. As the majority of students in this study come from homes with low levels of parental education, they are likely to have had few opportunities to build
their knowledge of university, and few opportunities to observe people like themselves at university and thus to view university as “not for the likes of us” (Bourdieu, 1990, as cited in Reay, David & Ball, 2001, para. 5.5). Consequently, it is hypothesised, they would be less disposed to consider it as a possibility for themselves than their counterparts from more privileged backgrounds.

*Embodied cultural capital: Self-efficacy and aspirations*

This study is fundamentally sociological in nature. However, in examining young people’s beliefs and dispositions, it touches on the concepts of self-efficacy and identity: constructs which are generally treated in the field of psychology. There is an enormous body of research literature in both self-efficacy and identity, which it is not possible to do justice to in the context of this thesis. Nonetheless, key theorists will be cited here to provide a framework for the application of these constructs to this study.

For the purposes of this study, self-efficacy refers to participants’ beliefs in their ability to get into university, in terms of how they rated their chances of attaining the necessary marks to gain entry to the course of their choice. It also includes their beliefs about how they would cope with university work, should they make it in. These beliefs in one’s abilities – self-efficacy beliefs – may be a critical element in shaping a young person’s aspirations. Self-efficacy has been linked to the intensity of effort expended toward attaining a goal (Bandura & Cervone, 1983). More recently, it has emerged as a highly effective predictor of students’ motivation and learning, and been shown to mediate students’ academic achievement (Zimmerman, 2000, p. 82).

Levels of perceived self-efficacy have also been shown to correlate with the range of career options seriously considered (Bandura, 1982, p. 136). The high aspirations which stem from strong self-efficacy beliefs can drive young people to work hard, which is likely to raise their academic achievement and may ultimately facilitate their entry to university. Conversely, weak self-efficacy beliefs are likely to lower their aspirations and effort as, “if people believe they have no power to produce results, they will not attempt to make things happen.” (Bandura, 1997, p. 3). This would have consequences for their academic achievement, and would ultimately restrict the post-secondary options considered attainable.
Expectations of self-efficacy are believed to be derived from four principal sources of information: performance accomplishments, vicarious experience, verbal persuasion and physiological states. (Bandura, 1977; Schunk, 1991). Physiological states aside, the young people in this study are likely to have less access to the three other sources of information about university. That is, they are likely to have fewer opportunities to experience accomplishment at university work, and fewer opportunities for vicarious experience of success the world of university. Further, as the majority of their parents did not go to university themselves, they may receive less verbal persuasion that they can go to university than their more counterparts from more privileged backgrounds. Thus, they are likely to have developed weak self-efficacy beliefs in their ability to gain entry to university and to cope with university work.

This builds a picture of a group of young people whose embodied cultural capital is likely to be characterised by: little experience or knowledge of the world of university; weak self-efficacy beliefs in their ability to get into university or to cope with university work; the disposition to view university as not for people like themselves; and, consequently, few aspirations for university. This brings us to the question of: in what ways is this embodied cultural capital constructed and transferred? The following section explores the role of social capital in the shaping of young people’s habitus.

**Social Capital**

The term “social capital” was applied to education in the 1980s by Coleman (1997; 1988) and Bourdieu (1986) separately. It refers to a variety of social resources linked to possession of a network of relationships, or membership in groups, which provide individuals with access to collectively-owned capital which may be useable (i.e., converted into economic capital) in the short or long term (Bourdieu, 1986, p. 243). It is not so much a resource in itself, but rather “a panoply of mechanisms that connect individuals to resources” (Fernandez-Kelly, 2002, p. 76). The core idea of social capital theory is that social networks have value, which can affect the economic and status standing of individuals (Bourdieu) and groups (Putnam, 2000, p. 19). It should be noted that, while both Bourdieu and Putnam explore the notion of social
capital, the two operate from different reference points. While this thesis draws mainly on the seminal work of Bourdieu in constructing the framework of social capital and its impact on cultural capital, I do make some reference to Putnam’s work, particularly his contribution of the notion of bridging social capital.

Just as economic capital and cultural capital are distributed unequally, so is the case for social capital. The upper classes enjoy a “situational advantage” from their access to networks with others sharing privilege (Fernandez-Kelly, 2002, p. 74). Thus, they have more opportunity to accumulate – and cash in on – the type of social capital needed to preserve their social status. In his comprehensive study of collective social capital Putnam (2000) observed that, while race, poverty and adult educational levels had an effect, social capital was the single most explanatory factor in explaining differential scores in standardised tests. Thus social capital exerts a “multiplier effect” on the economic and cultural capital an individual already possesses (Bourdieu, 1986, p. 249).

**Bonding and bridging social capital**

Although the poor can be rich in social capital, it can occur in distinct forms which operate in contrasting ways. Granovetter (1973) distinguished between *strong* and *weak* social ties, and observed that different styles of interaction provide differential access to resources. Strong ties, generally formed by kinship or friendship, create a sense of belonging, security, and identity. Weak ties, formed through irregular contact with persons outside one’s immediate social sphere – often more powerful persons – allow individuals to access resources that may be instrumental in improving one’s social station. When relevant connections are not present among a young person’s strong ties, weak ties might provide the connections that can make a difference in their lives.

Applying this idea to collective contexts, Putnam (2000) makes use of the terms “bonding” and “bridging” social capital, from Gittell and Vidal’s distinction (Gittell & Vidal, 1998). Bonding social capital is found in networks formed from “perceived shared identity relations” where individuals form connections with others “like” themselves (Szreter, 2002, p. 576). These networks are, by definition, inward-looking and exclusive. Bridging social capital, however, refers to associations where
participants are drawn from a wide range of backgrounds. It is therefore outward-looking and more inclusive (Putnam, 2000).

Bourdieu pointed out that the social capital of the poor is primarily of the bonding type. This bonding social capital provides essential solidarity and emotional support, but is of limited use in assisting people to move into worlds outside their immediate social sphere. Rather, it serves to lock them into it as they associate predominantly with others in the same position as themselves, thereby reinforcing a narrow set of possible identities. Bridging social capital, on the other hand, exposes people to others in different positions to themselves. Thus, it can generate provide relationships with persons or institutions that can give them access to broader identities and to resources and other forms of capital that are lacking in their own environment (Putnam, 2000, p. 23).

Within the contexts of this thesis, a young person’s parents, siblings and school friends are construed as components of their bonding social capital, while academically successful role models from outside their immediate social sphere are construed as bridging social capital. The first proposition is that a young person’s bonding social capital limits their habitus, which requires intervention from outside their immediate social sphere to be altered. The second proposition is that academically successful role models— for example, those encountered within an intervention program – can act as the bridging social capital needed to help young people to expand their horizons. This bridging social capital allows them to access resources, such as information, identities and motivation, which may be instrumental in facilitating their transition to university. The following section theorises the means by which social capital shapes and transforms young people’s habitus.

**The role of bonding social capital in developing habitus**

This thesis posits that, while individual characteristics and education structures play a role, it is primarily through the influence of the immediate social world that critical knowledge, beliefs and aspirations are established in young people. This operates in several ways. First, the presence or absence of academically successful role models affects their self-efficacy and identity. Second, conversations among family and
peers, coupled with differential modes of parental support, shape their understandings of university entry and the university experience. Finally, opportunities to experience of the world of university shape these beliefs about university life and work. In combination, these factors determine the extent to which young people will consider university as a realistic option for themselves.

**Bonding social capital and self-efficacy**

One way in which a young person’s bonding social capital can impact on the development of their embodied cultural capital with respect to their dispositions toward higher education is through shaping their self-efficacy beliefs. This can operate through parental goal-setting which, along with students’ self-efficacy and personal goals, have been observed to act as predictors of students’ final course grades. (Zimmerman, Bandura & Martinez-Pons, 1992, p. 663). Another way in which self-efficacy beliefs are informed is through vicarious experience. Observing another person modelling a competency can be a powerful tool for building a young person’s self-efficacy beliefs. However, the people a young person encounters regularly within her/his close social world influences the types of competencies that will be repeatedly observed. Similarity to the person modelling a competency has been demonstrated to increase the relevance of the performance to the young person’s beliefs of their own efficacy. (Bandura, 1997, pp. 92-93). Thus, observing people perceived as “like” themselves successfully attending university is likely to promote the development of positive beliefs in their own ability to go to university. Conversely, the absence of “like” role models in the lives of many of the young people in this study means they have few opportunities for this important form of vicarious experience and are thus less likely to develop positive beliefs in their ability to go to university.

**Bonding social capital and identity**

Another way in which a young person’s bonding social capital can impact upon their embodied cultural capital is in the construction of their identities. The notion of identity is used here to describe the extent to which participants were able to construct their possible future selves as university student and/or as working in a profession – to envisage themselves in these roles. Young people construct their possible future selves from both personal experience and from “the vast array of actual and symbolic models,
and socio-cultural influences” they encounter (Bandura, 1997, p. 25). When constructing their possible future selves, young people look first to those people they encounter regularly within their close social worlds. These possible selves “influence the way [they] think about their potential and options… guide [their] courses of action and motivate [their] pursuit of selected goals.” (Bandura, 1997, p. 25). Thus, when young people make study and career decisions, it is proposed that having academically successful role models within their immediate social sphere, particularly people viewed as similar to the young person, would be a useful resource. Concomitantly, the absence of such resources would likely limit the range of possible selves to those models they encounter in their daily lives.

This study proposes that the more young people encounter people who are either studying at university or who have successfully completed university, within their immediate social sphere, the more they will observe that “people like me” go to university, and the more readily they will be able to believe that they too could go to university. Cote (1996) construed this phenomenon as yet another form of capital – that of identity capital. Cote defines identity capital as that which individuals “invest in who they are’ (1996, p. 196). He suggests that, much as with other forms of capital, coming from higher social class backgrounds may give an advantage in acquiring identity capital.

As the majority of the participants in this study came from homes where parents and older siblings had low levels of education, they would have had limited access to the “right” sort of identity capital – to academically successful role models – in their immediate social spheres. Hence, it is posited that it would have been difficult for them to envisage themselves moving into the world of university. Making the transition to university would therefore involve making a leap from their world into the world of the other. Thus, they would need access to other sources of identity capital to help them to make this transformation.

*Bonding social capital and conversations*

Another means by which, it is posited, a young person’s bonding social capital shapes her / his embodied cultural capital is through the everyday occurrence of
conversations. Young people growing up in homes with high levels of parental and sibling education are more likely to be exposed to conversations about university. These conversations might contain useful factual information about entry to university and the costs of university study. Alternatively, they may feature the parents’ or peers’ experiences of university, building a picture of university life and helping to demystify the notion of university. Such conversations would likely help the young people to make informed choices, to form positive beliefs about university and to view it as relevant and attainable.

As most of the young people in this study grew up in homes where a higher education (specifically, an Australian higher education) was not the norm, it is likely that they were not often exposed to such conversations. Anecdotal feedback from teachers at the schools involved in the ACULink project suggests that going to university did not often feature in conversations among young people. Thus, they are likely to have had little exposure to accurate information about what it takes to gain entry to university, or about the costs of a university education, and are thus likely to acquire vague and/or inaccurate knowledge of these areas. The absence of such conversations would also mean that they had little opportunity to learn vicariously about the experience of university from someone perceived to be like themselves. It is proposed that this would likely lead to the acquisition of vague and/or negative images of university work and life. Ultimately, the absence would to lead them to develop a notion of going to university as of little relevance to themselves – to simply not consider it among their post-secondary alternatives.

Bonding social capital and experience

A third means by which a young person’s bonding social capital can encourage the establishment of positive habitus is through providing a view into the world of university and/or the world of professional occupations. Young people with university students and/or professionals in their close social world are more likely to have opportunities to visit a campus or professional workplace. I suggest that such experiences normalise the university environment and help establish the belief that “people like me” go to university. The majority of young people in this study, having little access to such role models, are not likely to have had such opportunities.
Figure 3.1. The proposed impact of bonding social capital on the construction of embodied cultural capital.

Figure 3.1 illustrates these processes by which, it is hypothesised, a young person’s bonding social capital shapes the construction of her/his embodied cultural capital. Clearly, this is an over-simplified model, which implies a direct linear relationship between family experience of education and young people’s habitus and takes no account of external factors or individual agency. The reality is likely to be a far more complex interplay of personal characteristics, influences and experiences, and it is the aim of this research to illuminate these relationships. Nonetheless, the model
provides a visual representation of the general tendency, in the absence of intervening factors, for family background to shape young people’s habitus.

This model leads to the question of: how might it be possible to intervene in these processes? The ultimate goal of the intervention in question is to assist young people to accumulate institutionalised cultural capital – to increase their access to higher educational qualifications – through enhancing their embodied cultural capital. The final section theorises processes which have the potential to transform young people’s habitus with regard to higher education.

**Scope for Change**

While a group’s socio-economic status is demonstrably the strongest indicator of its collective educational outcomes, socio-economic background cannot be viewed as the sole determinant of an individual’s or group’s success. Nor should the resistance to change in rates of transition to university among the low SES group be viewed as impossible to change. I contend that a young person’s embodied cultural capital, while doubtless entrenched by the time s/he reaches secondary school, is nonetheless open to alteration. Even Bourdieu, who emphasised the primacy of the pedagogic work which takes place in the home and the difficulty of altering entrenched dispositions, acknowledged a role for human agency and personal choice in changing an individual’s life chances. Indeed, “education is not just about the (re)production of the social order but also about change” (Thomson, 2002, p. 7). This chapter now turns to exploring what social and cultural capital theories offer on the notion of change.

Bourdieu’s theory of habitus has sometimes been subjected to criticism “on the basis of its latent determinism.” (Reay, 2001, p. 432). However Bourdieu challenged this view, arguing that, while habitus can be constraining, it can also enable the individual to draw on transformative courses of action (Bourdieu, 1999). Although habitus is primarily acquired as a product of early experience, in particular socialization within the family, it is continually transformed by an individual’s encounters with the outside world. (Reay, 2004, p. 434).
It is clearly possible that cultural capital can be acquired beyond the limitations of family background since some working class students do succeed in the current education system. Fernandez-Kelly (2002), for example, refers to groups of Chicanos – students of Mexican descent – graduating from Princeton. Price (2000) presents examples of young African American men from disadvantaged backgrounds who were successfully completing their schooling. The Australian Indigenous Mentoring Experience (AIME) – a project based on the provision of mentors for Indigenous high school students – claims some success in raising rates of retention to Year 12, and transition to university, among young Indigenous students (Galvin, 2009; and Manning Bancroft, 2009). In these cases, the intervention of a mentor was cited as instrumental in changing the directions of the young people’s lives.

In addition to individuals moving beyond the cultural capital of their immediate family background to succeed at school and beyond, there is also clear evidence that beliefs can be changed across larger groups in the community. The progress that has been made in the past two decades against gender disadvantage in education – as evidenced by the increased number of girls doing Maths and Science for the Higher School Certificate, and the increased number of women entering university, even in non-traditional fields – is one example. This instance shows that a change in beliefs – in this case, about the relevance and attainability of Maths and Science, and of university study, to females – is possible on a community-wide scale.

What is less clear is what processes might prove most efficient in changing pre-existing knowledge and beliefs about university among students from low socio-economic backgrounds. Bourdieu’s and Passeron’s theory of social and cultural capital asserts that capital is available outside the home and that therefore students’ futures are not determined solely by the socio-economic status of their parents. Bourdieu argued that, while habitus tends to be confirmed through immersion in a field that reproduces existing dispositions, it can also be transformed through experiences that either raise or lower and individual’s expectations. (Bourdieu, 1990, as cited in Reay, 2004, p. 435). This suggests that providing experiences which explicitly challenge young people’s pre-existing dispositions might facilitate the transformation of these dispositions. A key component of an intervention might then be activities which raise young people’s
awareness of their alternatives, and provide explicit encouragement for them to aim high and to consider university among their post-secondary alternatives. A characteristic of such an intervention might also need to be an ongoing commitment, the durable nature of embodied dispositions reminding us to avoid the trap of “quick-fix” approaches.

**The role of bridging social capital in changing habitus**

The social capital literature indicates that, while families provide the *strong ties*, it is often the conscientious work of mentors outside the family – counsellors and teachers, for example – who form the *weak ties* necessary to make the difference. “Decisive in the constellation of factors that determined their educational success was the active presence of persons mediating between themselves and institutionally structured opportunities” (Fernandez-Kelly, 2002, p. 73). As the Census and survey data showed (Chapter 1), the majority of students who attended the ACULink partner schools lacked academically successful role models – people who had successfully made the transition to university and beyond – in their lives. A key component of an intervention program which aims to alter young people’s habitus would, therefore, be the building of their bridging social capital: to provide the “bridge” between their lived experience and the unknown world of university.

McLean (unpublished) reviews two studies: Levine and Nideffer (1996), and Hedge (1991), which indicated the importance of a mentor. In each study, contact with a relevant person was seen as critical. The mentor was shown to provide practical information – a component of cultural capital – on course choice, subject options, costs, and, importantly, a sense of what university life is like. In addition, for young people needing encouragement to see university as an achievable option, a suitable mentor – here construed as bridging social capital – helped students to see that “people like me can and do go to university” (McLean, unpublished, p. 6). In this respect, a role model can help young people to envisage themselves at university.

Cote (1996) also asserts that an individual should be able to acquire identity capital regardless of social class background. However, they would require access to other sources of identity from outside their immediate social world. This suggests that
introducing young people to role models they can relate to – for example, university students who come from similar backgrounds to their own – would build their awareness of their own strengths, and encourage them to explore their alternatives and, ultimately, to re-construct their identities (Cote, 1996, p. 197). The self-efficacy literature on the role of vicarious learning, and the importance of similarity to the models observed, supports this notion. A characteristic of a successful intervention program, then, would be the provision of access to bridging social capital. That is, opportunities for young people to interact with academically successful role models from backgrounds similar to their own.

The role of real-world experiences in changing habitus

Changing entrenched dispositions – habitus – is notoriously difficult. Bourdieu compared the interaction of habitus and field to the unconsciousness of a fish in water, saying: “When habitus encounters a social world of which it is the product, it is like a ‘fish in water’: it does not feel the weight of the water and it takes the world about itself for granted.” (Bourdieu & Wacquant, as cited in Reay, 2004, p. 436). The literature on attitude change suggests that information alone is insufficient to alter these taken-for-granted dispositions. To Bourdieu, a special mode of inculcation is required if the secondary pedagogic work (in this case, a university intervention) is to bring about the complete substitution of the primary habitus for another – which he termed a radical conversion, or metanoia – as opposed to simply confirming the primary habitus. He suggests the possibility of the effect of an extraordinary event, a critical moment in shaping thinking about future prospects:

It is the critical moment when, breaking with the ordinary experience of time as a simple re-enactment of a past or a future inscribed in the past, all things become possible (at least apparently), when future prospects appear really contingent, future events really indeterminate. (Bourdieu, 1988, p. 182).

A critical moment can occur when an individual encounters a world outside their everyday experience: “When habitus enters a field with which it is not familiar, the resulting disjunctures can generate change and transformation”. (Reay, 2004, p. 436). This suggests that involvement in the as-yet unfamiliar world of a university has the potential to transform the young people’s pre-existing dispositions towards university.
In psychological terms, the most powerful way to build positive and resilient self-efficacy is through what is termed enactive mastery experiences. An individual’s own performances offer “the most reliable guides for assessing efficacy” (Schunk, 1991, pp. 208-209) as they provide “the most authentic evidence of whether one can muster whatever it takes to succeed.” (Bandura, 1997, p. 80). This suggests that providing opportunities for young people to experience success in university work would raise their belief in their ability to cope with university work.

Building on Bourdieu’s concept of the critical moment, Yair (2003) borrows the metaphor of the big bang from physics. According to Yair, big bang effects – short, intense, decisive episodes – produce extreme levels of motivation and can have long-term effects over the life-course. He argues that the widely-used cumulative model of school effects wherein learning is a slow, incremental and linear process is reductionist and does not explain the efficacy of short-term intervention programs (Yair, 2003, p. 126). Yair does not present an either/or scenario. Rather, he suggests that students’ career choices may be influenced by a small number of decisive experiences that build upon a foundation of incremental processes. One of the major outcomes of such big bang moments is self-empowerment, which encourages individuals to envisage alternative futures, to construct new identities. In these contexts, students may be motivated to choose a career/study path and to invest time and energy in planning and working to achieve this goal. Thus, their aspirations drive their achievement, rather than their limited achievements – or expectations of low achievement – limiting their aspirations.

Similar models of changing identities come from the literature on life course and career decision-making. Antikainen and Komonen (2003) speak of key experiences, as being instrumental in the construction of identity and in transforming an individual’s life course. Hodkinson and colleagues also argue that both routines and turning points play a part. The central idea is the same – at a turning point, a person “goes through a transformation of identity” (Hodkinson, Sparkes & Hodkinson, 2002, p. 436). A successful intervention program, then, would combine ongoing commitment – the step-by-step work of laying the foundations – with extra-ordinary “real world” experiences and opportunities to experience success in university work. Such characteristics would,
it is hypothesised, motivate and empower young people, facilitate their pragmatic decision-making, enhance their self-efficacy and ultimately transform their existing dispositions towards higher education.

Towards a theory of intervention

The chapter to this point has developed a theoretical foundation on which to base the shape of intervention programs. Drawing on the work first of Bourdieu and Passeron, and later Granovetter and Putnam, I have argued that a young person’s embodied cultural capital – specifically their knowledge and beliefs about and aspirations for university – is shaped early in their lives by their bonding social capital – the connections in their immediate social worlds. Further, I have proposed that transforming this habitus is possible, given certain conditions.

The implications for an intervention program are considerable. Several elements from the theories of social capital and cultural capital suggest factors that are likely to be effective in changing young people’s habitus. First, given the primacy of the pedagogic work of the family, altering embodied dispositions will likely require a significant investment of time, and the inclusion of powerful, real-world experiences. This suggests that commencing early, and combining sustained action with decisive events which engage young people in the world of university, will be most efficient. Second, given the lack of access to information, and the likelihood of acquiring negative beliefs about university, there is a need to provide accurate information and to explicitly address young people’s beliefs. Finally, given the evident absence of role models in the lives of the young people, an intervention needs to provide appropriate role models to act as bridging social capital. This chapter now develops an argument for constructing an intervention program based on these characteristics.

Several key characteristics of intervention programs consistently emerge in policy documents and the wider literature. Ramsay and colleagues (Ramsay, Tranter, Charlton & Sumner, 1998) recommend a combination of outreach, access and support for transition and retention. In particular, they note the importance of developing long-
term relationships. Similarly, James (2002) argues that the following characteristics are evident in successful intervention programs:

- collaborative activities between universities and schools aimed at making higher education seem relevant and rewarding;
- the early broadening of horizons – that is, well before final decision-making points; and
- a system-wide re-think of selection procedures.

Krause, K (2003) also argues that sustained linkages between schools and universities and targeting the early years of secondary schooling are vital ingredients. As outlined in Chapter 2, these characteristics have been taken up at Federal higher education policy level (e.g., DEET 1990; Commonwealth of Australia, 2009).

In addition to these structural characteristics, several writers point to the importance of role models in shaping young people’s horizons. In their study of “first generation” university students and their families, Levine and Nideffer (1996, cited in McLean, unpublished) found that a common factor in overcoming the challenges in getting to university was:

an individual who touched or changed the students’ lives: intervention by one person at a critical time in the person’s life. Sometimes the mentor was a loving relative, at other times it was someone paid to offer expert advice. In either case it was the human contact that made the difference. (Levine & Nideffer, 1996, p.65).

These conclusions indicate the importance of providing young people with access to the academically successful role models that may be absent from their immediate family and peer networks. These role models, the literature indicates, should not only be successful university students, they should be as much “like me” as possible. This implies recruiting role models who are close in age to the school students and who grew up and went to school in the same area as them.

Thus far, theoretically speaking, there are at least three elements which are clearly critical when endeavouring to change habitus. First is the provision of information; second is the interaction with appropriate role models; and third is the combination of ongoing activity interspersed with powerful, real-world experiences.
Figure 3.2 (below) illustrates the processes by which, it is proposed, an intervention can alter a young person’s embodied cultural capital.

**Figure 3.2.** Proposed model of the impact of an intervention on the habitus of young people from low socio-economic backgrounds.
Interventions: A model emerges

From the theoretical framework provided by theories of social and cultural capital emerges a model for intervention which offers the best chance of altering young people’s habitus such that they can consider university as a viable option. In operational terms, the essential ingredients of an intervention program would be:

i. Early intervention. That is, begin early in secondary schooling in order to affect young people’s habitus before critical educational decisions are made;

ii. Provision of bridging social capital. That is, employ academically successful role models, from similar backgrounds to the school students, as examples of “someone like me” who has gone on to university, thereby enhancing young people’s networks and broadening their identity horizons.

iii. Guidance in informed and pragmatic decision making. That is, provide access to, and train in the skills required to find, information on: post-secondary alternatives, course choice, university choice, entry requirements, and costs.

iv. A balance of incremental, foundation-building strategies, with “big bang” episodes. That is, involve time in the real world of university and interaction with university students, to build a realistic sense of university life and work and motivate young people to re-think their futures.

v. Work to change the young people’s habitus. That is, explicitly challenge the young people’s pre-existing beliefs with regard to the relevance, desirability and attainability of a university education.

As was outlined in Chapter 1, the ACULink project was modelled on these characteristics. The remainder of this study aims to ascertain the ways in which the project affected change in participants’ knowledge, beliefs and aspirations.

Conclusion

In his chapter I have theorised the factors and conditions which shape a young person’s post-secondary aspirations, with a view to answering two key questions: (i) in what ways does family shape young people’s beliefs about higher education?; and (ii) how might it be possible to intervene in order to alter these beliefs? These questions have been explored through the lenses of theories of social and cultural capital.
From this exploration, two key propositions have been developed. First, that a young person’s bonding social capital plays a significant role in shaping her or his embodied cultural capital with respect to their knowledge of, beliefs about and aspirations for university. Second, that it is possible to intervene in the processes of the accumulation of bridging social capital and embodied cultural capital and thereby to raise expectations for university.

Finally, I have proposed a model for intervention programs comprising early intervention, the provision of information, access to bridging social capital in the form of academically successful role models, and opportunities to experience the real world of university. An intervention based on these principles, I contend, has the potential to alter young people’s knowledge of, beliefs about and aspirations for higher education and thus to impact on rates of transition to university for young people from low socio-economic backgrounds.

In the following chapters I set about exploring and testing these propositions. Chapter 4 details a research approach and design that aims to capture the complexities of the young people’s decision-making processes, the factors that impact on these processes and, in particular, the impact of the intervention on these processes and on their beliefs and aspirations. Chapters 5 and 6 present that data as it makes evident the experiences, influences and thought processes of the young people involved in the ACULink project, building a picture of their pre-existing social capital and embodied cultural capital. Chapter 7 plots the interaction between students, their social contexts and the intervention, with a particular focus on the impact of the ACULink strategies, towards developing a theory of intervention to enhance social and cultural capital.
Chapter 4: Research methodology

Introduction

This aim of this research is to understand the factors that influence the construction of young people’s embodied cultural capital with respect to their knowledge of, beliefs about and aspirations for university, and the means by which it is possible to intervene in these processes. To that end, it interrogates two central propositions: (i) that young people’s bonding social capital plays a significant role in shaping their embodied cultural capital, and (ii) that it is possible to intervene in the processes of the accumulation of bridging social capital and thereby to enhance young people’s knowledge, to alter their beliefs and to raise their aspirations. This chapter outlines the methodological approach and research methods employed in this study, and demonstrates why the chosen approach is best placed to address these propositions. The approach taken is essentially qualitative and the chapter begins by describing the nature of qualitative research and its potential for shedding light on a person’s lived experiences and on social phenomena, in this case the processes of accumulating and transforming embodied cultural capital. I then expound the method of in-depth interview and discuss its capacity to elicit rich descriptions of the participants’ social worlds, and to privilege the voices of those being studied. I then proceed to illustrate the stages in the research process: sampling; data collection; data analysis; and theory development. I conclude by considering issues of quality in this process, such as the credibility, dependability, confirmability and transferability of the findings.

Overview of the research methodology and methods

A predominantly qualitative approach was employed to gain an in-depth view of the processes that operate as a young person constructs her or his knowledge of, beliefs about and aspirations for higher education, as a closed-response tool such as a survey could do little to address these propositions in depth. The main research methods comprised conducting two in-depth interviews with a sample group of 22 participants. In-depth interviews were employed to provide participants with an opportunity to voice their own thought processes, experiences and influences with regard to their career and study decision-making.
Illustrating the extent of the impact of the intervention in a wider context, however, necessitated including a quantitative component in the form of a larger-scale survey of approximately 330 participants. The survey was employed to highlight key themes and questions which were later explored in depth in the interviews. It also served to establish the extent to which the themes that arose in the interviews were consistent with the experiences of the cohorts as a whole. In so doing, it served to triangulate the interview data and the perspectives gained from the literature.

**Quantitative versus qualitative: the great methodological divide?**

There has long been debate in the literature around the relative efficacy and quality of qualitative as opposed to quantitative methodologies. Their origins are in contrasting fields of research and their philosophies and purposes differ to the extent that the two approaches are often presented as fundamentally incompatible. Quantitative methods, most often associated with the positivist approach, are generally suited to questions where goal of the research is to test a hypothesis the researcher begins with, where a direct causal relationship is sought, and/or where large numbers of subjects are involved (Neuman, 2003). In contrast, qualitative methods more often involve a subjective, interpretive and naturalistic approach to subject matter (Denzin & Lincoln, 2008). These methods are more suited to research that seeks to understand the nature of people’s lived experience. They can be used to obtain intricate details about phenomena such as feelings and thought processes that are difficult to extract through more conventional quantitative research methods (Strauss & Corbin, 1998).

Not all agree, however, that the two methodologies are always distinct. Crotty, for example, argues that many methodologies claiming to be qualitative research have in fact been carried out in an empiricist, positivist manner. Moreover, he believes that quantification is possible, even essential, within qualitative research. “Whatever research we engage in, it is possible for either qualitative methods or quantitative methods, or both, to serve our purposes.” (Crotty, 1998, p. 15). Crotty therefore draws the distinction between quantitative and qualitative at the level of methods and not, as many writers do, at the “exalted” levels of epistemology or theoretical perspective.
Several theorists now argue that “there need be no simple polarity between qualitative and quantitative research.” (Silverman, 2005, p. 25). Indeed, some now assert that the best research “often combines the features of each.” (Neuman, 2003, p. 16). Even the quintessential qualitative theorists Strauss and Corbin accept that, while the bulk of analysis may be interpretative, “some of the data may be quantified, as with census or background information about the persons or objects being studied.” (Strauss & Corbin, 1998, p. 11). The intention in this study is that, by combining the intensive analysis which a qualitative approach offers with the extensive data which a quantitative approach offers, it can “achieve understandings of a relatively large data set and test emerging hypotheses with a fair degree of credibility.” (Silverman, 2005, p. 25). With these aims of attaining depth, credibility and a degree of breadth, this study employs a predominantly qualitative approach with some use of quantitative methods. This chapter now sets out to justify the research methodology and methods utilised in this study.

A qualitative approach

Qualitative research has a long history in the social sciences, originating in the sociological and anthropological research of the 1920s and 1930s. It has since been employed in many other human disciplines, including education (Denzin & Lincoln, 2008). The term “qualitative research” is used in many different ways, and can mean different things to different researchers. In general, the term is applied to “any type of research that produces findings not arrived at by statistical procedures or other means of quantification.” (Strauss & Corbin, 1998, p. 10-11).

There are several important reasons why a predominantly qualitative approach has been selected for this research. First, qualitative research is most appropriate for research that is concerned with exploring people’s lived experiences, their everyday behaviour and their thoughts and feelings (Silverman, 2005). It is a means by which we can identify and observe processes, not just outcomes. These attributes are central to the purpose of this research, which seeks to illuminate the social worlds of the participants – family and peer conversations, and the intervention strategies – and to explore the ways in which these affect their thought processes as they shape their knowledge of and beliefs about university and form career and study aspirations.
Second, a qualitative approach is more likely to secure “rich descriptions”, whereas quantitative researchers are generally less concerned with such detail (Denzin & Lincoln, 2008, p. 16). These rich descriptions of the social world are valuable in enabling us to attain a “genuinely rich understanding of human behaviour” (Jaffe & Miller, 1994, p. 55). It is hoped that obtaining detailed descriptions will illuminate the complex interplay of influences upon the career and study choices made by the young people in this study.

Third, qualitative methods can give voice to disempowered minorities and can provide accounts of the world from their perspective (Russell, 2005). For the purposes of this study, young people from low socio-economic backgrounds can be viewed as a minority in that they are not represented in university populations in the same proportion as they appear in the wider population. They can be seen as disempowered in that their voices are rarely heard in the large-scale, predominantly statistical studies into their participation. The qualitative methods employed in this study explicitly seek the voices of people from this group, and the interview process allows participants to voice the perspectives that are important to them, in their own words.

Finally, and most importantly, answering the research questions required different methods to those employed in positivist research. A number of large-scale studies, using questionnaires administered to large sample sizes, have been undertaken with a view to identifying the factors contributing to decisions around post-compulsory education. (See, for example, Long, Carpenter & Hayden, 1999; Steveson, Evans, Maclachlan, Karmel & Blakers, 2000; James 2002). These have been highly effective in demonstrating links between socio-economic status and participation in higher education. Together, they also establish the primacy of parental levels of education as an indicator of post-compulsory destinations. What quantitative studies such as these have been unable to illustrate, however, is the way in which the various contributory factors operate to shape young people’s aspirations. More importantly for this study, they have been unable to do more than suggest means by which it is possible to intervene in these processes in order to raise aspirations: none have been able to take the next step and evaluate the effectiveness of any such schemes. Asking how young people shape their aspirations, how they might be altered, and in what ways the intervention
effected change, therefore, necessitated a more in-depth exploration than the broad brush-strokes of a survey might provide.

**Qualitative methods: In-depth interviews**

In order to understand better how these processes operate, it was critical to listen to the voices of the school students. Attempts to capture the participant’s perspective often employ in-depth interview studies, thus this method was selected to form the greater part of this study. In-depth biographical interviews with a small number of students from each year group were employed to allow me to gain a picture of how their beliefs and career plans are constructed and transformed over time, and what role the intervention strategy plays in these processes.

An in-depth interview has been defined as a conversation “focusing on the informant’s perception of self, life and experience, and expressed in his or her own words” (Minichiello, Aroni, Timewell & Alexander, 1995, p. 61). In-depth interviews were employed as a research method for several reasons. First, they allowed me access to “areas of reality that might otherwise remain inaccessible, such as people’s subjective experiences and attitudes” (Perakayla, 2008, p. 351): in this case, the construction of beliefs and aspirations. Second, interviews can capture the individual’s point of view in a way that quantitative researchers are seldom able to do as “they rely on more remote, inferential methods” (Denzin & Lincoln, 2008, p. 16) And third, they provided the participants with a voice, allowing them to identify and elaborate on themes that strayed from the limits of the pre-set survey questions.

A characteristic of open-ended, in-depth interviews is that there is often no fixed set of preconceived questions and no set order. Indeed, if a researcher is genuinely interested in hearing the voices of the informants, s/he must be prepared to relinquish some of the control over the flow of conversation to the informant. For me, encouraging the respondents to voice their perspective was paramount, which meant that their meanings took precedence over the pre-designated questions that I was prepared to ask. My role, then, was to provide the broad area for discussion and then to listen more than to speak.
This imperative had to be balanced with the need to ensure that the research questions were addressed, albeit not always in a pre-determined order. With this in mind, a schedule of questions was developed which first guided participants to talk about their experiences and to consider influential people and events in their lives, without pre-empting any particular topic. (See Appendices 5.1 and 5.2: Interview topic guides).

Despite their flexibility, the interviews were not without organization. Rather, they were guided by the interviewer – myself – and the research agenda (Holstein & Gubrium, 1995). That is, the questions were designed to elucidate responses that would illuminate the participants’ social and cultural capital and, ultimately, the impact of the intervention thereon. The first section asked questions around participants’ aspirations, the influences upon their aspirations, and their self-efficacy beliefs regarding these aspirations. The second section explored their embodied cultural capital with regard to their knowledge of post-secondary pathways and entry requirements, and the sources of this knowledge. The third section explored participants pre-existing social capital – both bonding and bridging – in terms of role models in their social worlds. The following two sections focused on participants’ embodied cultural capital in terms of their experience of and perceptions of the world of university, and their perceptions of any barriers and encouraging effects. The final section asked direct questions about participants’ perceptions of the impact of the intervention on their beliefs, aspirations and expectations regarding their post-secondary career and study plans.

The questioning strategy employed was that of funnelling. That is, the initial question was open, asking the participant to share their career aspirations, how they were formed and who or what was instrumental in shaping them. (In the case of the university students, they were asked to share their story of how they came to be at university). The aim was to not direct the informant to produce a particular desired response from a narrow set of pre-determined options. Rather, it was to allow them to identify the people, events and issues that were significant to them. In practice this meant allowing the participant to relate their story in the order and with the emphases that were important to them. I then endeavoured to select follow-on questions that flowed logically from the ideas expressed by participants.
The following sets of question, focusing participants on the people, events and structures that had an influence on them, were again posed as open questions, allowing participants to select their own emphases. Here, my role as interviewer was to follow these leads – to work with them rather than “strictly delimit the talk to my predetermined agenda.” (Rapley, 2004, p. 18). For example, a participant may have spoken at length about the importance of her or his parents in supporting them as they made their decisions, but may have made no mention of siblings, peers or teachers. My first priority was to explore the aspect of parental support in full, before asking participants to consider the role played by other potential role models. Once both the respondent and I felt we had fully covered parents, I would then guide the participant to consider any other people who had been helpful. If need be, I specifically named siblings, peers and teachers. Here, the interview schedule acted as a prompt, reminding me to ask about any areas that had not been brought up by the participant.

In cases where the ACULink project was not mentioned in response to the preceding questions, the final question directly asked the participant to consider the extent to which the project was influential in their decision-making and in helping her / him to achieve her / his goal. This question was deliberately held back until last so as to avoid leading or prompting the participants towards any particular response. Finally, participants were asked if there were other people or events which they had not yet mentioned. In summation, I reiterated the main aspects of the interview and asked participants to verify that my interpretation was correct.

Issues in interviews

Where there is an existing relationship (and, indeed, even when there is not), both interviewer and interviewee will carry preconceptions of one another to the encounter, as well as expectations of how to behave and what can be safely disclosed (Kaufman, 1994, p. 126). In the case of this study the researcher was known to most participants – except the Year 8 cohort at the first interview – either in the role of university-to-school-visitor, or in the role of university lecturer. In some cases, I was known to the informants in more than one capacity. The pre-existing relationship appeared to have a positive effect on the interview in that all participants came voluntarily and were generally smiling and apparently happy to share their experiences.
There were no occasions when any participant expressed a wish to not disclose or answer any of the questions posed.

It is not possible, however, to ascertain the extent to which this relationship may have affected the response from the participants, or the extent to which they were prepared to disclose. One concern was that participants might feel constrained to respond positively, particularly when it came to questions around the impact of the ACULink strategies. This did not seem to pose a problem: several respondents had no qualms in reporting that they could not remember much about a particular strategy, or that some of the activities and resources were not helpful or even were confusing. A small number did not even recognise the researcher as the person who had delivered a particular strategy! For these reasons, it seems reasonable to accept that any positive responses regarding the ACULink project can be regarded as honest expressions of the participants’ experiences. The next aim was to use this relationship as a starting point in developing rapport with interview participants.

Much has been written on the importance of establishing rapport. (See, for example, Fontana & Frey, 2008; and Sullivan, ND). Fontana and Frey assert that, as the goal of interviewing is to gain understanding, establishing rapport is “paramount” (Fontana & Frey, 2008, p. 132), and Kaufman argues that “there is simply no substitute for building a trusting relationship.” (Kaufman, 1994, p. 130). Not all agree, however, that establishing rapport is an essential precursor to obtaining information. Russell and colleagues found that, in fact, rapport has little appreciable effect either on informants’ willingness to be interviewed or on the nature of their responses (Russell, Touchard & Porter, 2002). Nonetheless, as the majority of participants in this study were school students and the pre-existing relationship was not close, I felt it would be beneficial to spend some time in establishing rapport.

Despite the emphasis on the importance of establishing rapport, few writers provide much direction on how such rapport might best be achieved. It is often assumed that rapport will emerge from a combination of the goal statement, or from biological similarities between the researcher and researched. As Rapley (2004) recommends, I commenced each interview reiterating the goal of the research and restating issues of
confidentiality and their right to terminate the interview or retain the audio recording. Taylor and Bogdan (1994, in Minichiello et al, 1995, p. 80) recommend informal conversation with the participant prior to the interview. I began with some informal chat to help them to put them at ease with an interviewer who was both adult and outsider. Throughout, I also used simple measures such as smiling, asking participants how they were and how things were going at school or university and, of course, thanking them for giving up their time. This appeared to be effective – with only one or two exceptions, participants appeared comfortable and spoke freely.

The quantitative component

The Questionnaire

Generally speaking, questionnaires allow researchers to question large numbers of people relatively effectively and efficiently. In this study, a survey was administered to whole school-year cohorts to address the research questions in a broad context. This survey first asked demographic questions to ascertain the participants’ pre-existing social capital: that is, what role models are available in the young people’s immediate social worlds. It then set out to ascertain the young people’s pre-existing beliefs about and aspirations for university. Finally, it asked the extent to which the intervention changed these beliefs and aspirations.

For the strategies that involve large numbers (i.e., Year 8 Goal-Setting, Year 9 Pathways Awareness and Year 10 Campus Visits), a before-and-after survey was employed. Both the pre and post-surveys were conducted, and initial analysis was undertaken, in the exploratory phase of the research prior to the commencement of the interviews. Thus, responses to the survey highlighted key themes and questions which could later be explored in depth in the interviews. The survey provides a backdrop to the in-depth data gathered from the interviews and, in so doing, serves to triangulate the interview data and the perspectives gained from the literature. Further, it establishes the extent to which the themes that arose in the interviews were consistent with the experiences of the school population as a whole.
Sampling

In the study, five ‘cases’, or schools, had already been selected by virtue of their participation in the ACULink program. However, for the study to be truly in-depth yet manageable within the limitations of one student-researcher, further reduction needed to take place. In the first step in this reduction process, the study was narrowed to two of the five school sites (one a Years 7-10 campus and one a Years 11-12 campus), plus the university campus (for the university students). This provided coverage of all relevant cohorts of participants, while enabling more time to be spent on each site in order for a richer, more detailed picture to be developed. Thus, the sampling choices made were in part determined by theoretical issues, and in part by pragmatic concerns such as time and personnel.

Survey component

For the survey component, no further reduction took place. The intention of the survey component was to give a broad picture of the aspirations and beliefs of the participants and it therefore needed to reach large numbers. To achieve this end, it was administered to every student who participated in the Years 8, 9 and 10 strategies.

Survey response rates

The surveys were completed at St Mary’s school site10, under teacher supervision, without the presence of the researcher. The teachers at St Mary’s elected to administer the survey to entire Year 8, 9 and 10 cohorts as part of their PD/H/PE Careers programme. However for ethical reasons, the only responses that are analysed here are those from whom written parental consent was obtained AND who completed both Before and After questionnaires. Each year group had an enrolment of around 150 students. With an average absentee rate of around 10 per cent, it is estimated that approximately 135 Year 8 and 135 Year 9 students were present at each of the pre- and post-intervention sittings (though not necessarily the same students present each time). It is not possible to ascertain the exact number who completed the surveys as, for ethical reasons, the researcher was only given completed surveys of those students whose parents had provided written consent for them to participate in the research.

10 St Mary’s is the Years 7-10 campus.
It was not possible to administer the *Before* questionnaire to the Year 10 cohort, as it was not known which students would participate until the day of the campus visit. Therefore, only the *After* questionnaire was administered. In order to minimise interference in the students’ schooling, this took place towards the end of the school year, after exams. A large number of St Marys’ students tend to leave school at that point, or simply don’t bother attending the last few weeks of the year. It is therefore estimated that approximately 60 students completed the Year 10 questionnaires. This gives an approximate total of 330 students who took part.

Of these 330 students, 39 from Year 8, 39 from Year 9 and 16 from Year 10 returned signed parental consent forms – a total of 94, or a response rate of approximately 28 per cent. This was after three separate attempts on the part of the researcher, school teachers and school principal to encourage the students to return the signed forms. Given the “captive” nature of the audience, this could be seen as somewhat disappointing. However, in the context of a community with above average non-English-speaking backgrounds, the voluntary nature of the research and the fact that no incentive was offered, this can be considered a reasonable response rate.

*Piloting the survey*

Sections of the survey (from Question 11 on) were piloted with each of the Year 8, 9 and 10 cohorts, in the year preceding the implementation of the whole survey, immediately after the students had participated in the ACULink strategies. These pilots focused on participants’ beliefs about university, their post-secondary aspirations and their perceptions of the helpfulness of the particular strategy. A number of concerns arose. First, that the focus was solely on the university experience, leading to the possibility that the survey might influence participants to focus more on the importance of university than they might otherwise have done. The final survey was amended to include questions on several post-secondary alternatives to avoid any undue influence. (See, for example, questions 12-20; 21-27 and 28-44). The first section on family occupation and education levels was then added to provide clearer insight into the influences upon students.
It was then intended to pilot the complete survey with a small group of students from each cohort. However, the teachers elected to administer the survey to entire year cohorts as part of their PD/H/PE Careers programme. There was no subsequent opportunity to administer the survey so, what was intended as a pilot run became the final data collection.

**Interview component**

For the in-depth interview portion of the study, further sampling occurred within school populations. Cases were selected that offered the best “opportunity to learn” (Stake, 2008, p. 130). This is sometimes referred to as “purposive sampling” – the careful selection of cases that are information-rich (Llewellyn, Sullivan & Minichiello, 1999; Neuman, 2003). As the project conducts different strategies in each year group, it was important to talk to students from each cohort across the two schools. Thus, the researcher actively sought participants from each group. From the senior cohorts, only those who had participated in the intervention were approached as only they could provide the opportunity to identify any impact from the intervention. A gender balance was also sought, to highlight any gender based differences which might emerge from the data. However, due to the voluntary nature of the study, a balance of sexes was not achieved in all age groups. While a balance was achieved across Year 11 to Year 12, and both sexes were represented in the Year 10 and university student samples, the Year 8, 9 and 12 participants were all female. While not a representative sample in the strict statistical sense, this method provided the best achievable coverage of the impact of the project across all relevant cohorts (with the exception of the gender imbalance). See Table 4.1 for an overview of the sample selection in matrix form.

Taking four students from most cohorts, this gave a total of 38 interviews which were conducted over a span of over the two years. To gauge changes over the long term, most participants were interviewed before and after participating in the relevant intervention strategy, with a time gap of six to nine months in between – as long as was possible within the school calendar year. Ideally, sample size is determined by reaching

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11 St Mary’s, the Years 7-10 campus; and St Thomas More, the Years 11-12 campus.
theoretical saturation. In practice, it is also determined by the constraints of the time and resources of the researcher, and this study is no exception.

Table 4.1

Matrix of Interview Sample

<table>
<thead>
<tr>
<th></th>
<th>School A</th>
<th>School B</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years 7 – 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 8 = 4</td>
<td>4 recruited: all female.</td>
<td>4 recruited: 3 male 1 female</td>
<td>4 recruited: 3 female, 1 male</td>
</tr>
<tr>
<td></td>
<td>2 interviews each, pre- and post-intervention</td>
<td>Post-intervention interview only</td>
<td>1 interview each</td>
</tr>
<tr>
<td>Years 9 = 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 recruited: all female.</td>
<td>3 recruited: all female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 interviews each, pre- and post-intervention</td>
<td>2 interviews each, pre- and post-intervention</td>
<td></td>
</tr>
<tr>
<td>Years 10 = 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 recruited: 2 male, 2 female.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 interviews each, pre- and post-intervention</td>
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</tbody>
</table>

Piloting the interview

The interview was piloted with a volunteer university student, transcribed, and preliminary analysis undertaken as part of a unit of study on qualitative research methods. Feedback led to minor re-phrasing of a few questions. It also provided the researcher with guidance in interview technique and raised her awareness of potential issues. This interview (Carly) was included in the final analysis, as it provided a wealth of information.

Data collection: Survey design

The survey was designed to address the components of the theoretical framework as developed in Chapter 3. That is, it began by ascertaining the levels of education of participants’ bonding social capital. It then explored participants’ embodied cultural capital, pre- and post-intervention, first in terms of their knowledge of post-secondary alternatives and university entry requirements, and then in terms of their post-secondary aspirations and expectations. Further sections were designed to
ascertain participants’ beliefs about the world of university, and their self-efficacy beliefs in their ability to gain entry to university and to cope with university work.

The *Before* questionnaires were 5 pages in length, comprising five sections. (See Appendix 4: Survey questionnaire). The *After* questionnaires were 4 pages, comprising the last four sections of the *Before*. Section 1 required short, factual responses to demographic questions such as parental occupation and levels of education of parents and older siblings. Responses to this section were used to determine participants’ access to advantageous bonding social capital in the shape of the academically successful role models in their families, and the number of participants who would be the first in their immediate families to attend university.

Section 2 asked participants their post-secondary work and/or study aspirations and expectations, and explored their embodied cultural capital in terms of their knowledge of the pre- and post-secondary education they would need to undertake in order to attain their career goal. This required mainly tick-the-column responses with restricted alternatives. Section 3 focused on bonding and bridging social capital, asking students who they talked to when making their decisions and to rate how helpful they found each category. It also included questions explicitly examining the impact of the intervention, asking participants to rate the helpfulness of the ACULink strategies and other school-based Careers activities the students had participated in.

Section 4 comprises questions around the participants’ embodied cultural capital with regard to their beliefs about the various post-compulsory alternatives. It employed a set of statements designed to paint a picture of their views of the desirability, relevance and attainability of university education: Questions 12 and 13, asking students where they would *like* to go and where they *expected* they would go, were informed by the James study (James, 2002) which identified gaps between aspirations and expectations among young people from low socio-economic backgrounds. The James study also informed questions 14 to 20, which asked participants to rate post-secondary pathways as the most interesting, challenging and rewarding. Subsequent questions focused on participants’ self-efficacy beliefs with regard to their ability to gain entry to their chosen course (Questions 21 to 27).
Section 5 questions focused on participants’ perceptions of the factors that encouraged or discouraged them in their decision-making. This included questions which explicitly measured participants’ self-efficacy beliefs regarding their ability to cope with university work (Question 39); and their identity concepts in terms of their beliefs that “people like me” go to university (Question 42). Being “attitudinal” in style, participants were asked to respond to statements using primarily Likert scale questions comprising “strongly agree”, “agree”, “unsure”, “disagree” and “strongly disagree”. This aimed to provide a clearer picture of the intensity of participants’ beliefs than might be obtained through, for example, straight yes/no answers (Judd & Smith, 1991).

The questions around self-efficacy beliefs were informed by approaches taken in existing measures, including the use of a rating scale (Bandura, 1997, p. 43), though here much simplified. In this fundamentally sociological study, self-efficacy beliefs form but one small construct in a myriad of constructs explored in relation to the impact of the intervention on young people’s dispositions. It was therefore considered not appropriate to use a pre-existing measure of self-efficacy in full, as this would place undue emphasis on one construct. Further, employing a different approach in one area could confuse participants. Instead of a 100-point scale, for example, a 5-point Likert scale was employed, in order to employ a consistent style across the survey.

**Analysing the Survey Data**

Each of the five sections in the survey required different types of response and therefore necessitated differing tools of analysis. In general, results are reported as simple percentages. This is to provide an accessible, descriptive overview of patterns that emerged. These patterns were then explored in depth in the interviews. In some cases, comparisons have been made between rates in the pre and post-surveys, in order to ascertain any shifts in perceptions over time. It is important to note here that the research is in no way intended to be “experimental” in design. Given the time elapsed between administration of the pre and post-surveys, it was obviously not possible to eliminate all variables. Therefore, no direct causal link can be established between the intervention and any changes from pre to post. Rather, the intervention is viewed as but one aspect of the participants’ lived experiences in the intervening period. This section will now detail the analysis that was undertaken on each section of the survey.
Initially, the survey data was analysed in school year cohorts. Where possible, results were later combined to gain a picture of the sample as a whole (for example, Section 1 on demographic attributes). Data from the Year 8 and Year 9 cohorts was aggregated to gain a broad picture of the whole. However, as the Year 10 cohort did not undertake the Before survey, it was not possible to include them in pre- and post-intervention comparisons.

Section 1, entitled “Background Information”, only appeared in the “Before” survey. Comprising three open, factual questions, it asked respondents to identify the occupation and education levels of their parents and older siblings, in order to ascertain the extent to which respondents had access to a role model in their immediate family who had gone on to university before them. Questions 1 and 2 asked respondents to state their parents’ occupations. Responses were then grouped by the researcher into six categories: professional; managerial; skilled trade; low-skilled; unemployed/other; and don’t know. Results are reported as a percentage of the whole. It should be noted that, as was later revealed in the interview data, not all participants had a clear idea of their parents’ occupations and a number of responses were non-specific. Such responses required a certain degree of “best-fit” when placing them into categories. Figures obtained should therefore be interpreted as providing a general indication only.

Question 3, “Parental Education Level”, asked respondents to indicate the highest level of education attained by their parents, according to nine pre-determined categories: University degree or higher; Diploma (from University or TAFE); TAFE certificate; Apprenticeship; Other formal qualifications; School only to Year 12 Higher School Certificate (or equivalent); School only to Year 10 School Certificate (or equivalent); No formal qualifications; and Don’t know. Responses to Questions 2 to 5 were later combined into one generic “TAFE or equivalent” category, and Questions 6 and 7 into one “School only” category, to facilitate comparison against existing Bureau of Statistics categories.

The same process was followed for Question 4: “Highest level of education attained by any older sibling”. Participants’ responses to Questions 1 to 4 were analysed individually to ascertain the proportion that did not have access to a role model in their
immediate family. Again, not all participants had a clear idea of their parents’ and siblings’ educational qualifications. Providing pre-set categories removed the issue of non-specificity, but figures can still not be read as absolutely accurate. The mismatch between parental levels of education and parental occupation, as discussed in Chapter 1, was one example of the need for clarification. Further information was sought in the in-depth interviews. (Refer to Appendix 7: Demographic information).

Finally, responses to all questions in Section 1 were then compared with Australian Bureau of Statistics 2006 Census figures for the Australian populations and the populations of the local regions of Mountain View and Valley View (Australian Bureau of Statistics, 2006). This provided a picture of the socio-economic status of the families in the study, and allowed me to ascertain the extent to which the study sample could be viewed as representative of the broader community. These results are included in the contextual section of Chapter 1.

Section 2, “My Future Career”, explored respondents’ career aspirations and their knowledge of the appropriate training pathways, and of subject and mark entry requirements for these pathways. Career aspirations were grouped into four categories: those requiring a university degree or equivalent; those requiring a TAFE qualification or equivalent; those requiring school only; and those who don’t know. This is then reported as percentages of the whole, and these figures were compared in the pre- and post-intervention surveys to ascertain any general shift in aspirations across the whole cohort. (Refer to Appendix 8: Participants’ career aspirations).

In analysing participants’ knowledge of training and entry requirements, responses were grouped by the researcher into three categories: accurate knowledge; partial knowledge; and little or no knowledge. Once again, this required a degree of professional judgement and a general knowledge of university entry requirements. Where necessary, the standard UAC Guide was consulted for verification. Each category was calculated as a percentage of the whole, then weighted as follows: accurate knowledge – 3; moderate/partial knowledge – 2; little or no knowledge – 1. From these weightings, a mean was calculated and the difference in the mean from pre- to post-intervention was used to discern any change to respondents’ knowledge after the
intervention. Again, it should be noted that any changes cannot be viewed as solely and directly attributable to the intervention. (Refer to Appendix 9: Knowledge of entry requirements).

Section 3, entitled “Making My Decision”, asked respondents to rate various groups of people (Question 10) and various careers-based strategies (Question 11) as either Very helpful, Somewhat helpful or Not at all helpful. In the case of the ACULink strategies, a Not Applicable category was included for those students who had not had the opportunity to participate. Again, categories were weighted from 3 (Very helpful) to 1 (Not at all helpful). N/A responses were removed from the total before percentages and means were calculated. For the helpful people, the difference in mean from pre- to post-intervention was established. (Refer to Appendix 10: Decision making).

Section 4, entitled “My Beliefs about Work and Study”, first asked respondents which of three alternatives – University, TAFE, Full-time Job – they believed would be most accessible, rewarding and challenging (Questions 12 to 20). These responses were calculated as percentages and the differences calculated from pre- to post-intervention. (Refer to Appendix 11: Beliefs about work and study).

The next sub-set, questions 21 to 27, explored respondents’ self-efficacy with regard to entering their chosen career, for example “I expect to get a high enough mark to get into one of my first two choices of university course”. They were asked to rate these as either Yes, No or Unsure. Again, responses were calculated as percentages, and the differences calculated from pre- to post-intervention. (Refer to Appendix 12: Self-efficacy beliefs).

The final section, Section 5, asked a series of questions around respondents’ perceptions of factors that either encourage or discourage them on their chosen career paths. Respondents were asked to rate statements (eg., Question 28: “My parents would like me to go to university”) on a 5-point Likert scale. Results were first calculated as percentages in each scale-point, which provided an overview of factors which appear to be encouraging and discouraging respondents as they make their career and study plans. Each point on the scale was then weighted as follows: Strongly Agree – 5; Agree – 4;
Unsure – 3; Disagree – 2; and Strongly Disagree – 1. From these weightings, a mean was calculated. A mean of 3 would be considered neutral, and anything greater than 3 would be considered a positive response (for positive statements). This highlighted the strongest encouraging and discouraging effects. Finally, any difference in mean between the Before and After surveys was calculated, enabling me to ascertain any shifts in intensity of response from the pre- to the post-intervention survey. A paired t-test was conducted on each question in this set, comparing the mean of responses in the pre- and post-surveys, to ascertain whether any differences could be viewed as statistically significant (Fink, 1995). (Refer to Appendix 13: Encouraging and discouraging factors).

Qualitative data analysis

Data analysis is the process of systematically arranging information in order to search for ideas and to find meaning in the information collected. This study applied an approach to the analysis of qualitative data based on the process first developed by Glaser and Strauss in 1967, and revised by Anselm Strauss and Juliet Corbin in 1990. Although this research does not apply grounded theory as a research method, employing its approach to the analysis of data enabled me to test emerging theory, as well as to discover new themes, in a rigorous and transparent manner.

In summary, the analytical process advocated by Strauss and Corbin (1990) and employed in this research, incorporates three stages as follows:

- Stage one: open coding of the data, in which the researcher identifies and labels concepts in the data.
- Stage two: axial coding, wherein the researcher identifies broad themes and groups initial codes into conceptual categories; and
- Stage three: selective coding, which involves identifying central explanatory concepts and developing propositions.

This section now details this approach as it was applied to the analysis of the qualitative data in this study, commencing with a brief exploration of the features of the approach, its strengths and limitations, and an outline of the steps followed.
Data analysis in grounded theory

The grounded theory approach was developed by Glaser and Strauss (1967) in an attempt to bridge what the authors perceived as an “embarrassing gap” between theory and empirical research (Glaser & Strauss, 1967, p. vii). From its early days, grounded theory offered an alternative to existing methodologies: a complete method with which to conduct theoretically innovative research, covering the whole process from research design, data collection and analysis, to the generation and writing up of theory. Since its inception, grounded theory has undergone several significant permutations, such that it is no longer one single, consistently defined methodology (Dey, 2004, p. 80). It now exists in several versions including later versions by Glaser (1978), Strauss (1987) and Strauss and Corbin (1990) (as cited in Charmaz, 2006). It is the latest version developed by Strauss and Corbin which was applied in this study.

Essentially, Glaser and Strauss’s “constant comparative” method of analysis centres on "coding" concepts in the data into categories which offer meaningful interpretations of the phenomena being investigated. As each incident emerges, the researcher compares it with previous incidents in the same and other categories in order to identify the properties and relationships of the codes. Initial coding is followed by the integration of categories and their properties. This process is repeated, with the researcher moving back and forth between data collection and analysis, and only ceases when “theoretical saturation” has been reached (that is, when further data no longer adds new concepts or refinements to the emerging theory).

Building upon the constant comparative method, Strauss and Corbin advocated a meticulous three-stage coding process. Here, they defined coding as “the analytic processes through which data are fractured, conceptualized and integrated to form theory.” (Strauss & Corbin, 1998, p. 3). As in the constant comparative method, the first stage or open coding of the data involves labelling initial categories and coding data – in this case, segments of text – into these categories. The second stage, axial coding, involves grouping initial concepts into conceptual categories and identifying broad themes. The final stage, selective coding, involves developing an overarching, explanatory theory (Silverman, 2005).
Strengths

The Strauss and Corbin model of data analysis has a great deal to offer qualitative researchers. First, with its primarily inductive approach, it enables the researcher to develop theory that is not dependent on existing hypotheses. This offers rich possibilities for advancing research through the development of new theories. While this study is not so much exploratory as confirmatory, the Strauss and Corbin approach was nonetheless readily applicable, serving to test emerging theory as well as to discover new elements.

A second strength of the model is that it encourages researchers to remain close to the data, and to look in depth at interaction in particular contexts (Grbich, 2007, p. 82). This “grounding” of theory in data drawn from real situations promotes the emergence of theories which have direct, practical applications. It is hoped that such practical applications will flow from the results of this study to inform the future shape of the intervention in question.

Third, the approach provides the tools to conduct a systematic and transparent analysis of data (Tuettemann, 2003, p. 10), to explore complex interactions among the data, and to develop an integrated set of theoretical concepts (Charmaz, 2005, p. 508). Many researchers find this framework helpful, and its widespread application has undoubtedly enhanced the rigour and credibility of much qualitative research. For these reasons, the Strauss and Corbin approach to data analysis has been applied in this study.

Limitations and issues

Its many strengths notwithstanding, the Strauss and Corbin approach is not without its detractors. As is the case with any approach, it has its tensions. While the constant comparison method is helpful in generating theory grounded in the data, Glaser and Strauss have been criticised for their apparent lack of interest in testing existing or emerging theory (Silverman, 1993, p. 153). While this may be an accurate criticism, it must be noted that this was never one of their aims. Glaser and Strauss were very clear that the constant comparative method is concerned with “generating and plausibly suggesting (but not provisionally testing) many categories, properties, and hypotheses about general problems” (1967, p. 104).
Second, the widespread adoption of grounded theory has sometimes resulted in misunderstanding and inappropriate application at the hands of inexperienced researchers. Used unintelligently, it can become “a mere smokescreen used to legitimise purely empiricist research” (Silverman, 1993, p. 47). In addition, the method has been criticised for making little attempt to ascertain the universality of suggested causes (Glaser & Strauss, 1967, p. 104). However, the same could be said of many qualitative methods which focus in-depth on specific social situations and therefore cannot readily be applied to others. In this study, other means have been employed to address the potential for transferability of the research findings.

Finally, the Straussian approach in particular has been accused of fragmenting the data to the extent that the researcher may lose sight of the emerging big picture (Grbich, 2007, p. 80). Used unintelligently, it is argued, it can degenerate into a fairly empty building of concepts or categories with little substantive or formal theory emerging. This criticism is more to do with a lack of transparency in the process and an inadequate depth of analysis than with the approach itself. If followed, as recommended, through to the final analytical phase, the approach should result in the generation of a theory that is firmly grounded in the data.

**Researcher sensitivity**

Grounded theory has also been criticised for its failure to acknowledge the implicit theories which guide work at an early stage. However, both Glaser and Strauss initially, and later Strauss and Corbin, recognised the challenge of balancing researcher objectivity with the need to employ the researcher’s accumulated experience and theoretical knowledge, acknowledging that “we cannot completely divorce ourselves from who we are or from what we know” (Strauss & Corbin, 1990, p. 45). In acknowledging this inherent tension, they emphasise the importance of referring to the literature and using personal experience to enhance sensitivity to meanings in the data. As was explored earlier in this chapter, this advice has been followed closely in this study.
The Straussian model as applied in this study

While this study does not employ a grounded theory approach in its entirety, the approach to the analysis of qualitative data in this study is based on the version developed by Strauss and Corbin in 1990. Data analysis began soon after data collection began and took place concurrently throughout the research process. This allowed the checking of working hypotheses and the following up of unforeseen themes as they emerged. Themes and questions that emerged from the questionnaires and from the first interviews were used to shape the questions in the second round of interviews. Thus the data collection was continually informed by analysis of existing data. The following section outlines the steps in this process and describes how they were applied in this study.

Stage one: Open coding

During the first step, referred to as “open coding”, data is “broken down into discrete parts, closely examined, and compared for similarities and differences” (Strauss & Corbin, 1998, p. 102). In this study, this process was undertaken continuously as data was collected. The first phase of analysis comprised several readings of the data. After the interviews were conducted, the transcripts were first read by the researcher to locate the “open” codes or points that were made. Concepts and categories were identified prior to and throughout this stage and for each concept, I created a “free node” in NVivo. All interview transcripts were then analysed line-by-line and phrase-by-phrase and, using QSR NVivo7, almost all segments of text were coded under one or more of the headings or nodes.

While a grounded theory approach is generally inductive, in this study it is recognised that the researcher brings to the analysis a background of reading and personal experience in the field that could not help but influence the interpretation – particularly in the early stages. In this light several concepts – derived from the research questions, the literature, the theoretical framework and from my experiences in the field – had been identified before coding commenced. From these, a preliminary schema was devised. (See Appendix 6.1: Schema for analytical codes – preliminary).
Segments of data were initially coded into four broad categories: social capital, cultural capital, structural factors and personal characteristics. These were further broken down – provisionally – into sub-categories. For example, social capital was divided into bonding and bridging social capital. Each of these categories could then be classified according to two versions: either as encouraging factors or as barriers to transition. For example, parents as role models could be placed under encouraging factors if a parent had a university education, while the absence of a parent as role model could be placed under barriers to transition. Within NVivo it was a straightforward process to code each segment of text twice – once into the relevant social capital or cultural capital node, and again into either barriers or encouraging effects. In addition, where a participant explicitly identified an impact of the intervention on one of the other categories, the segment was coded a third time into a “relationship” node.

In addition to the pre-conceived codes, concepts were drawn from “… empirical indicators in the data, by comparing indicator to indicator” (Grbich, 2007, p. 74). Thus, new categories were created from the data, and the preliminary schema was continually modified as new concepts emerged and pre-determined categories were found to be irrelevant. As codes were established, they were continually compared within each case and across cases for similarities and differences. For example, when one participant reported having contact with person outside their immediate family who had gone to university, this was compared with other participants who reported something similar. This led to the development of the code Bridging social capital: Role model at university. Similarly, if more than one participant named any peers in her/his social circle who were at university another code, that of Bonding social capital: Peers as role models, emerged. The mechanics of this process were facilitated by the use of QSR NVivo7, as described in the following section.

Stage two: Axial coding

The second stage entails grouping the discrete codes from stage one according to conceptual categories that reflect commonalities. Strauss and Corbin refer to this as “axial coding” – the act of relating categories to subcategories in terms of their properties and dimensions. This stage involves taking one category which has emerged
in open coding and linking it to all the subcategories which contribute to it. (Grbich, 2007, p. 79). The researcher looks for patterns in the data and begins to generate hypotheses about relationships between phenomena (Priest, Roberts & Woods, 2003, p. 34).

In this study, the categories which were derived strongly reflect the interpretive lens of the researcher, in that concepts from social capital and cultural capital theories provided the provisional framework. For example, both parents and peers as role models were seen to be similar in that they involved relationships with people close to the lived world of the participants. Hence they were seen to belong to the category of Bonding Social Capital. However, additional categories were added as the need arose, allowing new themes to emerge from the data. Such categories included Sources of Information/Misinformation and notions of Fear and Hope. Again, the mechanics of this process were facilitated by NVivo, with its structure of tree nodes. (Refer to Appendix 6.2: Schema for analytical codes – Stage 2. See also Appendix 6.4 for a list of open codes (tree nodes) as they were grouped into broader categories and sub-categories).

Stage three: Selective coding

The final stage, that of “selective coding”, involves identifying one or two central explanatory concepts to which all categories are related through a series of explanatory statements. This provides a conceptual framework from which to develop a theory that is grounded in the data. Finally, the theory is validated by comparing it to raw data or by presenting it to respondents for their reactions. Priest and colleagues assert that the integration of codes and categories into a coherent theory is particularly challenging and many studies are compromised at this stage. Many writers choose to simply present their findings thematically, from categories that have emerged from the first two stages, rather than developing any substantive grounded theory (Priest et al, 2003, p. 35). Using the theoretical lens provided by social and cultural capital theories, this study strove to avoid this trap and to develop the themes into a coherent, inter-related framework.
At this stage in the process, I searched for relationships between the phenomena, looking for central explanatory concepts to which all categories could be related. Taking the framework provided by social capital and cultural capital theories as a starting point, each participant was first analysed on an individual basis to examine their pre-existing social capital and the resulting pre-existing cultural capital, under the sub-headings outlined above. Second, as the aim of this research is to ascertain the efficacy of the intervention, every category was examined in terms of its observed impact on the bridging social capital and embodied cultural capital of the participants. Again, within-case analysis was undertaken first to allow the configuration of events and outcomes to become apparent with each participant before being subjected to cross-case comparison. Finally, cases were compared against others, seeking similarities and contrasts that contributed to the identification and understanding of any causal relationship. This ultimately led to the development of an abstract model describing essential factors and key influences on the formation of career aspirations and intentions to undertake university study, with a particular focus on the role played by the intervention in this process. (Refer to Appendix 6.3: Schema for analytical codes – Stage 3). Chapter 7 provides a description of this final phase and the theory of intervention which emerges.

The use of NVivo in the analysis of the qualitative data

The data analysis process, particularly the first two stages, was undertaken with the use of QSR NVivo7 software. A computer was employed not to “supplant time-honoured ways of learning from data” (Bazeley, 2007, p. 2), but to increase the efficiency and credibility of the learning. NVivo has a number of features which facilitate the researchers’ ability to make connections among a large number of sources and ideas. Bazeley (2007) identifies five principle ways in which NVivo supports qualitative data analysis. These are: managing data, managing ideas, querying data, graphically modelling, and reporting from the data. To these can be added a sixth benefit, that of enhancing rigour. This section now briefly explores these benefits and describes how NVivo was employed in this project.

Managing data

At the most basic level, NVivo is a powerful tool for manipulating and retrieving text. One of the most fundamental advantages of working with a computer is
that it enabled me to store, organise and access large quantities of data (i.e., 38 interviews from 23 participants) efficiently, and to access it at any time. This left me free to focus on analytical questions (Silverman, 2005). The interview transcripts were readily imported into NVivo and results were just as readily exported into Word (Godau, 2004). Each participant was saved as an individual “case”.

Managing ideas

In addition to storing data, NVivo provided “the tools for exploring the relationships between data and ideas.” (Richards, 2005, p. 27). As initial coding takes place, the categories (called “nodes”) and the source document can be viewed simultaneously. This kept the categories in the forefront of my mind. NVivo also made it easy to add, remove or revise categories as the research progressed – allowing flexibility and the development of new ideas. The “drag-and-drop” action sped up coding while keeping the source document intact, allowing me to code each segment of text into a number of categories while retaining its context. The ease of making links, and of retrieving data, allowed me to pursue leads as they arose, and return to them later as more information came to light.

NVivo also facilitated the second stage of data analysis, in particular the organisation of ideas into a hierarchy of categories. The creation and re-creation of a node hierarchy or “tree” was a straightforward task. (Refer to appendix 6.4: NVivo tree nodes, for a diagram of the final node-tree). In addition, data was sometimes re-coded from within nodes as well as from the original source. For example, a section of text might be pulled up with all coded occurrences of parents as role models. From within this already coded data, it could be re-coded under encouraging factor or barrier.

Querying the data

More important than simply organising ideas, NVivo allows the researcher to ask simple or complex questions of the data. These queries range from simple frequency counts to relationships between cases, nodes and attributes. Results from queries were saved for further reference so that querying became “part of an ongoing enquiry process” (Bazeley, 2007, p. 3). For example, I was readily able to query the number of
participants who reported having an older sibling who had been to university, or who mentioned financial issues as a concern, and to then retrieve all the relevant coded text.

Further, I assigned attributes to each case, enabling cross-referencing between groups, characteristics and responses, which helped to identify patterns. These attributes included gender, school year, parental occupation and parental levels of education. Once original source interview data had been coded, for example under aspirations, it was a straightforward query to cross-reference against parental occupation and/or levels of education. It was then possible to draw out all coded text that was linked to any or all of these categories. This enabled the ready identification of trends such as links between participants’ aspirations and parental occupation or levels of education.

**Graphically modelling**

At the later stages of data analysis, NVivo can go beyond textual analysis to enable the researcher to create visual representations of relationships between nodes and attributes, and to display them using models. This can be helpful for exploring ideas and developing theories (Godau, 2004, p. 77). This tool was only used to a limited extent in this project. This was in part due to the inter-related nature of the data which resulted in over-complex models, and in part due to my personal preference for pencil and paper diagrams.

**Reporting from the data**

The many features described above make it relatively easy to report on all the contents of the NVivo database, including the original data sources, categories or coding systems, results of queries, the relationships between ideas and the processes by which these outcomes were reached. In this project, once all data had been coded and queries conducted, it was easy to transfer all material coded under each heading into *Word* to facilitate reading and summarising of all relevant text.

**Enhancing rigour**

In addition to these many tools that aid efficiency, working in applications such as NVivo has other benefits. Among these is the enhancement of rigour, or at least of the researcher’s ability “to demonstrate that their conclusions are based on rigorous
analysis… adding to trust in findings” (Silverman, 2005, p. 201). For example, when conducting a query, NVivo includes every coded occurrence of a term or concept, thereby ensuring a more complete set of data for interpretation than might result when working manually.

In summary, NVivo facilitated the analysis of the interview data from managing the data, through the management of ideas and querying the data, to the point of reporting from the data. It is hoped that, through these processes, it has also enhanced the rigour of the analytical process.

Quality of the research process and findings

Like quantitative research, qualitative research asks “How are studies to be evaluated?” In quantitative research, findings are generally interrogated in terms of their validity, or truthfulness, and their reliability, or consistency. Validity can defined as the extent to which an account accurately represents the phenomena to which it refers. In other words, does a study measure what it says it is measuring? Reliability asks whether the same results would be obtained at different times, by different observers or in similar conditions? (Neuman, 2003).

While qualitative research seeks to be every bit as trustworthy as quantitative, notions of reliability and validity do not always have the same application in a small-scale qualitative study as they would do in large-scale quantitative research. In response, many qualitative researchers have sought more appropriate ways to construct and demonstrate the quality of their findings. One common approach is to replace these terms with the more qualitative-friendly criteria of credibility, dependability, confirmability and transferability (See, for example, Anfara, Brown & Mangione, 2002). As this study is small in scale and in-depth in nature, these constructs have been employed as they are believed to be more appropriate.

Building on these four criteria, Meyrick (2006) overlays two key common principles of good qualitative research, those of transparency and systematicity. If a researcher is both transparent and systematic, this serves to strengthen the
trustworthiness of the findings. Meyrick proposes a model built on these two core principles and suggests a number of techniques that can be applied to establish rigour. These include triangulation, grounding findings in the data and describing all stages of the research process, all of which have been applied in this study.

In this study, transparency is achieved by providing a clear and detailed description of all the processes undertaken, from sampling to data collection and analysis. Transparency is also aimed for in the reporting of findings in as much as all respondents are reported, including any negative cases which arose. Systematicity is achieved through a detailed, systematic approach to the analysis of all the available data collected, and the consistent demonstration of the findings as grounded in the data, as is described in the data analysis section. In this final section of this chapter I demonstrate how these criteria have been applied to ensure rigour in this study.

**Credibility**

Credibility in qualitative research can be likened to authenticity, or how trustworthy the conclusions are that are drawn from the data (Anfara, Brown & Mangione, 2002). To this end, all data were analysed and a clear and transparent account of the data collection and analysis processes is provided. In addition, data, in the form of verbatim quotes and/or statistics, is woven into coding and theorizing to illustrate the process and the conclusions drawn. This enables the reader to judge for her/himself whether the interpretation offered is adequately supported by the data (Mays & Pope, 2000).

**Triangulation**

Credibility is further enhanced by triangulation, which can be defined as the process of corroborating evidence from different individuals, different types of data, or methods of data collection (Anfara, Brown & Mangione, 2002). In small-scale studies, triangulation is commonly sought through multiple observations and multiple methods of investigation so that the different perspectives provide confirmation and thus strength to the findings (Keeves, 1997, p. 281). In this study, triangulation of methods is employed through dual procedures of interviews and surveys. Data from these sources is further triangulated through comparison against results from pre-existing studies. This
reduced the likelihood of misinterpretation and rendered a more holistic understanding of the phenomena. This triangulation of methods and data should therefore enhance the credibility of the results.

**Dependability**

Dependability refers to the extent to which the research represents the perspectives of participants’ as opposed to the bias of the researcher. First and foremost, dependability in this study was sought through the careful alignment of data collection with the research questions, which were in turn grounded in the literature. Dependability is also served here by triangulation of methods and by the detail and transparency in the reporting of the analytical process.

**Confirmability**

Confirmability can be viewed as the qualitative equivalent of objectivity. Recognizing that there is no such thing as pure objectivity, qualitative researchers seek instead to acknowledge the ways in which the researcher and the research process may have shaped the collected data (Mays & Pope, 2000, p. 51). This involves critical reflection on the factors which may influence the researcher’s construction of knowledge and how these influences are revealed in the conduct and writing up of the research.

**Researcher reflexivity**

Reflexivity is a process whereby researchers place themselves and their practices under scrutiny. A reflexive researcher is one who is aware of potential influences and is able to take a step back and take a critical look at his or her role in the research process. (Guillemin & Gillam, 2004, p. 275). This sensitivity is of particular importance when prior relationships already exist, (Etherington, 2007, p. 599), such as is the case in this research project.

As was state at the outset, the researcher had a role in running the ACULink project at the time of data collection and was known to school student participants as “the lady from the university”. However, at the time when most of the data analysis was being undertaken, responsibility for the project had been handed over to others. This
means I experienced little drive to focus only on positive data, or to interpret data in a positive light. While I began with a sense that the project was having a positive impact on participants, I did not feel that all strategies were equally helpful. Thus, I was driven by a desire to identify which elements of the project were most efficacious, in order to assist my colleagues and the university in directing energy and resources in the future.

In order to minimize researcher effect and to enhance the rigor of this study, the following steps were taken:

- My role as project officer in ACULink was reported at the outset of this report;
- My beliefs and biases were made plain and the potential for my position in the project to influence my interpretation has been canvassed;
- In the interviews, open-ended questions were employed to avoid leading participants in a pre-determined direction;
- The survey was administered by school staff, not the researcher;
- All data was analysed, and a substantial selection of all interview participants’ data is reported, including examples of negative cases or cases which did not necessarily support the thesis;
- I was aware of potential influences throughout the analytical process and endeavoured to remain as objective and open-minded as I could be; and
- Interview quotes are clearly referenced to the transcripts for transparency in the analytical process.

Countering the possibility of the Hawthorne effect

The Hawthorne effect is a term used to describe an effect whereby participants are believed to respond not so much to the treatment itself as to the attention they receive from the researchers, or from an awareness that they are being observed. (Neuman, 2003, p. 256). In this study it is important to consider whether such an effect may have occurred, particularly with the interview participants, such that the additional attention they received may have helped to convince them of the importance of a university education.

It is believed that any such effect is unlikely to have been strong in this study for the following reasons:
1. In the case of the Year 8 and 9 participants, whole cohorts were involved in strategies that emphasised the benefits of a university education. In the case of the Year 10 and Year 11 participants, those who participated in the intervention self-selected, largely on the basis that they were already considering going to university. The Year 12 participants were all currently undertaking the two university units as part of the SUIT program, thus had already developed a desire to go to university before the interviews took place, as is evidenced in their transcripts from the beginning of the first interviews. The university students had obviously already chosen the higher education pathway. Thus, any dispositions towards higher education are more likely to stem from pre-existing conditions, or from participation in the intervention itself, than from participation in the research.

2. In order to minimise researcher influence, the survey and the interviews were designed to ask questions around the range of post-secondary alternatives, with no emphasis on university. In the interviews, further questions around university were only asked after participants had expressed an interest in going there.

Transferability

Unlike quantitative research, which aims for a high degree of generalisability, or transferability of one set of results to another population or context, qualitative research is by its very nature context-specific. The great strength of much qualitative research is that of its ability to provide rich descriptions of particular settings. This very strength has, however, been a major source of criticism in that the inability for results of small-scale research cannot generally be interpreted as representative of larger populations. Some argue against the need for generalisability, on the grounds that there is no such thing as a single “correct” interpretation, as qualitative research is concerned with individuals and meaning in their lives (Janesick, 1998, p. 50).

As this study examines a relatively small sample, in a very specific context, it makes no claims to generalisability. Nonetheless, some degree of transferability is hoped for, so measures were put in place to maximize the potential for transfer of results to other contexts. First, purposive sampling was undertaken (as described earlier in this chapter). In surveying whole year cohorts, and interviewing a cross-section of the
given population, the sample aimed to be broadly representative of the young people from the schools in the study. Second, where possible the results were compared against results from similar studies. For example, the demographic data was compared to Australian Bureau of Statistics figures for similar populations. Similarly, some of the attitudinal responses to the survey were compared to published results from pre-existing surveys such as that conducted by James in 2002. This allows the reader to draw conclusions regarding the extent to which the findings may be read as transferable across a wider population of young people from low socio-economic backgrounds.

In summary, the methods of collecting, analysing and reporting on the data incorporate a number of procedures aimed at promoting the credibility, dependability, confirmability and transferability of the study’s findings. These include:

- Collecting data on a confidential basis;
- Reporting the researcher’s relationship to the participants;
- The use of open-ended questions to minimise researcher influence;
- Triangulation of method in collecting and analysing data from survey and in-depth interview sources;
- Application of a thorough and systematic approach to analysing all the data;
- Transparency in reporting how the themes were derived;
- Reference to the theoretical literature to support themes;
- Reference to pre-published studies for comparison of results; and
- Using data to support analytical claims.

**Ethical issues**

**Risk of harm to participants**

As the objects of inquiry in this study are humans, care must be taken to avoid causing any harm to them. Traditionally, ethical concerns have focused on issues of protection from harm, informed consent and privacy or confidentiality (Fontana & Frey, 2008). In this research, protection from harm did not present a significant concern. Participants were not exposed to any risk of physical harm and there was little likelihood of emotional distress, as questions around the formation of career and study
aspirations are not generally sensitive. I was, however, aware of some minor potential risk of causing distress in some participants. I therefore ensured beforehand that I was acquainted with the relevant Year / Pastoral Care Coordinators in the schools, and the Counsellor on the university campus, should a situation arise where I needed to refer a student. Happily there was no need to make any referrals.

**Potential power imbalance**

When working with young people, or any vulnerable groups, the issue of potential for exploitation also arises. Researchers need to be aware of the potential power imbalance between researcher and participants, especially where there is an existing relationship such as in this study (Etherington, 2007). In this study, the risk of exploitation was minimized by the voluntary nature of participation in the research. As researcher, I did not approach the school student participants directly. Rather, school teachers were asked to approach all students in the selected classes, and only students who were interested returned the parental consent forms. This minimized any pressure on school students to participate. In the case of the university students, care was taken to ensure that I had no responsibility for the assessment of the participants, in order to minimise pressure to participate and potential bias in the responses and the interpretation of data.

**Informed consent**

Nothing would be gained by deception in this study, so participants were made aware of the nature and purpose of the research and what was asked of them. (Refer to Appendix 3: Information letters and consent forms). At the commencement of each interview, and prior to completing the questionnaire, participants were informed that they were free to withdraw at any time, or to retain the audio recording, without any adverse consequences. Informed consent of the adult (university student) participants was obtained in the form of a signed written agreement. In the case of the school students, written consent was obtained from both the participant and their parents. While entire year cohorts completed the surveys, the only data that was tabulated and analysed was that from participants who had submitted consent forms signed by themselves and their parents.
Confidentiality

All data collected remains confidential and individuals remain anonymous. Names were recorded for the purpose of undertaking follow-up interviews and questionnaires, but were not published in any form. In this report, the names of all interview participants have been changed to avoid identification. Likewise, the names of the participating schools have been changed. Raw data will be retained in a locked filing cabinet in the researcher’s office for seven years. Aggregated data and analytical notes will be kept in digital form, password-protected, on the researcher’s office computer.

Limitations of the study

As with most qualitative research, this study is in-depth rather than large in scale. This must necessarily impact upon the transferability of the findings. As only twenty three students were interviewed, and the research was conducted in only one university and two school sites, the findings may not be automatically generalisable to wider populations, nor can they be viewed as necessarily representative of all low SES school students. Nonetheless, the findings do shed light on the accumulation of social and cultural capital and on the potential for intervention in these processes. Thus they can be utilised to inform the design of projects aimed at altering young people’s beliefs about higher education and thereby raising their expectations.

A second limitation of this study lies in the potential for bias in the sample, particularly the interview sample and most especially the Year 8 cohort. The researcher requested access to students who the teachers considered to be capable of gaining entry to university, regardless of their aspirations. In some cases, this led teachers to select students only from the upper academic classes, which may have resulted in a sample that was already predisposed to consider university. Further, in the interview sample females outnumbered males by a factor of three to one. This made it difficult to draw any strong conclusions regarding any potential gender differences. To mitigate any potential bias, the reader is made aware of instances when this may have had an impact, thereby maintaining transparency in the analytical process and the conclusions drawn.
Conclusion

In this chapter I have developed an argument to justify the methodological approach and the research methods employed in this study. The chapter has described the processes whereby data were collected and analysed in order to interrogate the two propositions that are central to this thesis: that is, what is the role of bonding social capital in the construction of young people’s embodied cultural capital with regard to higher education: and to what extent, and in what ways, did the intervention change participants’ knowledge of, beliefs about, and aspirations towards, a university education?

This chapter has described the steps taken in exploring the impact of an intervention on young people’s beliefs about higher education, from data collection through data analysis to the generation of theory, and has outlined the reasons for selecting these methods. In so doing, it first presented an argument for the application of a predominantly qualitative approach. Second, it demonstrated the advantages of a combination of in-depth interviews and surveys as a research method. Third, it detailed the process that was applied to the analysis of both the qualitative and the quantitative data. Finally, it addressed issues of quality in qualitative research and described the means employed to promote the credibility, dependability, confirmability and transferability of the findings in this study.

Researchers are constantly urged to select a methodology that will best address the research purpose and question (Bazeley, 2007, p. 2). Generally speaking, qualitative methods are chosen in situations where a detailed understanding of a process is sought. In this study, in-depth interviews were the main research method. They were employed to “illuminate the perceptions, beliefs and lived experiences” of the participants (Rasmussen, 2006, p. 19) as they constructed their career and study aspirations. The Strauss and Corbin approach was then applied to the analysis of qualitative data, to enable development of theory which is “grounded” in real situations, and consequently has direct practical applications. In addition to providing rigor and transparency, the application of this approach aided the unravelling and explaining of complex interactions in the data.
The following three chapters present the data that were gleaned from this study. Drawing heavily on interview data, chapters 5 and 6 illustrate the main influences at play as young people construct their knowledge of, beliefs about and aspirations for higher education. This is followed by an exploration of the ways in which the intervention impacted on this pre-existing knowledge and these pre-existing beliefs and aspirations. Following from these observations, Chapter 7 develops a theory of an intervention which can be effective in bringing about change to young people’s embodied cultural capital.
Chapter 5: Social capital

Introduction

This is the first of two chapters that identify people and conditions that were instrumental in shaping participants’ career and study plans. In this chapter I begin by exploring participants’ social capital and its impact on their knowledge, beliefs and post-secondary intentions. Chapter 6 then presents their cultural capital in terms of their knowledge of, beliefs about and aspirations for university. Finally, this cultural capital is explored pre- and post-intervention to identify the impact of the ACULink project.

Chapter 3 outlined a theoretical framework wherein a young person’s cultural capital – their knowledge of, beliefs about and aspirations for university – is largely shaped by their social capital. The proposition is that the educational experiences of family members and peers have a profound impact on the development of a young person’s knowledge, beliefs and aspirations. This study aims to ascertain the impact of the ACULink program on participants’ cultural capital. In order to establish any impact, however, it is first necessary to establish participants’ pre-existing social and cultural capital. To this end, this chapter presents the data which illustrate the educational experiences of key role models in the participants’ lives, and the extent to which this influenced participants’ knowledge, beliefs and aspirations.

This chapter is organized in two main sections derived from the theoretical framework of bonding and bridging social capital. Data from both the interviews and the questionnaire are presented under further thematic constructs which emerged from the data. These constructs are:

- Bonding social capital:
  - Helpful people
  - Parental occupation and education
  - Peers’ aspirations and destinations

- Bridging social capital:
  - The influence of teachers
  - The influence of other role models
Other sources of information.

The means by which this social capital impacts upon participants’ cultural capital is then explored, through describing each social group as a source of:

- role models who went to university;
- personal encouragement;
- information about university entry, course options and the experience of university;
- financial support;
- practical assistance; and
- pressure.

Throughout, each group is examined for its influence on the young people’s knowledge and beliefs about, and aspirations for, university.

Silences in the data

In qualitative analysis, sometimes the silences, the unspoken thoughts or influences, can be as imbued with meaning as the spoken words. (Mazzei, 2004). When exploring the data, it is therefore important to analyse not just what is said, but what is not said. In this study, often it was not the presence of a negative influence in a young person’s life, so much as the absence of positive influences, which was significant. For example, several participants had no-one in their immediate social world who acted as a positive role model of someone who had gone on to university ahead of them. However, participants did not always recognise this absence as an influence and therefore did not explicitly mention it in interviews, perhaps having “no history or context with which to give [it] voice” (Mazzei, 2004, p. 27). Later analysis, however, often revealed that this absence was in fact a significant influence on the shaping of the young person’s knowledge and beliefs. Thus, throughout the presentation of data, I endeavoured to make explicit any silences and to explore their significance.

Bonding social capital: Helpful people

The first step in the analytical process was to identify the people or groups who participants perceived to be helpful as they made their career and study plans. In both
questionnaires and interviews parents were almost universally rated as the most important source of support, followed by someone working in the career they wish to pursue, then teachers, friends and siblings. This section presents an overview of the perceived helpfulness of each group, before discussing the role of each group in depth.

Question 10 in the questionnaire asked participants to rate different groups in participants’ social spheres, according to their perceived helpfulness. Responses were ranked on a 3-point scale where 3 equals very helpful, 2 equals somewhat helpful and 1 equals not at all helpful or not applicable. Pre- and post-intervention responses were then compared, and a paired t-test was conducted, to evaluate impact of the intervention on participants’ social capital. (Appendix 10 (b) provides an full report of responses, the difference in the mean from pre- to post-intervention, and the resulting two-tailed P value).

Prior to the intervention

As expected, parents rated as by far the most important group of people in helping the participants to make their decisions, with around 94.7% of Year 8, 9 and 10 students rating their parents as very helpful or somewhat helpful. These figures were all supported by the interview data, where parents came out strongly as the most important source of support. Figure 5.1 provides an overview of the relative importance of the different social groups. (Refer to Appendix 10.2 for a more detailed breakdown).

The next most important group was Teachers who also rated as moderately helpful, with 73.3% of Years 8, 9 and 10 students (mean of 2.63) rating them as very helpful or somewhat helpful. Teachers were followed by someone working in the career I would like to pursue with 70.2% of students (mean of 2.21) rating them as very or somewhat helpful. Here, the young people showed some awareness of the usefulness of having a positive role model to turn to. This was followed by friends at school, with 74.4% of Years 8-10 (mean of 2.0) students rating them as very or somewhat helpful.
Prior to the intervention, university students from ACU and Students from other universities did not rate highly, with only around 1 in 4 Year 8 and 1 in 5 Year 9 students rating each group as helpful. This indicates that the majority of participants did not generally have access to university students outside their families. Counsellors rated least helpful of all groups, with only 12% of Year 8 and Year 9 students rating them as very or somewhat helpful. This is probably an indication that students at this participating school did not have access to Careers counselling in any structured way at the time this research took place.

After the intervention

An interesting difference between pre- and post- intervention responses was an apparent negative impact on the perceived helpfulness of parents (see Fig. 5.2). There was a statistically significant difference in the mean of 0.12 and a 2-tailed P value of -0.0022, which is considered to be important. (Refer to Appendix 10.2: Helpful people, pre- and post- intervention). This change does not necessarily imply that the intervention renders parents less helpful. It is more likely that, as the intervention provided alternative sources of support and information, the importance of parents as sole source might have subsided as other sources become more important.
In contrast, Question 10, which asked participants to rate the helpfulness of groups in their social world, shows a significant positive impact on how participants perceive the helpfulness of their school teachers. Following the intervention, teachers were viewed as a more useful source of support than prior to the intervention (see Fig. 5.2). With an increase in the mean of 0.38 from pre- to post- intervention and a P value of $< 0.0001$ (refer to Appendix 10.2), this is considered both statistically significant and important. It indicates that the intervention may have been the impetus for students to utilise this resource. Alternatively, it could indicate that the intervention itself provided an opportunity for students to talk to their teachers about their plans – an opportunity most participants did not have outside the intervention.

A similar impact is observed for both counsellors and someone working in the career I want to pursue (see Fig. 5.2). With a statistically significant increase of 0.32 in the pre- and post-means and a 2-tailed P value of $< 0.0001$ (see Appendix 10.2), this is considered important. Once again, the intervention may have prompted some students to find other people to talk to, to find out what they needed to know. Thus, the intervention could be said to be encouraging students to expand their own social capital and ultimately their access to the necessary cultural capital.
There was no significant difference pre- and post-intervention in participants’ perceptions of the helpfulness of their school friends and their siblings (see Fig. 5.2). There was, however, a significant increase in the perceived helpfulness of friends outside school. With a statistically significant increase in the mean of 0.15 and a 2-tailed P value of 0.0004 (refer to Appendix 10.2), this difference is considered to be of only moderate importance. Perhaps, as with the counsellors and teachers, the intervention has encouraged some participants to seek guidance from other friends and further exploit their existing social capital.

One of the ways in which ACULink works to alter young people’s beliefs about university is by introducing them to university students from similar backgrounds to themselves, who act as social capital, building a bridge from their familiar social world to the often unknown world of university. Among Year 9 students the opportunity to talk to a student from ACU was rated much more highly after the intervention12 – a statistically significant increase of 0.5 in the mean and a 2-tailed P value of < 0.0001 (refer to Appendix 10.2). Given that the interaction with university students occurred only briefly in the Year 9 strategy, this represents powerful effect in a short time. The high rate of not applicable responses in the pre-survey (69% of Year 9 students) indicates that the intervention was the first time the majority of participants had met a student from ACU. Results were similar for students from other universities, with 68% of Year 8 and 9 students reporting that they had not spoken to a university student about their plans prior to the intervention. The vast majority are apparently lacking in positive role models to encourage them to go to university. This demonstrates the importance of school students having access to role models and suggests that an intervention might need to provide this access where none is available in the students’ existing social worlds. The following section now examines in depth the role of each helpful group.

**Bonding social capital: The role of parents**

From a theoretical perspective, dispositions towards learning first become established within the family. Throughout recent research, parental occupation and

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12 Note that the Year 8 strategy does not involve any university students so the question does not apply.
levels of education have been established as the best predictors of a young person’s post-secondary destinations. Thus it is to the participants’ families I first look in order to uncover the likely influences upon the beliefs of the young people in this study. This section begins by describing the occupational and educational experiences of the people in the participants’ immediate social worlds. The key question is: what access do the young people in this study have to role models, people like themselves, who have successfully gone to university ahead of them?

Questions 1 to 4 of the questionnaire asked participants to report on their parents’ occupations and on the levels of education attained by both parents and older siblings. Similar questions were posed to interview participants, who generally answered in greater depth. Together, these data clearly establish the proportion of participants who had a positive role model in their immediate family who had gone to university.

**Parental occupation**

Chapter 1 established that the young people in the survey sample were largely from low socio-economic backgrounds as measured by parental occupation. (Refer to Table 1.2, Chapter 1). Around 18% of parents were reported to be employed in professional or managerial occupations. Results were similar among the young people in the interview sample, where only six parents (13%) were currently employed in a professional or managerial occupation. This compares to 33% of the Australian population (ABS, 2006). Tables 5.1 and 5.2 (below) summarise survey and interview participants’ parental occupations.

From 23 interview participants, 46 parents are reported upon here.\(^\text{13}\) Of the 46 parents, four mothers and two fathers were working in professional or managerial fields. Interestingly, none had both parents working in a professional occupation. Therefore, six of the twenty three young people – around 26% – had one parent who was employed in a professional or managerial occupation. Of the rest, approximately half were

\(^{13}\) One father is deceased but both he and the current step-father are included. The whereabouts and history of one birth-father was unknown to the participant.
employed in skilled and/or clerical occupations, and the remainder were bus drivers, warehouse packers, cleaners, retail assistants and homemakers. Interestingly, no parent was reported as being unemployed and only six of the mothers (about one quarter) were predominantly homemakers. Table 5.2 presents a summary of the number of interview participants who had one or more parents working in a professional occupation. (A more detailed description of interview participants’ parents’ occupations is provided in Appendix 14). These data demonstrate the limited extent to which parents were able to act as role models or to provide accurate information. They are also important when later compared to participants’ knowledge and beliefs.

Table 5.1

*Parental occupation: Survey participants (N = 188 parents)*

<table>
<thead>
<tr>
<th>Professional / managerial</th>
<th>Clerical / skilled</th>
<th>Semi-skilled / unskilled</th>
<th>Unemployed / don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of parents</td>
<td>34</td>
<td>37</td>
<td>79</td>
</tr>
<tr>
<td>Percentage of parents</td>
<td>18%</td>
<td>20%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Table 5.2

*Parental occupation: Interview participants (N = 23 students)*

<table>
<thead>
<tr>
<th>One or both parents professional / managerial</th>
<th>One or both parents clerical / skilled</th>
<th>One or both parents skilled</th>
<th>One or both parents semi-skilled</th>
<th>Both parents unskilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Percentage of participants</td>
<td>26%</td>
<td>26%</td>
<td>30%</td>
<td>4%</td>
</tr>
</tbody>
</table>

As parental occupation represents one of the prime indicators of a young person’s post-secondary destinations, we would expect to see the young people’s aspirations broadly mirroring the career choices of their parents. However, this is clearly not the case for the young people in this study. Parental occupation limited neither the aspirations of parents for their children, nor the career aspirations of the young people themselves. 64% of survey participants and all but one of the interview participants were aiming for a professional career. (The impact of bonding social capital
upon aspirations is explored further in Chapter 6). The young people appear to be able to look beyond their parents as role models for their choice of occupation.

**Parental education levels**

Even more than parental occupation, parental levels of education are increasingly recognised as the best predictor of a young person’s post-secondary destination. This section therefore sets out the levels of education of the parents of the participants in this study.

<table>
<thead>
<tr>
<th>Table 5.3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary of parents’ highest levels of education: Survey participants</strong></td>
</tr>
<tr>
<td><em>(N = 188 parents)</em></td>
</tr>
<tr>
<td><strong>University degree or higher</strong></td>
</tr>
<tr>
<td><strong>TAFE qualification or equivalent</strong></td>
</tr>
<tr>
<td><strong>School only</strong></td>
</tr>
<tr>
<td><strong>No formal qualification</strong></td>
</tr>
<tr>
<td><strong>Don’t know</strong></td>
</tr>
<tr>
<td>Number of parents</td>
</tr>
<tr>
<td>Percentage of parents</td>
</tr>
</tbody>
</table>

Questionnaire respondents reported that 19.7% of their parents had a bachelor degree or higher, which is very close to the levels for the Australian population as a whole (19%, ABS, 2006). By these figures, parental levels of education among the questionnaire sample place them in middle rather than in low socio-economic status. The figures are well above those for the population within the Mountain View and Valley View geographical areas (11.5% and 13% respectively, ABS, 2006). (Refer to Table 1.2, Chapter 1). As discussed in Chapter 1, there are several possible reasons for this difference, including the fact that many of the parents’ degrees were obtained in countries whose degree qualifications are not recognized as the equivalent of a degree from an Australian university. Table 5.3 presents a summary of survey participants’ parents’ levels of education.

Of the parents in the interview sample, only four (17%) were reported as having attained a university degree in Australia, and one was currently enrolled in her first undergraduate degree. Of these, only one was reported as having gone to university immediately after completing high school. The other three had completed a degree as
mature-age students. Two had also completed a post-graduate qualification. Another was reported to have commenced but not completed university studies in Australia. (Refer to Appendix 14 for a more detailed description of parents’ levels of education). These represent relatively low levels of parental education.

The figures look quite different, however, when overseas qualifications are included. Participants report a total of 12 having attained a university qualification overseas. (This figure is approximate as several participants were vague on the subject of their parents’ levels of education). Six of these were from the Philippines, two from each of India and Lebanon, and one each from Vietnam and Hungary. Two further were reported as having commenced but not completed a university degree – one in Taiwan and one in the Philippines.

Table 5.4

<table>
<thead>
<tr>
<th>Summary of parents’ highest levels of education: Interview participants (N = 23 students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>1 or 2 parents have an Australian university degree</td>
</tr>
<tr>
<td>Number of participants</td>
</tr>
<tr>
<td>Percentage of participants</td>
</tr>
</tbody>
</table>

In total, of the 23 interview participants, 12 reported either or both parents having a university qualification: 4 from Australia and 12 from overseas. 10 participants had one or two parents who had studied at TAFE (14 parents). For six of these, a TAFE qualification was the highest level of education in their family. 16 parents had undertaken no further education beyond secondary school. Of these, nine had not completed Year 12. Six of the participants had both parents who had completed no further education. (Refer to Appendix 14: Parental occupation and education histories: Interview participants). Table 5.4 summarises these results in terms of the number of participants who have one or more parents with a degree level qualification.
Parents as role models

One of the most obvious ways in which parents can act as role models is through their ability to provide their children with opportunities to observe them in their professional capacities. We would expect that having someone close to themselves who can act as a role model – of someone who has successfully completed a university education – might provide a powerful example of what is possible for the young person. This section presents the interview data as it relates to this phenomenon.

Only a few interview participants talked about going to a parent’s place of work. This experience seems to have given these young people an insight into the world of work, and in some cases provided motivation. For example, Catherine (Year 11), whose mother was secretary to a company manager, “went to her office there and I used to help her out”. She reported that she had “enjoyed” the experience (Catherine, Experience of Work, ref. 1). Lisa (Year 8) also described going to work with her father, a company CEO, and feeling comfortable at his place of work:

Jo:
You say that your father’s working in finance and law? (Yeah). Have you ever been to his place of work?

Lisa:
Yes, it’s a massive building. They have a cool lunch room. (I bet). It’s got one of those massive wide-screen TVs so when Dad comes in, you know, like, he has to pick up some paperwork or whatever, we just sit in the lunchroom and then he’d be like “OK Lisa we’re ready to go” and I’d go “No. I’m watching TV, come back later.” (Laughs). (Lisa, Parents as Role Models, ref. 3).

Having a positive role model in the immediate family appears to have helped these young people to feel at home in the professional world.

The majority of participants did not have a parent in a position to act as a role model of a professional. This absence did not come through explicitly in the data as something the young people were conscious of. Rather, it is an example of a silence in the data. That is, of the young people whose parents were not in a professional occupation, none talked about going to their parent’s place of work or observing them at work. In the absence of another person acting as a role model, this may have an
impacted on the young people’s ability to envisage themselves in a professional occupation. These effects are explored later in this chapter.

Parents as “Don’t do what I did” role models

While to some participants a parent acted as a positive role model of what can be achieved, for some the opposite was the case. Three of the participants reported that their parents explicitly encouraged them not to “end up like them”. Elijah (Year 11), reported his parents having “dropped out” of school in Years 8 and 9. He told how his parents spoke of their working lives in terms of “hard labour working” and said that they “didn’t want me to end up like them” but encouraged him to do “something easier to do and something that I want. Not something that I’m having to do ’cause I’m dropping out” (Elijah, Don’t Do What I Did, ref. 1). Similarly Michael, also in Year 11, reported that his parents had said “if they had their time again they would go on and give themselves better options. And that’s what they want for me” (Michael, Don’t Do What I Did, ref. 1). None of Michael’s or Elijah’s parents had completed their secondary schooling and were now employed as carpenters, in retail and in a warehouse. Sean, another Year 11 student, said his parents’ advice was “Don’t end up doing things where you are just like a pawn… have a career, not a job” (Sean, Don’t Do What I Did, ref. 1). Both of Sean’s parents had gone to university in the Philippines but were now working in office administration and as a machine operator in a factory. In all of these cases, the message from parents appears to be to not make the same mistakes as themselves.

In this message, a sense of parents communicating high aspirations for their children emerges strongly. Among these parents, who had some of the lowest educational outcomes themselves, a more satisfying career for their children was highly valued. While they were not explicitly pushing a higher education, it was implied by their career aspirations for their children. It appears that, even when parents have little direct experience with higher education, they can still have a keen appreciation of its potential to alter the direction of their sons’ or daughters’ lives.

A less explicit, but nonetheless powerful, message came from the three parents who went to university as mature-age students. In these cases, the young people had
witnessed their parents studying, doing assignments, and struggling to balance study commitments with family and work. Lucy (Year 11) described her mother’s experience of university as “very stressful, especially because … me and my sisters were young at the time. And she spent a lot of time up at night doing assignments” (Lucy, Don’t Do What I Did, ref. 2). Lucy believed her mother had not fully enjoyed the university experience “because she was a mature age student she didn’t feel like she fit in as well, especially being married with kids sort of thing… she didn’t get as involved in the social life part of it” (Lucy, Parents Went to University, ref. 2). Year 8 student Lisa’s father had gone “to TAFE for like five years” and later “studied law for like seven years”. He told her that “it’s not easy and it takes a lot of effort and time… but it’s all worth it in the end” (Lisa, Conversations, ref. 1). Similarly, university student Tracey’s father didn’t even do his HSC he just picked accounting when he went into TAFE and he just kept going and going, then eventually… He’s just done I don’t know how many years of uni. He went to university and he’s done his Masters and CPA and that sort of stuff. (Tracey, Parents Went to University, refs. 1, 2).

To Lucy, Lisa and Tracey, avoiding their parents’ fate of having to work so hard for so long, and having to balance study with family and career, appears to have been an important motivator to work hard in order to enter university straight from school.

**Parental Support**

Parental support came through explicitly and consistently as a critical factor in shaping young people’s aspirations. Regardless of parents’ occupation or educational experiences, the majority of participants rated their parents as the most important support. In the few instances where parents did not rate number one, they were rated second behind the young people’s personal characteristics.

This support took many forms, including emotional support and the provision of information, practical assistance and financial support. The type of support offered by parents seems to reflect the parents’ own experiences of education and these variations appear to be behind some of the differences in the young people’s beliefs. This section now explores the various manifestations of parental support, then examines the impact of this support upon participants’ beliefs.
**Personal encouragement**

The predominant form of parental support was that of personal encouragement of participants’ aspirations, which included offering words of personal support, and exhorting their children to aim high and to work hard. This encouragement most commonly took the form of comments such as those of Year 9 student Amanda’s mother, who said she’ll “support me in whatever I choose to do” and later “she says yeah, I can do that, as long as I’m happy with it” (Amanda, Encouragement, refs. 2, 3). Similarly Sean (Year 11) reported that his parents have dreams for me, like I’ll become a doctor or a dentist or an orthodontist. But they say whatever we decide to do with our lives they’re happy to support us. And they’re proud of whatever we choose to do. (Sean, Encouragement, ref. 1). All participants reported that their parents were supportive of their aspirations, and this support did not vary according to the parents’ educational histories.

Parents were an important source of motivation for most participants. For Jennifer, (Year 9), they were someone to “push me to stay on and keep going” and to “keep me to my studies, to not give up on it” (Jennifer, Encouragement, refs. 1, 2). Carly, an Education student at university, said her father was particularly important as he watched me as well, you know, with my brothers, he watched. I can interact really well with younger children. I’ve got a lot of younger cousins, being the oldest as well. My Dad and my family really influenced me there, to go for this goal. (Carly, Encouragement, ref. 3).

Another university student, Maria, said her parents were “number one. They actually encouraged me to get a job. Like they believed in me – they trusted me to still do my study”. For Maria, “having parents believe in you is really important” (Maria, Encouragement, ref. 2). Nancy, a Year 12 student who was participating in the Step-Up program, also felt that to have family back you up – that is the most important thing in my aspect. Without family, I have no idea where I would be right now… I would have come to Year 11 and 12 but I wouldn’t have went [sic] to university and done the subjects that I have done… They’ve always just been there for me in tough times and bad (Nancy, Encouragement, ref. 3).
In some cases parents boosted the young person’s confidence in their abilities, and helped them to decide if their chosen career was a good choice for them. Lucy (Year 12), who wanted to go into teaching, said her parents “think teaching is a good choice for me because they know that I enjoy school as well and that I enjoy working with kids and stuff. And they think that I have the potential” (Lucy, Encouragement, ref. 1). Katie, a Year 8 student, wanted to become a PE teacher but was concerned she may not be able to do it due to injuries she sustained in a car accident. Her mother, however, reassured her, saying “you can do it” and that “she thinks I’d be good at it” (Katie, Encouragement, ref. 1). Anna (Year 9) also looked to her parents for reassurance that she is making good decisions: “whatever I want to choose for a career, I discuss it with them first. And they tell me whether I am good at it” (Anna, Encouragement, ref. 3). None of the parents were reported as discouraging the young people, or even so much as suggesting that s/he set their sights lower.

Parents as a source of information

While parental occupation and education had little or no impact upon the aspirations of the young people in the interview sample, they did appear to affect their knowledge of their post-secondary options and of what is required to gain entry into university. The young people generally sought two types of information. First, they wanted to know what their alternatives were, and what was necessary to gain entry. Second, they were interested in developing an understanding of what going to university is like. Not surprisingly, the parents’ ability to provide accurate information directly reflected their own experience of education.

Parents were often the first port of call when students were seeking information about career and study options. Tina, a Year 8 student, said “if I’m not too sure of something I’ll ask my Mum and she will help me find out about it. She’ll ask someone and that’s basically how I find out my information” (Tina, Parents as Source of Information, ref. 5). Martha (also in Year 8), whose mother had had three attempts to do a teaching degree but didn’t complete due to having children, said

when I told my Mum that I was going to be a teacher, she asked me “do you know that you have to go to university for four years, and if you get a degree
you can go to other countries and teach?” She was kind of preparing me.
(Martha, Parents as Source of Information, ref. 1).

Nancy, a Year 12 student, said her mother was particularly helpful “because she goes
on-line and looks up the information which I need to know for university, and the pre-
requisites and the band and the UAI that I need” (Nancy, Parents as Source of
Information, ref. 1).

In a few cases, one parent was employed in a field which gave them access to
some specific information. For example, due to his work in a Catholic Education Office,
Carly’s father was able to inform her that “if I want to teach at a Catholic school,
ACU’s right at the top of the list” (Carly, Parents as Source of Information, ref. 1).
However, he could not provide any advice about entry requirements or UAI cut-offs.
Similarly Anna (Year 9), whose mother went to university in Vietnam and was a
university librarian, said her mother could “talk to me about whether a job suits me and
whether I’d be good at it” (Anna, Parents as Source of Information, ref. 4), but she
could not provide any specific study information.

Notwithstanding their obvious desire to support their children’s aspirations,
parents who did not have a university education (ie, the majority of parents in the
interview sample) were generally not a useful source of information regarding entry to
university. For example Albert, a Year 10 student, said that “they don’t really know
much about policing, so there’s nothing they can do to help. Just encourage me I guess”
(Albert, Encouragement, ref. 5). A Year 12 student, Sarah, said that her parents were
“not as much [helpful] as teachers which tell me… that, in the future, is that going to be
right for me? … with any decision I make they just tell me to go for it” (Sarah,
Encouragement, ref. 3).

In several cases the parents’ inability to provide specific advice was because
their own educational experience was not relevant to the Australian context. In these
cases, the young people often expressed awareness of this lack. One Year 11 student,
Michael, whose parents “dropped out” after Year 10, said his parents were “not really
up to date with all the university stuff” (Michael, Parents as Source of Information,
ref.1). Amanda (Year 9), whose mother studied in the Philippines, said “sometimes my
Mom asks what I want to be. But yeah, that’s pretty much it”. When asked if her mother was able to give any further information, she replied “No” (Amanda, Parents as Source of Information, ref.1). Catherine, a Year 11 student whose parents were educated at universities in India, reported that they were “not at all” able to give her the information she needed, as “they don’t know the syllabus and structure of universities in Australia” (Catherine, Parents as Source of Information, ref. 3). Catherine said that when she asked her parents for advice they
tell me what might help me. But they’re not sure if it will help me ’cause they are not used to the system. They ask me to go and ask my teachers and be more questioning… Cause I’m not sure, and if I go ask them I’ll be even more in doubt because they don’t know anything either. So I go up to school and ask my teachers – that’s what they say to do. (Catherine, Parents as Source of Information, ref. 4).

Not surprisingly, parents with an Australian degree were much better placed to help their sons and daughters develop an understanding of how to gain entry into university. A few participants related conversations between themselves and their parents in which they talked about entry requirements. Jennifer, also in Year 9, whose mother was currently studying Counselling at university, knew that she needed to get a high mark to get into Law because “my Mum told me” (Jennifer, Parents as Source of Information, ref. 1). Anna (Year 9), whose mother was a university librarian, said that her parents were useful for “telling you where you can go and how to get to uni” (Anna, Information Sources, ref. 23). She knew that “Macquarie University has got Forensic Science. And Sydney Uni” because she heard from “my Mum” (Anna, Parents as Source of Information, ref. 2).

One Year 8 student, Lisa, hoped to become a lawyer. Her father was a company CEO and had a Law degree and Masters in Finance. Lisa’s father appears to have been particularly specific in his information and advice, having “told me all about it and given me pros and cons of it” (Lisa, Parents as Source of Information, ref. 3). He has also told her that

instead of just going to uni and then just waiting to find a job from there, I could start at a law firm, like while I was at uni, just a part-time job like a secretary or
something like that. Just so that I’m in the firm and then once I’ve finished my degree I could be promoted and I won’t have to look for a law firm. (Lisa, Parents as Source of Information, ref. 5).

His experience of working while studying had given Lisa’s father access to relevant information which in turn provided Lisa with an accurate picture of how entry into her chosen field can operate.

**Financial support**

Results thus far indicate that parents’ experience of education directly impacted upon the accuracy and specificity of information they were able to provide. This effect was particularly strong when it came to the issue of the costs involved in going to university. In many cases, the young people were ignorant of the payment arrangements in Australia, or held misconceptions regarding the costs. Of the interview participants whose parents were not educated in an Australian university, none showed any knowledge of the HECS system before participating in the intervention. There was little clarity among these participants about how much university might cost or what these costs might involve, with most expressing a vague notion that it would be expensive. In most cases the young people and their parents believed they would need to pay tuition fees. This belief was still present in students from in the senior years, with no evidence of students gaining greater understanding of the HECS as they progressed through their schooling (excepting the impact of the intervention). Nonetheless, most parents demonstrated their support by offering to pay. Given the straitened financial circumstances articulated by some of the participants, this is further evidence of the high value the parents placed on a university education for their children.

For several students, financial constraints and misconceptions about the costs of going to university were a concern and in some cases presented a potential barrier to transition. For example Margaret, a Year 10 student whose parents were both educated at TAFE, initially said that the cost of university was “a problem” and that her mother had said “Well, you know, we can’t afford it”. Consequently, she felt that “I can’t go for it because, I can’t study for free!” (Margaret, Financial Support, ref. 2). Carly, a university student, also explained the concerns she initially held about the costs of going to university:
Carly:
Probably financially, um, that would have been, that was probably quite hard for me but, when I found out about HECS and other ways that I could go to university that was better, yeah.

Jo:
So before you found out about HECS, you had some concerns about finance?

Carly:
I did, yeah. I didn’t know about it. No, I - from what I’d heard I didn’t think I would be able to afford university at all.

Jo:
So why did you think you wouldn’t be able to afford university?

Carly:
Um, I just thought the books, the fees are very high, um, I had this big image in my mind…

Jo:
You thought you’d have to pay fees?

Carly:
I thought I’d have to pay fees, thought I’d have to pay for the books, for the travelling as well, cause I don’t drive at all, public transport, um, even just like basic resources that I’d have to buy. (Carly, Beliefs about University, ref. 6)

Another common theme when discussing the financial implications of going to university was parents’ willingness to pay for it. There was often little clarification of what “it” might involve, particularly when neither parent had attended university in Australia. For example, neither of Elijah’s or Michael’s (both Year 11) parents had completed secondary schooling. Elijah’s parents had said “they will pay for everything if I do get there” (Elijah, Financial Support, ref. 2) and Michael was working hard “to earn that money” (Michael, Financial Support, ref. 1). Similarly, Year 10 student Deborah’s parents had said “doesn’t matter how much it costs, you’re gonna go” and “I don’t have to worry about it, it’s all covered” (Deborah, Financial Support, refs. 1, 4). Once again, these parents demonstrated a strong commitment to their children’s
education, but incomplete or inaccurate knowledge about the costs of going to university and the HECS payment system in Australia.

In contrast, those students whose parents went to university in Australia tended to have at least a general idea of how the HECS system operates. Lucy (Year 11), whose mother studied nursing as a mature-age student, knew that “you get time after you finish the course to pay it off as well” (Lucy, Financial Support, ref. 3). She also related that her parents would help with the costs, but rather than simply saying they will “pay for everything” Lucy knew, from her parents, that this would involve “trying to pay it off… the HECS and stuff” (Lucy, Financial Support, ref. 1). Jennifer (Year 9), whose mother was currently studying at university, knew university costs “a lot” because “I saw one of my Mum’s bills” (Jennifer, Financial Beliefs, ref. 2). Lisa was also aware that “there’s things which are… what do you call it… HECS I think it’s called, you know, where you pay it off later” (Lisa, Financial beliefs, ref. 1). Tina (Year 8) believed that her parents were not concerned about the costs as, even though it costs “a lot – a very large amount of money” she knew about HECS and that “You pay it off later” (Tina, Financial Beliefs, ref. 1). Similarly Tracey, a university student whose father went to university in Australia, said that money was not an issue in her home but she had always known that “if it was I could always do the HECS” (Tracey, Financial Beliefs, ref. 1). It would appear that, notwithstanding the information that may be available to these students through their schools, having a parent who has had direct experience of university was critical in shaping their understandings regarding the costs of going to university.

**Practical intervention**

While personal encouragement did not show any effects from parental education, there was a good deal of variation in the extent to which parents were able to provide other forms of assistance. Among parents with a higher education, encouragement often took a practical form. Many students reported that their parents kept them on track with homework and assignments, and sometimes helped with homework as well. Here, there appears to be a direct link between parental education and the amount and type of help students received with homework. Those who had a parent with a university education reported that Mum or Dad would sometimes proof-
read an assignment, or that they were good at English or good with the computer. Two students said that their parents also arranged tutoring to help improve their grades. Maria, a university student whose parents had a university education, felt this showed “how persistent they were for me to get into uni” (Maria, Tutor, ref. 1).

Among those whose parents did not have a university education, instances of help with homework and school work were rare, with some students saying that they did not receive much help, in one case because their parents “are a little bit tired” after work (Sean, School Work and Homework, ref. 1). However, some reported that their parents “ask if I have assignments due, make sure I’m doing it, homework done and stuff” (Michael, School Work and Homework, ref. 1). These parents were keen for their children to do well at school and spent time monitoring homework and assignments. However, they lacked the time, skills and/or confidence to translate this support into practical assistance. While all parents were supportive of their children’s educations, those with a higher education were more likely to possess the wherewithal to assist as well as monitor and encourage them.

In a few cases, a parent’s practical intervention went as far as taking their son or daughter to visit university’s open days. Again, these experiences appear to be closely related to parents’ educational histories. Only one parent who had not been to university himself had taken this step, and this was due to another connection with the particular university campus. Katie (Year 8) had been to a university open day with her stepfather: “because his partner works there in a café. They had a big open day so we went there and had a look” (Katie, Experience of University, ref. 3). Here she was able to obtain the information that her parents had not been able to provide, as “We looked at all the different, like all the jobs available, like on bits of paper. And I got some information on PE teacher” (Katie, Experience of University, ref. 2). Katie also found the experience enlightening on what universities are like, finding it Big, it’s very big. But I suppose it’s just… I suppose I think you have a lot more freedom than what I expected, cause you have, yeah you have more freedom. That’s about it. Everything else was kind of how I expected it. (Katie, Experience of University, ref. 4).
While still in Year 9, Anna had been to the university library for her mother’s work and had “wandered down the aisles. And it has like 6, 10 floors and it’s in two bits and I got lost!” She had taken the opportunity to explore the rest of the campus, describing it as “this big church-ish thing… and there’s this giant big lawn with corridors” (Anna, Experience of University, ref. 4). Jennifer (Year 9), who had also accompanied her mother to university a couple of times, said “I went to Bankstown with my Mum… it was big and there was like a lot of people there” (Jennifer, Experience of University, ref. 1). Year 8 student Lisa’s father, the lawyer and company CEO, had twice taken her to a university open day and they had even sat in on the Moot Court. She related the experience:

I practically know my way around the campus. And um, I went into the book store. I started having a look at all the law textbooks and stuff. And my Dad has a lot of law textbooks and stuff like that ‘cause he studied Law when he went to university. So, yeah I’ve been to open days and chosen electives… (Lisa, Experience of University, ref. 1).

These experiences appear to have played an important role in shaping the young people’s perceptions of university, and in demystifying the notion of university. Once again, parental education was closely linked to the occurrence of such opportunities.

**Pressure**

Despite the high value which most of the parents attributed to a higher education, few of the participants reported experiencing any pressure from their parents to go to university. Beyond an understanding that their parents want them to do their best and to follow the path that will be best for them, only two students felt that going to university was an expectation. Tracey, a university student, reported that she had been aware that her parents wanted her to go to university since

Probably at the end of Year 6, the beginning of Year 7 I guess. I think it was my parents, sort of thing where “You’ve got to do well so you can get to university and be a teacher,” blah, blah, blah. I think it was always instilled in my head like that’s the direction I was going in, my parents saying, “You’ve got to go to university! (Tracey, Pressure, ref. 1).
Throughout her schooling, Tracey continued to feel her parents “kept pushing us to do well at school so that we could go to university later” (Tracey, Pressure, ref. 5).

Tracey continued to feel her parents’ pressure at university, in no small part because they were paying her fees. She said:

I can understand why the pressure’s there, because they do want results if they’re paying for it… They’re not that harsh, but they know I can achieve so I can understand why the pressure is there… I tried to hide my last results from my Dad for quite a while because he goes, “How’d you go?” and I usually have to tell him. Yeah, it was my 21st so I didn’t bring it up for a while, cause I was like “I’ll wait till after then” and then he forgot. But then he remembered the other week and the pressure was back on! “Where are they? Where are they?” I think because they pay for everything, so I can understand that. (Tracey, Pressure, ref. 2).

Maria also felt strongly that her parents wanted her to go to university, and they would say “You have to go to uni”. For Maria, a large part of her motivation to make it to university was that “I didn’t want to disappoint them” (Maria, Pressure, ref. 2). She said that:

… it’s always been part of my culture as a Filipino, like, to finish education means you have to be at uni to finish it… The standard of education with my family is uni and you know you’ve made everyone happy, so my whole family has been to uni, my older brother… (Maria, Pressure, ref. 1).

Consequently, Maria said that she had “always had it in my head that I have to be at uni at some point so you know, I have to study hard” (Maria, Goal-Oriented, ref. 1).

Maria spoke at length about this culture of high expectations, recalling family gatherings where parents discussed their daughters’ and sons’ achievements:

But it was in high school where, like what you said with family and friends, hearing all these “oh, my daughter went here” and “my daughter’s doing this” or “my son’s doing that”. I just felt like, one day, in a few years, I’m going to be in that position, so I’m gonna have to try to get my name up there. Cause I think
it’s just really my parents’ expectation that I just have to get in. (Maria, Pressure, ref. 3).

Both Tracey and Maria had one or more parents who had been to university. Maria’s parents had studied at universities in the Philippines and Tracey’s father had completed his Accountancy degree and CPA as a mature age student. In each case, the young person recognised that their parents’ education had been hard won, and this might in part explain their desire for their children “to succeed in a much easier way than they did” (Maria, Pressure, ref. 2). Fortunately, neither Maria nor Tracey felt that this pressure had altered their aspirations as their own goals matched their parents’ expectations.

The role of parents summarised

In summary, participants across the board rated their parents as the prime source or one of the main sources of support. This support was manifest in a variety of ways, from personal encouragement to practical and financial assistance. Parents uniformly encouraged their daughters and sons to pursue their dreams, which in all but one case would involve a university education. This encouragement did not alter with differing occupations or educational backgrounds. However, several important differences were identified in the experiences of those whose parents went to university and/or were employed in professional occupations, compared to those whose parents did not and/or were not. Differences were apparent in parents’ capacity to act as a role model and in the ways in which they were able to provide practical support. In particular, differences were observed in the amount and accuracy of information parents were able to provide around post-secondary options, university entry, the costs associated with going to university and the university experience.

Bonding social capital: The influence of peers.

Having a parent who went to university appears to have been a distinct advantage for participants as they constructed their beliefs about higher education. However, parents were not the sole source of encouragement or assistance. Many of the young people whose parents did not have a university education had access to others in
their social world who performed these roles for them. These people were sometimes an important factor in shaping their understandings of and aspirations for a university education. For a small number of students, it was an older sibling who gave advice and paved the way for them. In other cases it was a relative or a family friend. This section now presents the data as it relates to the impact of other role models in the participants’ lives.

**Siblings as Role Models**

Within the immediate family, siblings are the second important component of a young person’s bonding social capital. After parents, they are the group with whom young people spend the most time throughout their school lives. This section therefore begins by presenting the data which relate to the presence and impact of older siblings in the participants’ lives. Again, it commences by exploring their levels of education.

Among survey participants, only 11 (11.7%) reported having an older sibling who had attained a degree-level qualification or higher. 43.6% reported having no older siblings and 14.9% reported having an older sibling who had completed a TAFE qualification or equivalent. (Refer to Table 5.5, Siblings’ highest levels of education: Survey participants). This means that roughly one in nine of the Year 8 to Year 10 students had access to an older sibling who could act as a positive role model of someone who had gone to university.

Table 5.5

*Siblings’ highest levels of education: Survey participants (N = 94 students)*

<table>
<thead>
<tr>
<th></th>
<th>University degree or higher</th>
<th>TAFE qualification or equivalent</th>
<th>School only</th>
<th>No formal qualification</th>
<th>Don’t know</th>
<th>N/A: No older siblings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of older siblings</td>
<td>11</td>
<td>14</td>
<td>18</td>
<td>5</td>
<td>5</td>
<td>41</td>
</tr>
<tr>
<td>Percentage of older siblings</td>
<td>11.7%</td>
<td>14.9%</td>
<td>19.1%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>43.6%</td>
</tr>
</tbody>
</table>

Of the twenty three young people in the interview component, sixteen either had no older sibling, or no older sibling yet old enough to have gone to university ahead of
them. One Year 10 student, Albert, had a brother in Year 12 who was also hoping to go to university. Another Year 10 student, Margaret, had a twin brother who also aspired to go to university. Both Margaret and Albert had parents who had undertaken their further education through TAFE. Of the remaining seven participants, five had older siblings who had not gone to university. This means that very few interview participants had a sibling who acted as a positive example of what can be achieved. (Refer to Table 5.6, Siblings’ highest levels of education: Interview participants).

Table 5.6

<table>
<thead>
<tr>
<th>Completed or currently at University</th>
<th>Completed qualification or equivalent / at TAFE</th>
<th>Completed / at school only</th>
<th>No formal qualification</th>
<th>N/A: No older siblings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of older siblings</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Percentage of older siblings</td>
<td>8.7%</td>
<td>21.7%</td>
<td>8.7%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Only two interview participants – Maria (university student) and Lisa (Year 8) – had an older sibling who had gone to university. As we have already seen, Lisa had witnessed her father undergoing a good part of his university studies, so the presence or absence of a sibling role model is likely to be of less importance in her case. Both of Maria’s parents had a university education, albeit in the Philippines, and she reported feeling under pressure to go to university herself so, again, the post-secondary destinations of her older brother are likely to have had only a minor impact on her own beliefs and goals. In addition, Maria’s brother did not get enough marks to get into university at his first attempt and spent a year or two at TAFE before making the transition to university. Consequently, he commenced university at around the same time as Maria and was therefore not in a position to have acted as a positive role model. Neither Lisa nor Maria spoke much about their older siblings.
Siblings as “Don’t do what I did” role models

For a number of other participants, an older sibling acted as a role model of “what not to do”, much as some parents had. One example of this effect was Maria’s brother, of whom she said “the influences of school pushed him back, like he didn’t actually get to show … during his HSC… what he has, his knowledge” (Maria, Don’t Do What I Did, ref. 2). According to Maria, these influences had been behind his failure to get enough marks to get into university. She says that this made her even more determined to go directly to university, both to pursue her own goals and so as not to be a further disappointment to her parents.

Paolo (university student) also spoke of an older sibling who was an example of what not to do. His older sister did not finish school as she was pregnant at age seventeen and now had two small children. In this case, it was Paolo who acted as a positive role model – his older sister followed him to university and was now studying Sociology by correspondence. Lucy’s sister was another example of what not to do, as she had been indecisive, “left it a bit too late to apply for university” (Lucy, Siblings as Role Models, ref. 2) and studied at TAFE instead. Lucy (Year 12) believed that her sister “regrets leaving it a bit late as to her decisions” (Lucy, Siblings as Role Models, ref. 3). The older sister entered university around the same time as Lucy.

For the majority of the interview participants, then, there was no older sibling who acted as positive role model by going to university ahead of them. One or two made mention of this absence, showing an awareness of its importance. For example, Carly (university student) said there had been “No-one, no-one at all that I saw, other than the students who came, from ACU” (Carly, Role Modelling, ref. 1). More often, however, the lack of role models appeared as a silence in the data rather than as any consciousness of this absence among the participants.

The Influence of Peers

Most interview participants reported that their friends were a source of encouragement as they developed their career and study plans. However, all rated the peer group as less helpful than parents and other family members, and spoke much less about their influence. Being of the same age, the young people’s peers were not in a
position to act as positive roles model of what can be achieved in terms of terms of post-secondary destinations. There was little evidence that the peers’ intentions had either a limiting or a broadening effect on participant’s aspirations. However, several participants commented that they found it helpful to have someone their own age and with similar aspirations to talk to about their futures, and one or two noted the negative effect of lack of support from friends. The presence – or absence – of these conversations appears to have been influential on participants’ motivation and sharing of information.

**Peer aspirations and destinations**

Among the interview sample, the younger students were more likely to report that their friends “don’t really know what they want to do” (Anna, Peer Intentions, ref. 1). However, by Year 10 most participants reported their friends as having at least a general career in mind. In general they reported that most of their peers did not aspire to go to university. This does not seem to have affected their own aspirations, as all but one of the participants aspired to go to university. Nevertheless, those few who did report having friends with similar aspirations reported that they found this helpful and encouraging, while those without were often conscious of what they were missing.

One exception to this pattern was the Year 8 cohort, where participants reported that around half of their friends were aiming to go to university, or aiming for careers that require a university degree. For example, Martha reported that “a lot of the people in my class want to go to university”. Katie also said that most of her friends wanted to go to university, saying “M… wants to be a teacher [and] L… wants to be a lawyer” (Katie, Peer Intentions, ref. 2). (Both of these friends were also participants in this research). She said that

we just talk about it cause we know what each other is good at. Like M… she is going to be good with kids. And you know, and ’cause I was good at sport, she said I would make a good PE teacher. So we just talk about that and see if anything’s changed. (Katie, Conversations, ref. 6)

This opportunity to share plans with peers appears to be highly supportive.
This was quite different from the experiences of students in the other years. Jennifer, a Year 9 student, reported that she and her friends only “very occasionally” talked about their plans, but that “One of them just wants to finish their swimming course and then they can coach. The other one wants to be a masseuse. They don’t need to go to university” (Jennifer, Conversations, ref. 1). Patricia, also in Year 9, said that among her friends “one of them wants to be a beautician and one wants to be a carpenter” (Patricia, Peer Intentions, ref. 2). However, she also said that “some of them are interested (in university) – mainly the ones who want to be doctors and nurses” (Patricia, Peer Intentions, ref. 3).

Margaret (Year 10) said that all of her friends were talking about going to TAFE, as did John (Year 10). Similarly, Michael (Year 11) also reported that none of his close friends were planning to go to university:

A lot of my friends aren’t in my class and they are moving into different areas. A lot of them, after Year 10 they dropped out to do apprenticeships and stuff like that. And some here now, with the Voc Ed\textsuperscript{14} project they are going to move into apprenticeships after the end of this year. (Michael, Peer Intentions, ref. 1).

Lucy (Year 12) also said that among her friends “a lot of them aren’t sure, and a lot of them want to go to TAFE” (Lucy, Peer Intentions, ref. 1). She did have one good friend, however, who had similar plans and she felt this was helpful as “it is good to talk to them about it cause similar sort of ideas”. In contrast, Sean (Year 11) said “I have a friend who is planning to become a primary school teacher. I have one that wants to be a graphic designer” (Sean, Peer Intentions, ref. 1). Sean believed that all of his close friends wanted to go to university.

When looking back at their school days, two of the four university students also recalled that they were the only one of their peer group to be planning to go to university. Tracey recalled that “out of my friends, I think I was the only one to go straight into uni” (Tracey, Peer Intentions, ref. 1). Carly was also the only one from her friendship group to go to university. She said that

\textsuperscript{14} Vocational Education.
none of my friends were going to go to university either. Out of the whole group
I was the only one that did go to university. I know a few people from other…
groups within the grade that did go, but most of my friends, they went to TAFE
or they went straight into the workforce, or got an apprenticeship. (Carly, Peer
intentions, ref. 2).

The situation was different for Maria (university student), who reported that she
had “many good friends in high school who did want to go to uni as well… it was still
in our heads that after school we’d go to uni”. Maria attributed this to the Filipino
culture, such that “they had the same mindset as me” (Maria, Peer Intentions, ref. 3).
Being part of a culture where high achievement was not only encouraged but expected,
appears to have had a powerful impact on Maria’s aspirations. Having friends with a
similar mindset also gave her someone to go to university open days with, which helped
to break down some potential barriers. For Maria and her friends:

The moment the Careers Adviser told us, you know, “Come to this open day” all
of us would be at that open day, we’d take advantage of it – we never thought
twice about “Should we look at this uni?”, we’d just go “Come on, let’s go have
a look at it, what it’s like there”. So we took every opportunity we could for uni.
(Maria, Conversations, ref. 8).

Another university student, Tracey, also mentioned the importance of having someone
to go along to these events with, saying “I actually went to an Open Day with two of
these guys and they were going to Sydney Uni, so I met up with them when they did
that… it helped that I had friends there who’d been walking around all day and knew
where to take me to pick up brochures” (Tracey, Beliefs about University, ref. 5).

A small number of participants reported that their peers actively discouraged
their ambitions for university. For example Lisa (Year 8) said that her peers were “sick
of hearing about it”. After going to a university open day “they went ‘God you’re an
idiot’… They’re like ‘[Lisa] you’re only thirteen, what are you doing this for?’.” (Lisa,
Conversations, ref. 2). Deborah (Year 10) said she had stopped talking to her friends
about her plans “because they put me down sometimes. So, like, they’ll be ‘Oh, it’s a
waste of money’ … you know, just things like that” (Deborah, Conversations, ref. 7).
Fortunately Deborah had one close friend who had similar ambitions and together they
would “go on the sites” and “just talk about what she wants to do and what I want to
do” (Deborah, Conversations, ref. 8). While this lack of support was clearly felt by both
participants, it did not alter their plans.

*The influence of peers summarised*

Only a small proportion of participants had access to an older sibling who could
act as a role model of someone in the family who had gone to university. Having such a
role model was potentially helpful, but the two relevant participants spoke little about
their siblings so it appears that, for this sample, the effect was not strong. A small
number of participants had friends who were like-minded people with whom they could
share their plans. For the majority, however, their peers did not share their ambitions
and in some cases were actively discouraging. While this did not dent the aspirations of
those in this group, friends’ intentions and support should nonetheless be considered as
possible influence on their beliefs and plans. As was the case with parental influence,
the absence of successful siblings or high-aiming peers did not act as a direct
discouraging effect or barrier. Rather, the lack presented as an absence of
encouragement that was only occasionally expressed by participants.

*Bonding social capital summarised*

Several participants described the encouraging effects of having a family
member or close peer who had successfully gone to university. These people provided
inspiration and information, as well as personal encouragement and practical assistance.
These factors had a positive effect on their knowledge of and beliefs about university.
They also appeared to have had a positive effect on their ability to envisage themselves
as a university student and/or in a professional occupation. Those who did not have
access to such people in their close social world sometimes turned to their broader
social world to find mentors who could provide a bridge to the world of university. The
following section of this chapter now explores this bridging social capital.
Bridging social capital

Teachers

Outside of the family, school teachers were the most important source of support and sometimes exerted a powerful influence on participants’ decision-making. Teachers played many roles, the main being the providers of information and advice. They also provided inspiration and encouragement, and in a few cases acted as role models of people who had gone to university and/or people working in the profession to which the participants aspired. However, a small number of participants reported not talking to their teachers about their plans at all, and two described negative effects of teachers’ actions.

Primarily, teachers were perceived as an important source of information, and were often able to provide more specific and accurate information than participants received from home. Specific information included advice on:

- post-secondary and university course options and useful references;
- how to gain entry to university; and
- appropriate choice of school subjects.

In addition, some teachers acted as role models, and often were a source of encouragement or inspiration. These effects will now be explored.

Teachers as a source of information

For many participants, teachers were their main source of information about subject choice, post-secondary options, and getting into university. For example, Michael (Year 11), who wanted to become a physiotherapist, spoke first to his Chemistry teacher: “He was talking to me about it, like you could do stuff like a Bachelor of Science or Medical Science and then you can move into Medicine, Physio, areas like that” (Michael, Teachers as Source of Information, ref. 1). His Physics teacher also played an important role when he was considering dropping the subject:

I was actually going to drop Physics and keep Business Studies. But then I got sat down and spoken to… they asked me what I wanted to do, what courses… They said most Science courses, Physics is a prerequisite as well. And you are better off doing that, as long as you do well it is better for your UAI than a
subject like Business Studies. (Michael, Teachers as Source of Information, ref. 3).

This timely intervention prevented Michael from taking a decision that might have precluded him from entering some of his preferred post-secondary options.

Deborah (Year 10) reported that her Year Coordinator was “a really good help. She provided me with information when I wanted to do the Nursing course. She talked to me about what there is to do and what I need to do to get into the course” (Deborah, Teachers as Source of Information, ref. 5). Similarly, Lisa (Year 8) said:

He will give me advice, like I asked him the kind of tests would be done in the School Certificate so that would help me practice. So I could get even higher marks. And he gave me a couple of websites and gave me a couple of Year 10 and 12 exams. After I harassed him for it, harassed him for about a week. And that gave me practice in English, Maths and a Science one. So that would help me even more, like a higher UAI mark. It’s really cool. (Lisa, Teachers as Source of Information, ref. 5).

Likewise, Sarah (Year 11) turned to her teachers for information:

My teachers are the ones that are mainly helping me right now, because I ask them a lot of questions, and giving me lots of help in regards to which university to go to, what type of course I should do…. What are the requirements… do I need to do an audition… how long the course is… and is it hard? (Sarah, Teachers as Source of Information, ref. 4).

Tracey (university student) also mentioned gaining important advice and assistance from a teacher:

I was very confused and I didn’t understand subject choices, I didn’t understand pre-requisites… and I got all confused. I didn’t understand the difference between a major and a minor, or any of that, or even what a Bachelor of Arts was... So I went to a teacher with the UAC Guide and we just sat down and went through it all, and he helped me fill it in. (Tracey, Teachers as Source of Information, ref. 1).

In the absence of a qualified Careers adviser, teachers were clearly a critical resource for many participants. Where teachers could not provide specific information, they often directed students to appropriate resources. Anna (Year 9), Catherine (Year 11) and
Elijah (Year 11) all mentioned being directed to various Careers guides by their teachers.

While a few students mentioned Work Education as a subject (for example Katie, Year 8 and Anna, Year 9), or made reference to Careers-based lessons in their PD/H/PE classes, conversations with teachers happened mainly on an ad hoc basis. Few students mentioned any other structured opportunities in class to plan for their futures. For example, Anna (Year 9) reported that “we were just talking and the teacher asked what we wanted to do when we finished school… we kind of stumbled onto the subject” (Anna, Teachers as Source of Information, ref. 6). Alternatively, some students had taken the initiative to approach teachers to seek specific information. John (Year 10) said that his Food Technology teacher “gave me information on where to go… she advised TAFE” but this was just because “I asked her” rather than part of a structured class activity (John, Teachers as Source of Information, ref. 3). Similarly Tina (Year 8), prior to the intervention, said “We were just talking about career things and I was telling her I what would like to do and she said “Yeah, that’s a good idea”… but this “just came up in conversation” (Tina, Teachers as Source of Information, ref. 2).

Despite teachers being frequently cited as a useful source of information, several participants had not had conversations with any teachers about their post-secondary plans. For example, Sean (Year 11) related:

*Jo:*

Have you ever talked to your teachers about it?

*Sean:*

Not really.

*Jo:*

15 It should be noted that St Mary’s, the 7-10 school, did not employ anyone in the role of Careers Guidance Counsellor, nor was Careers offered as a subject, at the time this research took place. Work Studies was taken as a subject by a small proportion of students in Years 9 and 10 – usually those most likely to leave school at the end of Year 10. Structured lessons on careers were delivered within the PD/H/PE program, and were normally allocated only a couple of weeks each year. In Years 8 and 9, the ACULink program comprised almost the entirety of this focus. St Thomas More, the Years 11-12 school, employed a Careers Guidance Counsellor half-time (sharing her with a nearby school). Her role was primarily to manage the Vocational Education and Training (VET) program. However, she provided career and study guidance to any student who approached her.
When you were in school, did you have any Careers subject or anything like that?

*Sean:*
Not really…

*Jo:*
Do you have a Careers adviser here?

*Sean:*
Yes, but I haven’t seen her. (Sean, Teachers as Source of Information, refs. 1, 2)

Similarly, Amanda (Year 9) said she would probably find certain teachers helpful and approachable, yet said: “I don’t really talk to any of them about my career” (Amanda, Teachers as Source of Information, ref. 4). When asked if she had had any opportunities to think about her future in class, Anna (Year 9) also said “I do have the opportunity but… I couldn’t be bothered” (Anna, Teachers as Source of Information, ref. 2). Even Patricia (Year 9), who wanted to become a PE teacher, had not approached her PE teachers to talk about her plans:

*Jo:*
Have you ever taken the opportunity to just ask the teachers?

*Patricia:*
No. Because before, when I wanted to be a lawyer, there was nobody here who had actually been a lawyer, but now with PE there’s a couple of teachers that I could ask.

*Jo:*
How helpful do you think they would be?

*Patricia:*
Pretty helpful, especially the younger PE teachers, because they’ve done it recently, so – yeah. They’d be able to tell me about what they’ve done and what I need to do (Patricia, Teachers as Source of Information, ref. 4).

It appears that, in the absence of structured opportunities in class, the opportunity to receive guidance from teachers was left largely to the initiative of individual students. For those with initiative and/or a clear goal in mind, this was not a problem. Others, however, appeared to need an impetus to open up these conversations.
This suggests a role for a school program and/or a university intervention in providing a stimulus to open these channels of communication and thereby provide all students with equitable access to a vital resource. As observed earlier, participants’ perceptions of their teachers’ helpfulness improved significantly after the intervention, indicating that the intervention had a positive effect on the extent to which young people had access to, or utilised, teachers as a resource.

**Teachers as a source of encouragement**

Many participants described their teachers as encouraging, and reported that this encouragement was helpful to them as they made their plans. For example Albert (Year 10), had this to say:

*Jo:*  
Have the teachers here been helpful?  
*Albert:*  
Yeah, they’re good teachers.  
*Jo:*  
In what ways are they helpful?  
*Albert:*  
Just their encouragement I guess. They go “Oh, that’s a good job, you need more police.” Just the encouragement from all of them is good (Albert, Teacher Encouragement, ref. 1).

Lucy (Year 12), also found her teachers were helpful through “… just reminding you constantly that you have to study. It’s not just going to come… that sort of thing” (Lucy, Teacher Encouragement, ref. 1).

Some participants rated teacher encouragement as critical. As Deborah (Year 10) said, “there’s teachers who make a difference” (Deborah, Teacher Encouragement, ref. 2). Michael (Year 11) acknowledged the support of “all my teachers throughout my whole time at school. Especially the ones now helping me with the subjects and stuff that I want to do, that I need to do to get into university” (Michael, Teacher Encouragement, ref. 1). Similarly, Lisa (Year 8) said:

Well I have to say that Mr. [D--], who is the English coordinator for debating and public speaking, he is really cool and a lot of it is thanks to him ’cause if he
hadn’t chosen me to be in the debating team I wouldn’t have been so sure that I could actually do Law. (Lisa, Teacher Encouragement, ref. 1).

For Maria (university student), it was her Careers adviser who was particularly important:

The first person I can remember was the Careers adviser. Cause without her I wouldn’t know what was out there. Like it was too big for me to even realize that it was actually there. But with her, she would empathise with my interests and everything, just to put me on the right path to uni (Maria, Teachers as Source of Information, ref. 3).

Later, other teachers also played an important role:

The teachers here at [St Thomas More] are really, they always say everything about uni, like “You’ve got to do this. When you’re at uni you’ve got to write essays this way.” Like they always say that so then in your head you do want to get up to that uni standard, whatever they’d say the uni standard was. (Maria, op cit).

To Maria, this combination of high expectations, empathy and information, “shaped my view on uni” (Maria, op cit).

Teachers’ encouragement, however, may have been largely reserved for those students who teachers perceived as special – those who were already motivated and achieving at high levels, such as the majority of those in the interview sample. Those who did not fit this mould, for example John (Year 10), had little to say about his teachers’ encouragement, saying one teacher “doesn’t say anything, just doesn’t care” (John, Teacher Encouragement, ref. 1). Further, there appear to have been few structured opportunities for students to seek information about their chosen careers in class. One case, Paolo (university student), cited the downright discouraging effect of his teachers’ negative expectations. He described his experiences thus:

_Paolo:_

I found that the education support – the teachers there, they didn’t exactly encourage me to do my best. They didn’t really believe in me, didn’t try to stop me doing what I was doing.
Jo:
Were you misbehaving?

Paolo:
I wouldn’t say “misbehaving”. I had a lot of problems and it affected my education.

Jo:
Would you say your teachers didn’t have very high expectations of you?

Paolo:
Yeah (Paolo, Teacher Encouragement, ref. 1).

And later:

Jo:
When you had conversations with your teachers, did they communicate the belief that you were capable of getting into uni?

Paolo:
No, not really. They talked about university from a general perspective but in terms of me, they didn’t give me the encouragement I’d need to get into university… I don’t think they believed in me much (Paolo, Teacher Encouragement, ref. 2).

This highlights the importance of teachers communicating belief in their students’ capabilities, and encouraging them to aim high. Indeed in Paolo’s case, were it not for Maria who became a significant influence, there was a very real prospect that Paolo’s teachers’ low expectations would become self-fulfilling.

*Teachers as role models and inspiration*

Teachers can spark interest and promote achievement in their subject areas and, for at least one participant, were the key motivation to pursue the subject beyond school. Michael (Year 11), said that in Science:

We had a good teacher. I started to learn heaps about it and I enjoyed it and I was getting like the highest mark. That was my subject with the best mark, Science. So just from there I started enjoying it, so I chose to pick the subjects in Year 11 and 12. (Michael, Teachers as Role Models, ref. 1).

While this was an important effect for Michael, it was not noted among any of the other participants in this study.
Another important role that a few teachers played was that of role model. For the many participants who had no family members who had been to university, their teachers were the closest or only people they knew who had done so. This was particularly helpful for those who aspired to become teachers, such as Katie (Year 8), Patricia (Year 9), Elijah (Year 11) and Maria (university student). Katie said she spoke to her home room teacher “because she’s a PE teacher so she knows, and she loves PE teaching too” (Katie, Teachers as Role Models, ref. 1). Similarly Patricia found some teachers “pretty helpful, especially the younger PE teachers, because they’ve done it so recently, so they’d be able to tell me about what they’ve done and what I need to do” (Patricia, Teachers as Source of Information, ref. 4). Maria was particularly inspired by her school teachers, saying

I’d always imagined myself like my favourite teachers. Like, I’d imitate them. Like when I was doing my first Prac I would just think “Put all my favourite teachers together, what did they do?” and I’d try to sort of do it like that but in my way as well (Maria, Identity, ref. 5).

However, this effect was not widespread or strong and only featured in the cases of participants who specifically aspired to become teachers. For the majority of participants, teachers were most often cited as an important source of information about getting to university. While many acknowledged their encouragement or inspiration, the provision of information was spoken of much more frequently and rated as more important than any of the other roles played by teachers. When looking for someone to act as a role model, most participants turned to other significant adults in their social worlds.

Other Role Models

Where there was no role model available in the immediate family, some participants knew someone else who was at university or had gone to university. These people were members of the extended family, the friends of older siblings or neighbours, or were tutors. In most cases, these role models were not particularly close to the participants. Rather, they met up occasionally and may have had conversations with them around work or study. Indeed, some participants, including Amanda, Catherine, Elijah and Carly, could not think of anyone in their social sphere who had been to or was currently at university. However, for a small number of participants,
there was a person who acted as a bridge to the otherwise unknown world of university study or of a professional career and who therefore played a significant role in helping to shape their beliefs and aspirations.

Among those who mentioned others in their social sphere who had gone to university was Anna, in Year 9. She talked about her cousin who she sometimes met at Christmas but generally didn’t have much opportunity to talk with. Anna said “I’m not able to because she’s usually got a test or something … so I don’t have much chance to see her” (Anna, Other Role Models, ref. 2). She also mentioned one other person. “He used to attend my primary school. We met in the street and had a conversation. He went to S----- (Senior High School) and then was accepted into uni” (Anna, Other Role Models, ref. 4). Another potential role model for Anna was “My Maths and Science tutor [who] went to the University of Sydney” (Anna, Other Role Models, ref. 7). While these were not people in Anna’s everyday social world, they nonetheless represented someone “like” Anna to whom she looked for inspiration.

Many similar conversations took place, as typified by this exchange with Jennifer:

Jo: Do you know anyone who’s been to university before you?

Jennifer: My uncle.

Jo: What does your uncle do?

Jennifer: He’s a business person.

Jo: Do you get to see him very often?

Jennifer: No.

Jo: Have you ever talked to him about what it’s like being at university?

Jennifer: No. (Jennifer, Other Role Models, ref. 2).
Like Anna’s potential role models, Jennifer’s uncle could have been an example to her of what is possible. However, as the relationship was not close it is apparent that his influence was not strong.

Role models as inspiration

For several participants, merely knowing a family friend or relative who had a professional career was inspiration in itself. Watching this person at work or talking to them about it often motivated the young people to want to do something similar. It also helped some to believe that such a career might be possible for themselves. One example of this was Tina (Year 8), whose mother’s uncle was a judge. Tina said:

I had an interest in it before but then he just tells me all about stuff I could do and everything like that. What’s involved. And I think it sounds, it interests me, it’s something I want to do, like, I actually want to go further in it. (Tina, Other Role Models, ref. 1).

Katie had a similar experience with her uncle, saying “he’s like a personal fitness trainer, so that kind of made me want to go there as well, so follow him kind of thing” (Katie, Other Role Models, ref. 1). For both, seeing someone they knew in a professional occupation sparked their interest and encouraged their aspirations.

For Patricia (Year 9), this inspiration came from an aunt who was a lawyer who “has an office in the city” (Patricia, Other Role Models, ref. 1). She had visited her aunt’s workplace and found this motivating, saying “After I’d visited her office … I started to think it was something really good” (Patricia, Other Role Models, ref. 3). For Deborah (Year 10), it was her Godfather, another lawyer, who first provided inspiration. He lived in Syria so she did not see him often, but he had nonetheless influenced her. She described the experience of visiting his workplace:

He took me to his office and it was really good – there’s room for a library – it was awesome. Just like to see your uncle accomplish something he’s always wanted to do – just the practice and all the stuff you have to go through to become one. (Deborah, Other Role Models, ref. 9).
Deborah was also inspired by her brother-in-law, a doctor, who she had seen at work when she was employed in his practice. She told of the impact this experience had on her aspirations:

I worked in my brother-in-law, he’s a doctor as well, in his doctor’s surgery and seeing the people … Just to see them smile when they walk out, they know they have been helped – so I want to do that too. (Deborah, Other Role Models, ref. 6).

Deborah also felt he was “helping me with some of the words to understand some things better” (Deborah, Other Role Models, ref. 11). Between these two social contacts, Deborah had opportunities both to experience the world of work and to discover some career opportunities that she would not otherwise have witnessed in her immediate family.

Several interview participants aspired to become teachers and this goal was often inspired by people they knew. For example, Nancy (Year 11), had the opportunity to observe her aunt at work on a visit to Hungary as a child. She said “I remember attending the school … my aunty was teaching me and I just loved it” (Nancy, Other Role Models, ref. 4). Martha (Year 8) also wanted to become a teacher and put this down to “influence by my family. My auntie’s a teacher, my cousin’s a teacher, and so I want to be a teacher” (Martha, Other Role Models, ref. 1).

Looking back over her decision-making processes, Maria (university student) related how decisive the intervention of role models had been for her. Although determined to go to university, Maria was unsure of what career she wanted to pursue and was considering studying Information Technology. She described a life-changing event:

I went on this Mission trip and we went to this area where they just established a school in that area of the Philippines. We stayed there for three days and we actually got to sit through primary school lessons with these kids who are just like, probably up to Year 3, so they’re all young kids. And we got to sit through, what, how the teachers in the Philippines taught. The teachers who worked there were from other countries – they weren’t Filipino teachers, so some of them were from Australia and so, watching her teach them, something that she loves
doing, I was like “If I want to stay in a career for a long time, I need to live it”. … That’s when I decided I should do something more creative with my career than just work with a computer or work with data bases all the time. That’s when I thought about it... I looked up the UAI straight away, what mark you had to get in, and I calculated it in my head… I used to talk to other students who did the HSC, I asked “how did you get above 80? What did you do?” I used to ask a lot of questions… So I just followed their advice and I worked really well to get into education. (Maria, Other Role Models, ref. 4).

For Maria, the role modeling experience worked both ways. After making it into university herself she became an inspiration to her good friend Paolo. Paolo (university student) acknowledged the important role that Maria and others like her played in raising his aspirations and ultimately getting him to university:

_Paolo:_

My best friend, she goes to this university as well, she was always talking about teaching and it kind of inspired me because I knew that I had things to offer as well, therefore I wanted to pursue a career in that kind of area, where I can give, where I can share something of myself… So probably around July 2005, after I just joined the youth group, that’s where everyone, a lot of the people in my youth group … do a lot of uni work and it made me feel… I felt left out a bit, so therefore I… not because I didn’t want to, but then I wanted to just, I wanted to make my parents happy as well. It kind of started from there…

_Jo:_

Tell me about those conversations?

_Paolo:_

Well, when [Maria] began uni, she always told me how wonderful it is, how uni life is so different to high school, and… I wouldn’t say I was jealous, but it made me feel like I needed to do something with my life.

_Jo:_

She must be quite an inspiration?

_Paolo:_

Yes, she is (Paolo, Other Role Models, refs. 1, 9).
Role models as a source of information

As with parents, other role models provided two types of information. First, they provided specific information about career and study options. Second, they sometimes provided more general information about the experience of university study and life.

Some participants were aware of relatives who were professionals but, as these relatives lived overseas, the opportunities for them to provide accurate information were limited. For example, Margaret (Year 10), reported that “I think half of my generation are pharmacists… but they all live in Lebanon” (Margaret, Other Role Models, ref. 1). These cousins were in part behind her motivation to become a pharmacist herself, as “they told me that it’s a really good job” (Margaret, Other Role Models, ref. 3). Of more importance, however, was another cousin who was a pharmacist in a nearby suburb. In addition to providing insight into the job, he painted a picture of the experience of studying Pharmacy at university: “He said ‘the work is really good but the university courses are hard. And especially the first year – you could fail the whole year.’.” (Margaret, Other Role Models, ref. 6). Similarly, Patricia (Year 9), talked to her cousins, who were currently at university, who told her that “There’s a big workload and you’ve got to study hard… you can’t bludge around, you’ve actually got to do your work and so you’ve gotta like what you’re doing cos it’s a lot bigger than school” (Patricia, Other Role Models, ref. 7).

Another Year 10 student, Albert, related his contact with someone in his chosen career. When looking for information about the Police Force, Albert spoke to “one of my brother’s friends [who] is in the police force… I’ve spoken to him a few times. Nothing in-depth, just asked if he enjoys it. Yeah. He said the money’s not that great but…” (Albert, Other Role Models, ref. 2). Once again, having a social connection with someone who was working in his chosen career area was helpful to Albert as he built up a picture of the career.

Elijah (Year 11) had sports trainers who were useful sources of information to him as he wanted to pursue a career in Sports Science or PE teaching. He related conversations with them about gaining entry to the profession:
They’ve told me uni and another told me through TAFE… They said I had to
do, I can’t remember how many years it was, but I think it was like 4 years or 3
years of one subject and then a year of teaching. To get like as a PE teacher
(Elijah, Other Role Models, ref. 2).

Michael (Year 11), also benefitted from his social connections, in his case his aunt: “She
is a physio… She went to TAFE and university to do Physio” (Michael, Other Role
Models, refs. 1, 4). Katie (Year 8) also looked to her trainer for advice on becoming a
PE teacher:

He told me what you need to know. Like he said it’s really hard, you need to
know the muscles and everything to be a PE teacher. So he kind of, he gave me
a bit of knowledge and that I have to listen and just concentrate all the time
’cause you can’t miss anything. (Katie, Other Role Models, ref. 4).

For Elijah, Michael and Katie, these connections gave access to vital information on
study pathways into, and the nature of work in, their chosen careers.

Sarah (Year 12) was another case where relatives were a source of information
about her chosen career of teaching. For her, “they kind of talked me into what happens,
and what they do, and I think I’m more suitable with older children” (Sarah, Other Role
Models, ref. 4). Martha (Year 8) also looked to her extended family for specific
information on study and subject options:

When I was choosing my electives, I rang my aunt and asked “I want to be a
teacher, what electives should I choose?” And they said “Well, it’s really up to
you if you’re doing teaching” but they said that Child Studies would be a good
one, and the rest aren’t really related. (Martha, Other Role Models, ref. 2).

Martha also had three cousins who are teachers:

Sometimes I ask them “Oh, what was it like? Was it hard? Did the three years
go quickly?” And they just talk about their experiences, so I’m kind of prepared
for it… They say “Oh, the four years just comes and goes, and before you know
it you’re set up with a good job, you get paid well, and the rest of your life is,
like, written for you. You don’t have to worry about getting a job or anything
because once you’re a teacher, you’re a teacher forever.” (Martha, Other Role
Models, ref. 4).
Again, these connections gave Sarah and Martha access to information about the teaching career and the university experience.

For a number of other participants, a “significant other” provided specific forms of support which family members could not. This significant other was often not a member of their close social circle, but a distant relative or family friend. Forms of support these people provided included inspiration, and providing access to information about course and career options and about the university experience itself.

Other sources of information

For some participants there was no significant other in their social world who had been to university and/or who was working in the career to which they aspired. Some of these young people turned to other places for inspiration and information, the most common being (mostly American) television shows and movies, Careers resources and the internet. Books and the internet were generally only perceived as sources of information, while television provided some participants with a view into the world of university and work.

Several participants mentioned going on the internet to locate information, and a number were aware of the UAC Guide. Others mentioned visiting university open days. These information sources, in particular the impact of ACULink on participants’ awareness of these sources, is explored in more detail in Chapter 6.

Role models in the media

A few participants relied on television or movies to provide insight into the nature of their chosen career, and for one or two they provided a type of role model. Anna (Year 9), who wanted to be a forensic pathologist, watched *CSI (Crime Scene Investigators)*, which showed her that “it’s a hard life… you see images of people that die and then you always keep it in your head. And then having to be on call whenever” (Anna, Information Sources, ref. 4). Jennifer (Year 9), who wanted to be a lawyer, had gained her understanding of the work of a lawyer from “TV and movies” (Jennifer, Other Role Models, ref. 2). Lisa (Year 8), who also wanted to be a lawyer, described where she gained her inspiration:
When I was first watching that movie *My Cousin Vinnie*. That’s one of my favourite movies of all time... Ever since I watched that movie, I think when I was around five… I have always wanted to be a lawyer since then. (Lisa, Sources of Information, ref. 7).

Lucy (Year 12), said the image of university she had in her mind came “only from movies” (Lucy, Sources of Information, ref. 5). Elijah (Year 11) also based his notion of university life “from movies and stuff” (Elijah, Sources of Information, ref. 6). Michael (Year 11), described images of “fraternity houses” (Michael, Beliefs about University, ref. 1) which he believed he had learned from watching American television. Deborah (Year 10) had believed that “according to the movies I watch, it would be huge, with, like you’d sleep there all the time and won’t go home” (Deborah, Sources of Information, ref. 8). Lisa (Year 8) had also gained the impression that university would be “scary… adultish… overwhelming” as this was “just like what you see in movies” (Lisa, Sources of Information, ref. 3).

In her first interview, Tina (Year 8) described how watching movies and television had inspired her to become a lawyer:

> My main [idea about] law is in *Legally Blonde*16. It seems really cool… *Law and Order* and everything like that… I know that they’re just shows, but there’s some truth to them and they just look interesting. (Tina, Sources of Information, ref. 1).

These show had been her main source of information about practicing law, but one movie in particular – *Legally Blonde* – had instilled in Tina the belief

> … that anyone can really do Law, it’s not specifically targeted to just a group of people, that if you really believe in something you can challenge it and find what’s right… so that’s what I really liked about it (Tina, Sources of Information, ref. 1).

On some level, Tina related to the main character and this had helped to build her belief in her own abilities. Interestingly, by the second interview she had changed her mind and decided she wanted to become a fighter pilot!

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16 A Hollywood movie in which a young blonde woman from a working class background goes against stereotype and expectations and goes to college to study Law.
In the absence of real-world role models, some young people turned to the mass media for their inspiration and information. While in some cases this reliance on American sources had filled their heads with misinformation, in other cases the characters and shows provided inspiration or insight into the world of work in their chosen careers.

Conclusion

Several participants related the encouraging effects of having access to someone within their family or peer group who had been to university. Such role models provided encouragement in a number of ways, including:

- acting as role models of what it is possible to achieve;
- giving personal encouragement, sometimes experienced as pressure;
- providing information about course options, entry to university and the university experience; and
- offering practical assistance and financial support.

These factors had a positive effect on the young people’s knowledge of post-secondary study alternatives, entry requirements and the financial implications of going to university. They also appear to have had a positive effect on their self-efficacy and ability to envisage themselves as university student and/or professional. Finally, they had a positive effect on the young people’s beliefs about the relevance and attainability of a university education.

Where the young people did not have access to someone within the family or peer group who had been to university, they were sometimes able to identify other significant persons in their extended social circle who could act the part of mentor. For those who did not have access to any role models, the lack generally presented not so much as a barrier or discouraging effect, but as an absence of encouraging effects. This absence was often not explicitly felt or expressed by participants.

This chapter has demonstrated that neither parental encouragement nor young people’s aspirations varied in accordance with parents’ occupation and educational experience. Rather, all parents displayed positive attitudes towards higher education and
all encouraged their daughters and sons to aim high and work hard. Further, the majority of survey and interview participants aspired to go to university and enter a professional occupation, regardless of their parents’ occupations and levels of education. It therefore appears to be a matter neither of parental “attitudes” nor of young people’s aspirations which causes their under-representation in higher education. Rather, there is an observable difference in participants’ cultural capital – that is their knowledge of and beliefs about university – which reflects their parents’ experience of higher education. This suggests the possibility for an intervention to fill the gaps and/or correct the misconceptions young people form about university, and that this would be particularly helpful for those who are lacking in successful role models in their everyday social worlds.

The following chapter will explore the means by which the young people acquire this cultural capital, before examining the impact of the intervention on this process.
Chapter 6: Cultural capital

Introduction: Embodied cultural capital

Following on from Chapter 5, which presented the data relating to participants’ social capital, this chapter presents the data relating to participants’ embodied cultural capital. The chapter commences with identifying participants’ habitus prior to and following the intervention. To this end, it asks three key questions. First, it asks what were their pre-existing knowledge of, beliefs about and aspirations for higher education? Second, it asks to what extent this habitus reflected the educational experiences of those in their immediate social worlds? Third, it asks what impact did the ACULink intervention have on this habitus?

This chapter is organised in four main sections. The first section describes the conversations that participants related having, within their immediate social worlds, concerning their post-school aspirations. The second section explores participants’ knowledge about post-secondary pathways, courses, entry requirements and the costs of study. The third section explores their personal characteristics, including their work ethic, goal orientation, identity and self-efficacy. The final section describes participants’ beliefs about university with regard to its desirability, relevance and attainability. Within each section participants’ habitus is explored both pre- and post-intervention, in order to ascertain the extent to which the ACULink project altered their knowledge of, beliefs about and aspirations for higher education.

As was identified in Chapter 5, only a small proportion of both survey and interview participants reported having role models in their immediate families who had been to, or were currently studying at, university. Chapter 5 reported this data in two separate tables: Tables 5.3 and 5.4 outlined parental education levels, while Tables 5.5 and 5.6 presented siblings’ highest levels of education. For the purposes of this chapter, parent and sibling data have been aggregated to provide an overall picture of the proportion of participants who had role models in their immediate families who had attended university. Table 6.1 (below) shows that 67% – two in three – reported having no positive role models within the immediate family. This chapter explores the ways in
which this social capital affected the young people’s accumulation of cultural capital in terms of their knowledge of, beliefs about and aspirations for university.

Table 6.1
Role models in immediate family who have completed university: Survey participants (N = 94)

<table>
<thead>
<tr>
<th>Model in Family</th>
<th>Number of Participants</th>
<th>Percentage of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than one</td>
<td>14</td>
<td>15%</td>
</tr>
<tr>
<td>One role model</td>
<td>17</td>
<td>18%</td>
</tr>
<tr>
<td>No role models</td>
<td>63</td>
<td>67%</td>
</tr>
</tbody>
</table>

Conversations

Family conversations

One way in which a family’s embodied cultural capital becomes evident is in the nature of conversations which commonly take place in the home. These conversations provide a window to strongly held beliefs of family members, such as what it means to go to university, and to the influences which may shape a young persons’ beliefs and aspirations. It is proposed that conversations about university might help young people to build a picture of the campus buildings and facilities, of the nature of university work and of what it might be like to go on to higher education after finishing school. Where such conversations present a positive picture, and/or when they feature people who the young people relate to as being like themselves, it is proposed that they are more likely to grow up believing that university is not only desirable but also relevant and attainable. Such beliefs should, it is posited, raise their aspirations and ease their transition into higher education. In Bourdieuan terms, such conversations would provide some of the right sort of cultural capital.

In another example of silence in the data, for most of the young people in this study, conversations about university were all but absent from their family lives. Despite parents being the first people they turned to for information and advice, very few participants recalled conversations with their parents about what university is like. Those who did report any conversations recalled mainly being told how much hard work it is. While parents appeared keen to support them as they made their decisions,
they were generally not able to provide the depth and colour that would bring the world of university to life. Not surprisingly, this reflects their own lack of experience in this world.

In the main, conversations between the participants and their parents focused on the young person’s aspirations and career choices. For example, Patricia (Year 9) said “I’ll discuss it with my parents and family to see what they think” (Patricia, Parental Attitudes, ref. 1). And later, she recalled a conversation about entry cut-offs for Law:

*Jo:*  
Do you know what sort of marks you need to get in the Higher School Certificate?

*Patricia:*  
I know it’s quite high for some of the universities

*Jo:*  
Where did you find that out?

*Patricia:*  
I can’t remember, but it was like a family talk. You know, everybody was talking and I said I wanted to be a lawyer. And everybody looked at me and said “If you want to get into a good university for being a lawyer you’re going to have to get over 97” and I was like “Yeah? Cool.”

*Jo:*  
Who was there in that conversation?

*Patricia:*  
My parents and my uncles and that. (Patricia, Conversations, ref. 3).

Here, Patricia’s parents appear to be acting as a useful reality check. However, the response does not appear to have been encouraging. The unspoken message here is that Patricia was not likely to get the marks required and, perhaps, that “good” universities are not for people like her.

On a more positive note Anna, also in Year 9, said that her parents “help me with basic stuff and whatever I choose for a career I discuss it with them first. And then they tell me whether I’m good at that” (Anna, Parental Attitudes, ref. 1). In another instance, Tina (Year 8) said that her mother
asks me what I, what my interests are, and things like that, so she tells me to
focus on them. My Mum helps me like that. She helps me plan out what I want
to do and things like that, so she’s good. (Tina, Parental Attitudes, ref. 2).

Similarly, Sarah in Year 12 found her parents helpful, saying they “really helped me
finding or knowing what I want to be and my goals and how to achieve them”. Lisa,
Year 8, also related similar family conversations:

I was thinking recently when we watch the movies and stuff which we watch
over dinner. A lot of the political issues come up. You know, about petrol prices
blah blah blah. And I get really passionate about politics and I just like lecturing
people… So Mum said, like, “Be in politics. You should study Law, be a lawyer
for a few years and then go into politics.” I was starting to think that was a good
idea. (Lisa, Parental Encouragement, ref. 5).

These conversations appear to have helped Anna, Tina, Sarah and Lisa to identify their
strengths and also indicated possible career pathways for them.

Only a few participants, however, related conversations where their parents
shared their experiences of higher education. Obviously, such conversations only took
place when one or both parents had been to university themselves. These conversations
focused almost exclusively on the workload, as if parents were trying to encourage their
children to work hard. Anna, a Year 9 student whose mother went to university in
Vietnam, said “she says that you have to study a lot and like there’s no break from it”.
Jennifer, a Year 9 student whose mother was currently studying, said “she doesn’t really
talk about it but like, she tells me the expectations with the workload and it’s pretty full
on” (Jennifer, Parental Attitudes, ref. 2). Maria, a university student whose parents had
both gone to university in the Philippines, said that her parents “haven’t actually sat
down and told me their side to it” (Maria, Conversations, ref. 3). However, she recalled
how they continually reminded her that university is hard work:

Like every time they’re cooking dinner, they’re like “You know when I was in
uni this…” They would always bring back stories of how hard it was being at
uni… and my Dad would always tell me that I’m really lucky to have an
education… My Mum was telling me that in her time she… because I have all
the time in the world to study – she never did because she’d have to do the
housework while doing uni, so. But then that’s different for us ‘cause we don’t
really… like, we have more luxuries now. So I think that’s the only thing she shared with me. (Maria, Conversations, ref. 3).

Tracey, another university student, related how her father would “just go ‘Look how much I have to read!’ and show me. There was a lot of reading” (Tracey, Parent went to University, ref. 2). In conversations with her mother, Lucy had learned that her mother’s experience of university was “very stressful, especially because … me and my sisters were young at the time.” (Lucy, Conversations, ref. 2). In this way, parents appeared to be preparing their children for what lay ahead – at least in terms of the workload they could expect at university.

In addition to talking about the workload, several participants also related conversations around the costs of going to university. This issue was covered in part in Chapter 5 in the discussion on parental support. It is also explored in greater depth later in this chapter in the section covering the young people’s knowledge about university.

In summary, family conversations tended to focus on the young persons’ career aspirations and rarely touched on either entry requirements or the university experience. Conversations about university work and life only took place within families where one or both parents had been to university. The few young people from families where a parent had a university education occasionally related stories of family conversations about their parents’ experiences of university. This appears to have helped them to develop a picture of university life and work. However, these conversations were almost universally confined to descriptions of the heavy workload at university. Other aspects of the university environment or university life only featured once, and then only when Lucy’s mother mentioned that she had not gotten involved in the social life due to her family commitments. While university was seen to be desirable, none of the conversations mentioned by participants painted university in a positive light as being either enjoyable or readily attainable by the young person concerned.

**Conversations among peers**

For the Year 8 and 9 students, and several of the older participants, career and study plans did not arise as a regular topic of conversation. When such conversations
did take place, they mainly centred on career plans, with study intentions rarely rating a mention. The following extract from Amanda (Year 9) illustrates this distinction:

Jo:
What about your friends – do you talk about your plans with your friends?
Amanda:
Sometimes.
Jo:
Do you know what your friends are planning to do?
Amanda:
One of my friends wants to be a doctor. I think another one wants to be a food critic. I’m not sure about my other friend. I think she wants to do something to do with computers or become like an actress…
Jo:
Quite a range of careers there. Do you ever talk about what study people are thinking they need to do after school?
Amanda:
No.
Jo:
So you talk about the jobs?
Amanda:
Yeah…
Jo:
Do you know whether they’re thinking about going to university, or TAFE, or looking for a Job?
Amanda:
I think my friend who wants to be a doctor probably wants to go to university, so she knows that you need to get like high marks to do that.
Jo:
Have you talked about that?
Amanda:
No. (Amanda, Conversations, refs. 6-8).
Patricia (Year 9) also said that “we just talk about the different jobs that we’d like to do… and if we’re gonna drop out, if we’re gonna stay in” (Patricia, Conversations, ref. 6). Similarly Michael in Year 11 said that he “sometimes” talked to his friends. However, these conversations did not feature university, as

A lot of my friends aren’t in my class… they’re moving into different areas. A lot of them, after Year 12, dropped out to do apprenticeships and stuff like that. And some here now with the Lighthouse Project, they are going to move into apprenticeships after the end of the year. (Michael, Conversations, ref. 11).

Elijah, another Year 11 student, also reported that conversations with his friends did not extend to study pathways:

We would talk about being a Physio or a PE teacher… it didn’t really matter what we learnt about, that’s what they wanted to do… Physio, and that’s it, but nothing really about university. (Elijah, Conversations, ref. 3).

Elijah felt it was helpful to have friends with similar interests and he particularly noted that “It’s mainly all the same because our group, we are all the same and so we all want the same” (Elijah, Conversations, ref. 3).

While many reported that they did not have close friends who shared their aspirations, for a few participants their friends were overtly negative. One such example was Margaret in Year 10, whose friends were all planning to study at TAFE. She described conversations with her friends on the topic of her plans to go to university: “They say ‘ooh, it’s very hard’ and … ‘You’re taking too much’.” (Margaret, Conversations, ref. 11). Deborah, also in Year 10, likewise reported that none of her friends planned to go to university and that they were “not really” supportive of her plans. She said “I don’t really talk to them much cause they put me down sometimes… they’ll be like, ‘Oh, it’s a waste of money’… you know, just things like that.” (Deborah, Conversations, ref. 7). Fortunately, Deborah had one close friend who also hoped to go to university. Together “my best friend and me [sic] go on the sites. We just talk about what she wants to do and what I want to do.” (Deborah, Conversations ref. 8). As was the case for Elijah, Deborah found it helpful to have a friend with whom she could share her plans and seek further information.
One of the Year 12 students, Sarah, described a different kind of negative conversation among her peers. While they viewed university as desirable, they did not see it as a likely destination for themselves. Sarah said that Most of them want to go to uni. I guess, like they have a really negative view on it. They go “I’m not gonna pass anyway, I’m not going to get into this or that.” They’re looking towards TAFE more. (Sarah, Conversations, ref. 4).

One exception to this pattern was the Year 8 group. Conversations among the four Year 8 students and their friends took quite a different form. They each described how they talked about their plans together and supported and encouraged each other17. Katie said: We just talk about it cause we know what each other is good at. Like (Martha), we can tell she is going to be good with kids. And you know and ’cause I was good at sport, she said I would make a good PE teacher. So we just talk about that and see if anything’s changed. (Katie, Conversations, ref. 6).

Lisa, from the same group of friends, said she had talked about becoming a lawyer so much that “they’re sick of hearing it”. She related how: Just this morning, (Martha) and I were talking about what we wanted to be. And like what it takes to get into our fields. And I was telling her that when I went to the open day I went into the teaching section for no reason in particular and I grabbed a few booklets. (Lisa, Conversations, ref. 5).

For Tina, having a friend who shared similar goals was an important motivator: I really like to talk to her a lot about what I’d like to do in the future because she is sort of on the same wavelength as me, like what we want to do…. She’s really interested in going to uni and that, ’cause she’s just really driven like me. (Tina, Conversations, ref. 7).

17 There are several possible causes for this difference between cohorts. One possibility is that the process of selecting students to participate in the study (a process which, as discussed in Chapter 4, necessarily involved their teachers) and the resulting bias towards the most able students was stronger among the Year 8 cohort. In addition, three of the four Year 8 participants were good friends. It is likely that part of the reason they became friends is that they shared a positive attitude to school and study. It therefore may be just coincidence that three friends with similar aspirations ended up in the same study. Another possibility which should also be considered is that the aspirations of the students attending the two schools were in fact getting higher with each passing year.
Martha, also in Year 8, enjoyed the fact that “a lot of people in my class want to go to university” and that “we kind of share our interests in teaching.” (Martha, Conversations, ref. 4).

As was discussed in Chapter 5, Maria talked extensively about the culture of high achievement among her Filipino extended family and friends. Another example of the influence of a culture of high achievement among the peer group was Paolo, now a university student and a friend of Maria’s from school days. He recalled that among his friends “one wanted to do something with Business… the other wanted to do teaching” (Paolo, Conversations, ref. 4). Paolo related how important this was in motivating him, saying:

They were always talking about university and every time they said something about it, I wanted to do it – not because they were doing it, but I wanted to achieve something as well…. A lot of my friends were – they were working hard and they pushed me to work hard as well. (Paolo, Conversations, ref. 4).

Paolo was very clear about the importance of this group of peers as a positive influence that motivated him to also go to university. He particularly acknowledged the role that conversations with Maria had played, saying:

She always told me how wonderful it is, how the uni life is so different to high school and… I wouldn’t say I got jealous, but it made me feel like I needed to do something with my life as well. (Paolo, Conversations, ref. 8).

After the intervention

There was some evidence that participation in the ACULink strategies promoted conversations between participants and their families, teachers and peers. One example is Anna (Year 9), who said that after the Year 8 Goal-Setting strategy “It was then that I asked my Mum about uni” (Anna, Goal-Setting, ref. 3). After the same strategy Martha (Year 8) said:

I told my parents that I was talking to Joanne Harris about how I wanted to be a teacher… They were like “What did you say?” and I was just, like, how I want to be a teacher and you have to be at uni and the things I have to do (Martha, Goal-Setting, ref. 1).
In another example, Deborah told how the information booklet for parents, *Is University for Me*, prompted a conversation with her parents around her career aspirations:

*Jo:*  
Did your parents read that?  
*Deborah:*  
Yep… Oh, well I read it, and then I read it to them… because it’s in English.  
*Jo:*  
And did you um, have any conversation about the information in that booklet?  
*Deborah:*  
Well, Mum just kept asking me what do you want to do and I’m, like, I’m not sure yet, she’s, like, just whatever interests you, I’d like you to do it, like, I want you to be more focused on the law side of things. (Deborah, Conversations, ref. 3).

In addition to initiating conversations between participants and their parents, the intervention also led to some conversations among their peers. One of these, Tina (Year 8), said that after the Goal-Setting session “I just remember everyone talking about it, everyone… about their careers, their different ideas” (Tina, Goal-Setting, ref. 3). It would seem that, to a small extent, the intervention had an indirect effect on some participants in that it sparked conversations with members of their immediate social worlds after the event.

With few exceptions, the notion of going to university was rarely a part of the conversations in the participants’ immediate social worlds. Furthermore, when the topic was discussed it was generally in terms of something remote, difficult and/or unlikely for people such as themselves. Some conversations were overtly negative. As a window into the cultural capital of the young people in this study, these conversations – or lack thereof – indicate that they were for the most part quite “poor” in the type of cultural capital which might have shaped positive perceptions about university study. In those cases where participants belonged to a group of friends who shared similar ambitions, they invariably found this to be a source of encouragement and inspiration. There was some evidence, albeit limited, that the intervention played a positive role in promoting conversations between participants and others in their social worlds. The following
section explores the impact of this social environment upon participants’ embodied cultural capital with regard to their knowledge about university.

**Knowledge**

A second evident effect of young people’s social capital, and the conversations they hear (or do not hear) in their immediate social worlds, is upon their knowledge of their post-secondary alternatives and the realities of work and/or study. Previous studies, as well as preliminary data analysis in this study, have indicated that young people from low socio-economic backgrounds often lack basic information and/or hold misconceptions about their post-secondary alternatives, particularly with regard to careers requiring a university qualification. One of the most straightforward goals of ACULink is therefore to acquaint school students with the breadth of post-secondary options, and to provide opportunities for them to explore both the career opportunities available to them, and the relevant education and training requirements for entry into their chosen careers. It endeavours to provide accurate information and to develop in participants the skills to undertake further research independently. This section of the chapter explores first the survey data, then the interview data, which illustrate the participants’ knowledge and the impact of the intervention thereon.

Survey questions, 6, 7 and 8 investigated the extent to which the intervention achieved these aims. These questions asked participants to identify: the appropriate level of qualifications required to enter their chosen career (Question 6); the school subjects required to enter the training for their chosen career (Question 7); and the UAI required to enter the training for their chosen career (Question 8). Year 8 and 9 participants’ knowledge of these requirements was measured pre- and post-intervention. Responses were scored on a 3-point scale where 3 equals accurate knowledge, 2 equals partial knowledge and 1 equals incorrect or don’t know. Pre- and post-intervention means were compared, and a paired t-test was conducted, to evaluate the impact of the intervention.
Knowledge of post-secondary education and training requirements

Just under two in three students across the year 8, 9 and 10 cohorts were moderately well informed regarding both the level of training they would need to enter their chosen career and the entry requirements for this training. Students’ knowledge improved significantly after each strategy, with approximately 63% of Year 8 and 9 students in the pre-survey\(^\text{18}\) demonstrating a correct or partially correct understanding of the relevant level of training, compared to 81% in the post-survey, indicating that the sessions and resources were useful in providing accurate information. A similar trend was identified in a recent Smith Family / ACER study of over 3000 junior secondary school students from disadvantaged backgrounds, in which more than one third of those surveyed did not fully understand the level of education required to achieve their chosen careers (Beavis, Curtis & Curtis, 2005, March and September).

Prior to the intervention

Prior to the intervention, just over one in three Year 8 and Year 9 participants (37%) correctly identified the appropriate level of post-secondary training that was required to enter their chosen careers and 26% showed a partial understanding. Slightly fewer – 32% correct and 22% partially correct – demonstrated an accurate understanding of the appropriate subjects they should choose in order to gain entry into the appropriate degree needed for their chosen career. Even fewer – 27% accurate and 54% partial – had a clear idea of the likely UAI cut-off (mark range) for entry into the appropriate degree.

These figures closely correlate with the proportion of participants who reported having a role model in their immediate family who went to university (33%), indicating that the experience of family members may have an important impact on the specific knowledge of the young person with regard to career entry requirements. Two of every three young people in this study appear to have no access to this important information in their family home, indicating an important role for an intervention in filling this gap. This finding was supported in the interview data, where students’ knowledge of university was clearly linked to their parents’ experience of education.

\(^{18}\) The Year 10 cohort was only surveyed after the intervention as it was not known which students would participate until the day of the campus visit.
After the intervention

Responses to Questions 6, 7 and 8 in the After survey showed improved knowledge across the three identified areas of school subject, UAI cut-off marks and post-secondary training requirements. In each case, a paired t test indicated a statistically significant difference. Responses to Question 6 showed an important increase in students’ knowledge of the post-secondary education/training requirements for entry into their chosen careers, with 72% of Year 8 and Year 9 participants in the post-survey showing a full understanding of what is required, up from 37% in the pre-survey, or almost double. This represents a change of +0.53 in the mean. In a paired t test the two-tailed P value was < 0.0001 which, by conventional criteria, is considered to be statistically significant. (Refer to Appendix 9: Knowledge of entry requirements). There was also an important increase in participants’ understanding of the subjects they would need to study at school, up from 32% in the pre-survey to 54% in the post-survey. This represents a change of +0.31 in the mean, also giving a two-tailed P value of < 0.000, which is also considered to be statistically significant. (Refer to Appendix 9). There was a lesser, but still statistically significant, shift in the young people’s knowledge of UAI cut-offs for entry into the appropriate university degree, with 40% providing a correct estimate of the mark range required in the post-survey, compared to 27% in the pre-survey. The difference in the mean of pre- and post- was 0.13, with a two-tailed P value of 0.0012. (Appendix 9 provides an overview of pre- and post-means, the difference in the mean from pre- to post-, and the two-tailed P value). Figure 6.1 (below) shows the percentage of students identifying appropriate, partial and incorrect post-secondary educational requirements; Figure 6.2 shows knowledge of appropriate school subject choice; and Figure 6.3 shows knowledge of the appropriate University Admissions Index (UAI).
Figure 6.1. Q. 6. Identifying appropriate post-secondary educational requirements pre- and post-intervention: Years 8 and 9 (%). (N = 78).

Figure 6.2. Q. 7. Identifying appropriate school subject choice pre- and post-intervention: Years 8 and 9 (%). (N = 78).

Figure 6.3. Q. 8. Identifying appropriate UAI pre- and post-intervention: Years 8 and 9 (%). (N = 78).
Given that the Year 8 and Year 9 strategies focused on post-secondary pathways, this outcome is to be expected, and shows a strong positive impact from the intervention on participants’ knowledge of entry requirements into their chosen careers. In terms of cultural capital, having access to accurate information about post-secondary alternatives and requirements for different careers is critical in enabling young people to form aspirations and make informed decisions. Two thirds of the young people in this study do not appear to have access to accurate and specific information from immediate family members. It is therefore critical that young people such as these are provided with the information they need from another source. In this case, the intervention appears to make a significant contribution towards filling this gap.

Interview data

These findings were supported in the interview data, where several participants reported that an ACULink strategy was the first time they realised they would need to go to university in order to pursue their chosen careers. As Sarah, a Year 12 student, recalled:

Sarah:
I remember in Year 8… You came to our school and… we went to the library and… we were talking about careers. And what I wanted to do then was, I wanted to be like my Mom, a computer programmer, analyst in the IT department… We were thinking of ways to get to our career… I remember for teaching you had to go to university.

Jo:
Was that the first time you worked out you needed to go to university?

Sarah:
Yes…. I wanted to be a teacher way before that, but that confirmed I had to go to uni. (Sarah, Goal-Setting, refs. 1, 3).

Similarly Margaret (Year 10) reported that the before the Goal-Setting “I wasn’t really sure … that you actually needed to go to university to become something more important.” (Margaret, Goal-Setting, ref. 2). Amanda (Year 8) also said the Goal-Setting strategy was where she “found out that you had to go to university for Journalism.” (Amanda, Goal-Setting, ref. 5).
The intervention not only raised students’ awareness of the need for a university education. For some, it simply raised their awareness of the range of post-secondary options they could choose from. It showed Tina (Year 8) the wide range of careers available: “that table of careers… and realising what I actually could do – there’s so much” (Tina, Goal-Setting, ref. 2). For Patricia (Year 9), the Year 9 Pathways session was helpful because “I’ve learnt how much, what I need to do, and my marks, and now I’ve learned where I can go to see what universities and what options I have” (Patricia, Pathways, ref. 5). For John (Year 10), the sessions “helped me see what sort of subjects I need… and what sort of level I might need to get that kind of job” (John, Goal-Setting, ref. 3). These examples indicate that the intervention was critical in shaping some participants’ knowledge of the post-secondary options available to them.

The young people who had a parent with an Australian university education were much better informed about their post-secondary options, particularly with regard to the courses that are on offer at different universities. They also had a much better understanding of what the entry requirements are and, importantly, a more realistic view of their own chances of meeting those requirements. For example Lisa, whose father has a Law degree, had a clear idea what the entry cut-offs are for Law at particular universities: “I have to get a UAI of over 85” (Lisa, Research, ref. 1). She also correctly named three universities which offer Law degrees, before taking part in the intervention. Having a parent with personal experience of going to university seems to have helped her to develop an accurate view of study options and of university life.

In contrast Deborah, a Year 10 student whose parents had not completed secondary school, was “very clear – 100%” that she was going to become a doctor (Deborah, Goal Orientation, ref. 2). Unlike Lisa, however, before the intervention she “[didn’t] have a clue” what she needed to do after finishing school in order to enter this career (Deborah, Research, ref. 4). When quizzed about her ability and school results, Deborah described herself as “just average – if the class fits the average would be 50 percent, I would be around 45 percent” (Deborah, Self-Efficacy, ref. 6). This is a long way from the top 3% that is required for entry into most medical degrees and represents a significant mismatch between her aspirations and her knowledge of the entry requirements. Despite the fact that Deborah’s parents were “proud of me” (Deborah,
Conversations, ref. 4) and encouraging her to “go for it” (Deborah, Encouragement, ref. 3), they evidently “don’t have much knowledge about it” (Deborah, Information Sources, ref. 1). They were therefore not able to counsel Deborah to consider other options in the event that she did not meet the entry requirements for a medical degree.

**Knowledge of financial considerations**

Young people’s knowledge of financial considerations was explored in Chapter Five in the section on *parental support*. In summary, parents’ experience of education was shown to affect the accuracy and specificity of information they were able to provide with regard to the costs involved in going to university. In many cases, the young people were ignorant of, or held misconceptions about, higher education fee payment arrangements in Australia. Of the interview participants whose parents either did not have a university education or had attended university outside Australia, none showed any knowledge of the HECS system before participating in the intervention. Their parents demonstrated incomplete or inaccurate knowledge of the costs of going to university and the HECS system and consequently there was little clarity among these participants about how much university might cost. In most cases the young people and their parents believed they would need to pay tuition fees. For several students, financial constraints and misconceptions about the costs of going to university were a concern and in some cases presented a potential barrier to transition.

In contrast, those participants whose parents had attended university in Australia demonstrated at least a general idea of the existence of the HECS and how the payment system operates. Having a parent who had experience of university was therefore critical in shaping the young people’s understandings regarding the costs of going to university.

*Perceptions of barriers: Financial*

The survey data further illuminate this phenomenon of misunderstanding of the financial considerations. Questions 34 to 38 investigated the extent to which young people’s beliefs about the costs of going to university acted as a barrier to transition, through asking students to respond to the following statements around the costs of further study:
• Question 34: The cost of university fees is likely to stop me attending university.
• Question 36: My family can afford to support me while I study at university.
• Question 38: I need to earn a full-time living straight after finishing school.

Responses were scored on a 5-point scale where 5 equals strongly agree, 4 equals agree, 3 equals unsure, 2 equals disagree and 1 equals strongly disagree. Pre- and post-intervention means were compared, and a paired t test was conducted, to evaluate the impact of the intervention. (See Appendix 13: Encouraging and discouraging factors).

Prior to the intervention

Overall, responses to Questions 34 to 38 showed that relatively few participants overall held perceptions of potential financial barriers to their entry to higher education. Only 18% of the Year 8 and Year 9 cohorts in the pre-survey agreed or strongly agreed with the statement: The cost of university fees is likely to stop me attending university. Somewhat higher was the proportion who agreed or strongly agreed with the statement I need to earn a full-time living straight after finishing school at 24% of Years 8 and 9 students, while 65% agreed or strongly agreed that my family can afford to support me while I study at university.

After the intervention

After the intervention, there was a decrease in the number of Year 8 and Year 9 participants who believed that the cost of going to university would present a barrier to their entry. Only a small number – 10% – reported that the cost of university fees would be likely to stop them from attending university, down from 18% in the pre-survey. This represents a change of -0.27 to the mean and a two-tailed P value of < 0.0001 which is considered to be statistically significant. This indicates that the message about the Commonwealth system for deferred payment of fees had an impact on students understanding and removed, for a significant proportion, a perceived barrier to entry.

19 Note: Questions 34 and 38 are negative questions and hence were scored in reverse, as "agree and "strongly agree" would constitute negative responses.
20 The Year 10 cohort was only surveyed after the intervention.
A smaller, though still statistically significant difference was also observed between pre- and post- responses to Question 36: My family can afford to support me while I study at university. In the post-survey, 73% agreed or strongly agreed with the statement, up from 65%. This represents a difference in the mean of +0.12 and a two-tailed P value of 0.0059. In contrast, there was a negative difference in responses to Question 38: I need to earn a full-time living straight after leaving school. (Refer to Appendix 13 for a full set of results). However, with a difference in the mean of +0.07 and a two-tailed P value of 0.1093, the difference is not considered to be statistically significant. It is also possible that responses to this question were confounded by young people’s growing understanding that they could work and earn a living while studying at university.

These findings were explicated in the interview data, where a number of participants mentioned that the intervention had provided them with vital information about university costs and the payment options available. Patricia (Year 9) said: “You told us that you can pay, like after – you don’t necessarily have to pay while you’re at uni. You can pay from when you get a job” (Patricia, Pathways, ref. 1). For a few, learning this was a source of relief and in some cases opened up possibilities they had formerly believed were not available to them. For example, Catherine (Year 11) had believed she would not be able to go to university because her parents could not afford it:

Jo: Do you ever think of anything that might make it difficult for you to go to uni?

Catherine: The money side, the financial side of it maybe.

Jo: Have you spoken to your parents about the financial side?

Catherine: Not exactly.

Jo: Can you explain why that might make it difficult?

Catherine:
'Cause at the moment we’re renting and I asked my Mum when she thinks we’re going to move to our own home and she said it might take a few more months and I don’t know how long that will take. I don’t think it will take long but... it’s that, plus my brother’s school, all the bills that we have to pay... and to get citizenship, we have to save up for that. (Catherine, Impact on Beliefs, ref. 3).

After the intervention, Catherine demonstrated a better understanding of her payment options, saying: “I think it’s called HECS program or something? You go to uni and then when you get a job you pay off the money you owe.” For Catherine, this had been “a bit of a relief, that my Mum and Dad don’t have to worry about that” (Catherine, Impact on Beliefs, ref. 4). Sean also indicated that the Year 9 Pathways session was the first time he learned about the HECS: “It was when you came to [St Thomas More Catholic College] to talk about university”. Finding this out “relieved a lot of stress on whether I can save that money” (Sean, Pathways, ref. 1). Margaret (Year 10) described how her plans were affected on gaining this knowledge: “you told us we could pay when we start working... so that kind of changed my mind and got me into going” (Margaret, Campus Visit, ref. 1). Carly (university student) voiced similar sentiments (refer to Chapter Five, Financial Support), as did Michael (Year 11). All six were initially ignorant of HECS, and this had presented as a potential barrier to their entry to higher education. Learning about HECS through the intervention removed financial concerns as a barrier and ultimately encouraged them to view university as a viable alternative.

Personal characteristics

The first two analytical categories of social and cultural capital were derived from the theoretical framework in advance of data collection. During the early stages of data analysis, however, it became apparent that there were additional factors and conditions impacting on participants’ aspirations. Many participants were aiming high, and achieving at high levels, regardless of their family circumstances. It became apparent that it was not only factors in their social and cultural worlds which needed to be investigated, but that the personal characteristics of the participants themselves
needed to be taken into account. This section of this chapter explores these personal characteristics. Again, they are presented in terms of before and after the intervention in order to identify any impact of the project.

The young people in the interview sample were a remarkable group. All but one had high aspirations for post-secondary study. Almost every one came across as a motivated, hard-working student and all were drawn from the upper half of their respective cohorts. It was beyond the scope of this study to identify participants’ academic abilities with specificity but there appeared to be a wide range of achievement among the group. In one other important regard they demonstrated a wide variance and that was in their self-efficacy. While several described themselves as confident and doing well at school, a large proportion had quite low self-efficacy with regard to their beliefs in their chances of gaining access to university.

Participants’ personal characteristics will be explored under conceptual headings which emerged in the first two stages of data analysis. These are:

- Goal orientation and work ethic;
- Pragmatism;
- Self-efficacy; and
- Identity.

**Goal orientation and work ethic**

Goal orientation is applied here to describe how the young people set career or study goals for themselves, and how they felt they were working towards these goals. Work ethic is used to describe how participants described themselves in their efforts with their school work. While these two began as theoretically discrete constructs, there was a high degree of overlap when participants described themselves. Hence the two are dealt with together here.

**Prior to the intervention**

Many participants talked about the importance of setting goals for themselves with regard to their post-secondary study aspirations. For example Carly (university student) said that, despite being concerned that she might not get the marks she would
need, “I still, you know, pursued my goals, still tried to get into university” (Carly, Goal Orientation, ref. 2). There was little variation in participants’ beliefs around the importance of effort, with many articulating the importance of working hard to achieve their goals, and almost all describing themselves as motivated and hard-working. For example Maria (university student) described herself thus:

I always set my goals. You have to achieve. I’m a really hard worker, I don’t need to be told to do my work, I just study. I’m really work-driven. And I always look to the future – I’m a planner. (Maria, Work Ethic, ref. 3).

Margaret (Year 10) also saw herself as working hard, saying:

I study every night, because if I don’t start now it’s going to be very hard for me in Year 11 and 12. So I study, I do research and I read everything about what I’ve learned, and look whether I have any homework or assignments. (Margaret, Work Ethic, ref. 2).

Despite being only in Year 10, Margaret had bought and studied past HSC Chemistry and Biology papers and was trying to “prepare for next year” (Margaret, Work Ethic, ref. 1).

Participants also valued the role of motivation and, in particular, self-motivation in moving them towards their goals. Elijah (Year 11) saw “the motivation to keep going… just concentrating on school work” as an important ingredient in his future success (Elijah, Goal Orientation, ref. 3). Michael (Year 11) believed that, to get into university, he would need to “Just focus at school, stay on task. Study and stuff a lot next year. Just put my head down and keep that my top priority” (Michael, Work Ethic, ref. 2). As well as being hard workers, most participants saw themselves as self-motivated in their studies. Katie, in Year 8, exemplified this:

Jo:
Are you a good worker?
Katie:
Yep.
Jo:
What are you like with homework and assignments?
Katie:
I usually get it done.
Jo:
Do you get any help with that?

Katie:
Not really… it’s usually pretty easy.

Jo:
So you manage on your own?

Katie:
Yep. (Katie, Work Ethic, ref. 2).

Several participants regarded their own efforts as the most important factor that was helping them to achieve their goals. For example Albert, in Year 10, when asked if anyone or anything was helping him to attain his goal of joining the police force, responded with “Just me. I’m just getting there my own way. No one else is pushing me or helping me.” (Albert, Goal Orientation, ref. 6). He was adamant that “I mostly get where I am by myself” (Albert, Work Ethic, ref. 4). Similarly, when asked what was the most important factor supporting him, Sean (Year 11) said “I think it is most important to keep studying, keep working hard” and that “my own self-motivation is really enough” (Sean, Work Ethic, ref. 2). Anna (Year 9) also said it was “mostly myself… if I don’t actually put in the work, make an effort to get to my goal” (Anna, Goal Orientation, ref. 4). Lucy also rated her own efforts as the most important factor, saying “I’ve got to do it myself… I’ve got to study myself, no one else is going to do it for me” (Lucy, Goal Orientation, ref. 4).

Not all, however, felt that their efforts would be sufficient to get them into university. For example, although Nancy understood that “self-motivation” was required if she was to get to university (Nancy, Goal Orientation, ref. 1), she did not feel she was working at the level that was required:

Jo:
So you think you need to work quite hard?

Nancy:
Yes. Harder than I am now…

Jo:
Can you think of anything that might prevent you getting to university?
Nancy:
Studying… I don’t study as much as I should.
(Nancy, Work Ethic, refs. 1, 4). Deborah (Year 10) also doubted whether she was working enough, saying she worked “most of the time. Then I muck up, just for fun” (Deborah, Work Ethic, ref. 2). For both Deborah and Nancy, this presented a potential barrier to their gaining access to university.

After the intervention
There was little evidence of the ACULink project having any direct impact on the goal orientation and work ethic of the interview participants. This may well be because they were such a highly motivated and focused group to begin with. It may also in part reflect that the key message of ACULink is one of “you can do it” rather than exhorting the young people to work harder. However one university student, Paolo, mentioned that he felt inspired by his visit to campus:

Jo:
And you say you found talking to the university students to be helpful?
Paolo:
Yes.
Jo:
What sort of things did they say?
Paolo:
… They talked about how it’s stressful at times, but at least you know that at the end of it, you have a degree, so it pays off in the end. They were encouraging us to work hard, as well. So it was a bit of a push.
Jo:
And did that make a difference?
Paolo:
Yeah. ..what they said to me, it kind of inspired me to do the best that I can, and to keep trying. (Paolo, Work Ethic, ref. 1).
The impact of the intervention appears to have been more indirect, through raising aspirations and expectations and thereby potentially motivating young people to work harder.
Pragmatism

Pragmatism in this context is used to describe the extent to which participants selected a career based on their interests and what they saw as their strengths. Most participants displayed a degree of pragmatism in their choices. The more pragmatic were also able to consider the possibility that they might not get into their first choice of career, and were looking beyond their one dream job to consider alternatives. A few had undertaken some independent research into their options.

Prior to the intervention

Most participants were selecting careers primarily on the basis of their interest in the field, and secondarily on the basis of their perceptions of their abilities. For example John (Year 10), wanted to be a chef “Just for the love of it [cooking] – the practical” (John, Pragmatism, ref. 2). He had initially wanted to be a veterinarian, but reconsidered as “I’m a bit squeamish. For the… blood and all the surgery” (John, Pragmatism, ref. 1). Jennifer (Year 8) had chosen teaching as “It’s fun. You’re around little kids, you’re helping them learn things” and she felt that “I’m good around children, pretty good at teaching them” (Jennifer, Pragmatism, refs. 1-2). Another Year 8 student, Tina, described the process she went through as she thought about her future:

I kinda read a lot of books about things that you know interest you – what you should go for and things like that. So I… think about my interests and what I would like to do. And I want to do something which I find interesting, which I really want to do. (Tina, Pragmatism, ref. 1).

Another Year 8 student, Katie, had come to similar conclusions via an unusual path. Her inspiration to become a PE teacher had come “because I had a car accident. I know a lot about the body now and muscles and bones and everything and I like sports and I’m good at sport, so… it all fits together” (Katie, Pragmatism, ref. 1). Despite the somewhat unorthodox means, Katie was going through the same process of choosing a career based on her interests and abilities.

While most participants had settled on one clear goal, a few were keeping their options open. Michael (Year 11) was considering a career in science but was not sure which area. He said:
At the moment I want to go to university but I don’t know what to do yet so I’m thinking I’ll try to get the highest UAI possible and hopefully do a Science course to start off with and then wherever it takes me from there. (Michael, Goal Orientation, ref. 1).

Even Albert, who was so definite that he would join the Police Force, was pragmatic enough to explore other options. He had investigated Information Systems and Business courses “’Cause I’m really good at it… I got top marks for it this year and last year” (Albert, Pragmatism, ref. 2).

Tina (Year 8) was also considering several options. In the first interview she said:

I’m stuck between two things, they’re kinda opposite each other. But I like design and I also like the law… ’cause I love to debate and argue, ’cause I do debating at school now so I think that I would be a good one. I enjoy it so much. And with design I like scrapbooking and… I really like designing clothes so I think clothing would be a good one to do. (Tina, Pragmatism, ref. 1).

Interestingly, by the second interview some months later, Tina had further re-considered and was thinking of becoming a pilot in the Defence Forces.

A few participants had not really considered alternatives to their first preference of career. However, these were often pragmatic to the extent that, if they did not achieve their aim of getting into university after Year 12, they planned to find another pathway and to keep trying until they did. For example Elijah, in Year 11, said that going to university was “something I really want to do… and if I don’t get it I’m just going to try other ways of getting to it” (Elijah, Goal Orientation, ref. 7). Martha, in Year 8, had also considered trying other pathways, saying “I’d just keep trying… I’d probably have to go to TAFE and try again” (Martha, Goal Orientation, ref. 3).

After the intervention

There were a couple of instances which indicated a small impact of the intervention on participants’ pragmatism, in that it prompted some to further explore their alternatives. For example Anna (Year 9) said the Year 9 Pathways session was “very” helpful because “once I got home I actually did some research” (Anna, Pathways, ref. 1). After a Campus Visit Margaret (Year 10) was prompted to find out
more so she “actually went on the site you gave us… I clicked on Macquarie and it said a higher mark, and then in the University of Sydney, it was a bit lower” (Margaret, Campus Visit, ref. 2). For Patricia (Year 9) the intervention prompted her to select a career based on a more realistic assessment of her abilities:

*Patricia:*

It just showed me that to go into Law I was going to need to work extremely hard, and I might not be able to do it. So that PE teaching would be, like, an easier option and something I enjoy at the same time…

*Jo:*

How much of an influence did that session have on your decision?

*Patricia:*

It had an influence. It wasn’t really my major, it didn’t turn me around completely, but it did influence me,… In the end it was just that I could have more fun actually playing sport than I could sitting up in an office. (Patricia, Pathways, ref. 3).

In summary, the majority of participants demonstrated a pragmatic approach to choosing a career. All gave consideration to their interests and abilities, and some were exploring alternative careers and/or alternative pathways to their chosen career. The intervention had a small impact in that it encouraged some participants to look into other alternative careers and/or alternative pathways to their chosen career.

**Self-efficacy and identity**

This section relates participants’ self-efficacy beliefs about their ability to go to university. This is explored in terms of how they rated their chances of gaining the necessary marks to gain entry to the course of their choice, and in terms of how they felt they would cope with university work. The notion of identity is used to describe the extent to which participants were able to envisage themselves as university student and/or working in a profession. While these are discrete theoretical constructs, there was a high degree of overlap when participants talked about their sense of identity and self-efficacy.

In addition to providing accurate information, ACULink endeavours to enhance young people’s self-efficacy with regard to their ability to enter the post-secondary
course of their choosing, and to their ability to cope with the workload. These self-efficacy beliefs were rated both before (Years 8 and 9 only) and after (Years 8-10) the intervention. This section examines responses to survey Question 25 – *I expect to get a high enough mark to get into one of my first two choices of university course* – and Question 39 – *I would be able to cope with the workload at university*. Results were rated on a 3-point scale where 3 equals yes, 2 equals unsure and 1 equals no. Pre- and post-intervention responses were compared (Years 8 and 9 only), and a paired t test conducted to ascertain the statistical significance of any differences.

**Self-efficacy: University entry**

*Prior to the intervention*

In the pre-survey 64% of Year 8 and 9 students expressed the belief that they expected to get a high enough mark to gain entry into one of their first two choices of university course (Question 25), thus over 1 in 3 believed that they would not or were unsure. This is very close to the percentage who aspired to go to university (65%), suggesting there may be a link between self-efficacy with regard to academic results and aspirations for university.

*After the intervention*

The intervention appears to have had a positive impact on the participants’ self-efficacy with regard to university entry. In the post-survey, 77% of Year 8 and Year 9 students expressed confidence that they would get a high enough mark to get into one of their first two choices of university course (Question 25), up from 64% in the pre-survey. (Refer to Figure 6.4). This represents a change in the mean of 0.26, with a P value of 0.0003, which is considered statistically significant. This effect appears to be embedded, as 75% of the Year 10 cohort believed that they would get a high enough mark and only one student expressed the belief that they would not. (Note: as the Year 10 cohort did not complete the pre-survey, this observation is extrapolated from observation of the general trend from the Year 8 to the Year 10 cohorts and is therefore not conclusive).
Q. 25. I expect to get a high enough mark to get into one of my first two choices of university course: Years 8 and 9 (%). (N = 78).

Self-efficacy: Ability to cope with university work

Prior to the intervention

Pre-existing self-efficacy in terms of participants’ perceptions of their ability to cope with university work was moderately high, with 60% of Year 8 and Year 9 participants agreeing or strongly agreeing with the statement I would be able to cope with the workload at university (Question 39). This closely matches the proportion who aspired to go to university, again suggesting a link between self-efficacy beliefs about academic ability, and aspirations for university.
After the intervention

The intervention appears to have had a positive impact on participants’ self-efficacy with regard to their belief in their ability to cope with university work. In the post-survey 69% of Year 8 and Year 9 participants felt they would be able to cope with the workload, up from 60% in the pre-survey. (Refer to Figure 6.5). This represents a change in the mean of 0.26, with a P value of 0.0003, which is considered to be statistically significant. (Refer to Appendix 12: Self-efficacy beliefs). Among the Year 10 cohort, 56% believed they would be able to cope, and only one student felt they would not, with the remainder unsure. This reflects moderately strong levels of self-belief, as well as an evident effect of the intervention in enhancing self-efficacy beliefs.

Interview data: I didn’t expect to get enough marks to get in

While most interview participants expressed hope that they would get enough marks to get into the university course of their choosing, levels of optimism ranged from a vague hope through to unswerving confidence. Once again, there was a strong relationship evident between those who had family members who had successfully gone to university ahead of them and those who had no immediate role models. For some of those without role models, the intervention had a profound effect on their self-efficacy.

Most participants who had close positive role models were confident that they would get the marks that they needed. Lisa (Year 8), whose father has a Law degree and a masters degree in Finance, rated her chances highly. She felt her academic performance was “pretty good” and said “the average of my scores is usually like 87, 88%... most of the time” (Lisa, Self-Efficacy, ref. 8). Similarly Albert (Year 10), whose mother was a nurse and whose uncle was an academic, displayed high self-efficacy with regard to his schoolwork, saying “I’m really good at it... I got top marks this year and last year” (Albert, Self-Efficacy, ref. 8). When asked if he had any concerns that he might not get the marks he needed, he said “I’ll get in. Definitely.” (Albert, Self-Efficacy, ref. 5).

Not all those with positive role models were quite this confident. Anna (Year 9), whose mother went to university in Vietnam, felt she had “an OK chance, but not a very high chance” and that “if I want to get into uni I have to study more” (Anna, Self-
Efficacy, ref. 6). Amanda (Year 9), whose mother studied in the Philippines, was also unsure of her chances:

Jo:
You think you need moderately high marks to get in [to Journalism]?
Amanda:
Yeah.
Jo:
Do you think that’s a likelihood for you?
Amanda:
I guess so.
Jo:
How well are you doing at school at the moment?
Amanda:
I do OK. (Amanda, Self-Efficacy, ref. 3).

Sean (Year 11), whose parents went to university in the Philippines, also felt unsure, saying his chances were “Not so good” and he wasn’t sure about the marks – whether I’ll get them or not” (Sean, Self-Efficacy, refs. 1, 2). This uncertainty was common among those whose parents had overseas university qualifications.

Several participants without close role models expressed concern that they might not get in. Martha (Year 8) was “really worried” that she might not get the marks to get into an education degree because “before… the mark was a bit lower. But now you have to get in the 80s… so I’m worried that I won’t get in” (Martha, Self-Efficacy, ref. 2). Paolo (university student), recalled that during Years 11 and 12 he “wasn’t getting very good marks” and that consequently he was “scared I might not get in”. (Paolo, Self-Efficacy, refs. 2, 3). Elijah (Year 11) was also not confident. He felt that “At schoolwork, I’m not so good,” and rated his chances as only “out of ten… maybe a six”. (Elijah, Self-Efficacy, refs. 4, 5).

There were some exceptions to this pattern. For example Michael (Year 11), whose parents “dropped out” after Year 10, still described himself as “confident about everything I do” and rated his chances as “pretty good” (Michael, Self-Efficacy, refs. 3, 5). Similarly Jennifer (Year 9), whose mother had been educated at TAFE, said “I do
pretty well” at school, and that her chances “would be pretty good” (Jennifer, Self-Efficacy, ref. 9).

I would be able to cope with the workload at university

A few interview participants spoke explicitly about concerns they had concerning their ability to cope with the workload at university. Elijah (Year 11), who did not know anyone who had gone to university and whose own parents had “dropped out” of school early, thought that university work “would be too hard and like full on” (Elijah, Self-Efficacy, ref. 6) and this initially put him off the idea of going to university. Others were aware that it would be difficult, but were not going to let this deter them. Patricia (Year 9) felt she could manage a law degree, saying “I think there’d be a big workload but, if I put my mind to it, I could probably get through it.” (Patricia, Self-Efficacy, ref. 4). John (Year 10) also felt confident he would cope with the workload (at TAFE), saying “I think I would do pretty good [sic] – I’d be fine” (John, Self-Efficacy, ref. 2). While it may be that concerns about workload become more real in the later years of schooling, there is insufficient data to draw any firm conclusions.

After the intervention

There was strong evidence that, for a number of participants, the intervention had a positive impact on their self-efficacy beliefs with regard to gaining access, coping with university work and undertaking a professional career. After the Goal-Setting strategy Martha (Year 8) felt more confident in her abilities to become a teacher:

I wasn’t sure I would be able to cope with all the children and would I be a good teacher or am I just choosing that for myself? So I think that survey kind of helped me… it showed me that I’ve got the right qualities. (Martha, Self-Efficacy, ref. 6).

This effect was most pronounced among the older students, who had visited the university and interacted with the university students during the Role-Modelling and Shadowing strategies. Margaret (Year 10) recalled feeling more confident after meeting an ACU student during the Year 9 Pathways strategy:
it actually gave me more… as in, “you could make it” … I thought, before … the UAI probably will be very hard, and you can’t make it. So that made me… calmer, in going to uni… in making it to uni. (Margaret, Self-Efficacy, ref. 3).

Deborah (Year 10) also said that she was initially concerned that she might not get in because “I’m not good at exams” (Deborah, Self-Efficacy, ref. 3). However, after participating in the campus visit, she said “It made me feel comfortable that what I want to do is out there and I can do it” (Deborah, Self-Efficacy, ref. 7). Sean (Year 11) also said that “I didn’t really think I would be able to make it into university, but after I went to campus I thought I could” (Sean, Identity, ref. 1). For Elijah (Year 11) the Role-Modelling was also a turning point:

I’d say it was heaps [helpful] ’cause I wasn’t really thinking about going to uni. I thought it would be too hard and like full on. But they came and said stuff like “It’s not that hard”. That was the main thing that worried me about uni, being hard... But the way they said it was completely the opposite. It really did help me. If they didn’t come I wouldn’t have thought about going to uni. (Elijah, Self-Efficacy, ref. 6).

Maria (university student) spoke at length about the impact meeting ACU students had on her self-efficacy. She recalled:

I remember she told me it wasn’t hard for her to get in, into uni. And I was like “Are you sure? Because it just seems really impossible for us.” Like… to get into uni. But she was saying “It’s not. It’s not hard to get into”… “You can get into uni”. She kept saying that and me and my friends are like “Oh, OK, we can get into uni guys”… And I knew she meant it when she said we could get into uni. (Maria, Self-Efficacy, ref. 7).

Sarah (Year 12) explained why this visit had such a powerful impact on her:

I remember… when the students from the uni came to our school and we got to talk to them… That was really good because what we’ve heard so far is from the lecturers, or from our teachers. But it’s really different if it’s from actual students because… I guess people believe them more ’cause they’re the ones who are actually doing it. So yeah, that really helped. (Sarah, Role Modelling, ref. 1).
It appears that the “can do” message was more powerful when coming from university students than when coming from parents or teachers.

The strategy that had the greatest impact on participants’ self-efficacy was the Step-Up into Teaching (SUIT). Initially, Sarah (Year 12) was concerned that she might “get a really low UAI… not meet up to the standards or requirements” (Sarah, Self-Efficacy, ref. 3). However, after participating in SUIT, she expressed much more confidence, saying “As of now, I think I can. I’ll be able to get into uni and finish” (Sarah, Self-Efficacy, ref. 1). This confidence came in part from experiencing success in completing university units while still at school, and in part from the 5-mark leeway it gave. Lucy (Year 12) described the confidence she gained, saying she felt “pretty confident… with the courses I’ve already done, that takes 5 UAIs off… so even if I don’t quite make it there I’ve still got a chance of getting in” (Lucy, Self-Efficacy, refs. 5, 7). Carly (university student) also felt that “during the middle grades of school I thought… with the marks, it might be impossible for me to get in” (Carly, Self-Efficacy, ref. 1). The additional marks Carly gained as a result of completing the two university units as part of the SUIT program were critical in raising her self-efficacy and in facilitating access. As she put it: “I wouldn’t be here now if it wasn’t for them… this really did help me get in, it was really, really worthwhile.” (Carly, Self-Efficacy, ref. 7).

**Identity**

Closely related to students’ self-efficacy is their ability to identify with university students and/or with people working in the field they aspired to. Survey questions 42 and 44 addressed participants’ sense of identity, asking them to respond to the statements *people like me often go to university* (Question 42) and *people like me often get work in my chosen career* (Question 44). Overall, responses were positive, showing many more students who could envisage themselves as a university student and as working in a profession than the proportion who had a relevant role model within their immediate family. There was significant positive impact from the intervention evident in both aspects.
Prior to the intervention

51% of Year 8 and Year 9 students agreed or strongly agreed that *people like me often go to university*. Around the same proportion – 53% – agreed or strongly agreed that *people like me often get work in my chosen career*. This is quite high given the large proportion (67%) who did not have a role model in their immediate family who went to university, and the even lower proportion (around 18%) whose parents were employed in professional and managerial occupations to help them to form this belief. However, it is lower than the number who aspired to go to university. This may explain some of the gap between participants’ aspirations and expectations. That is, despite two in three students wanting to go to university, one in two found it difficult to envisage themselves there.

After the intervention

The intervention appears to have had a significant impact on the ability of participants to identify with university students and with people working in their chosen careers. In the post-survey, 73% of Year 8 and year 9 participants agreed or strongly agreed that *people like me often go to university*, up from 51% in the pre-survey. (Refer to Figure 6.6). This represents a change in the mean of 0.37, with a P value of <0.0001, which is considered statistically significant. In addition, 63% agreed or strongly agreed that *people like me often get work in my chosen career*, up from 53% in the pre-survey. (Refer to Figure 6.7). This represents a change in the mean of 0.38, with a P value of <0.0001, which is also considered to be statistically significant. (Refer to Appendix 13). This increase in confidence is likely to be a result of the school students interacting with ACU students during the intervention, particularly given the role models were recruited on the basis that they were “like” the school students in terms of their school and area of residency backgrounds.
This effect appears to be sustained as, in the Year 10 cohort, 56% agreed or strongly agreed that people like me often go to university, and 50% agreed or strongly agreed that people like me often get work in my chosen career. This appears to be lower than the Year 8 and 9 cohorts and also lower than the proportion who aspired to go to university (69%). However, when the six who did not attend the campus visit are removed from calculations, we are left with figures of 90% and 80% consecutively who agreed or strongly agreed with the two statements. This supports the notion that interaction with university students during the campus visit helps school students to identify with them. This result is borne out in the interview data.
Interview data

The interview data illustrate that the intervention had a significant impact on the extent to which the young people identified with university students. In the absence of a role model close to themselves who had successfully gone on to university, many of the participants related having difficulty picturing themselves as professionals and/or as university students. However, this changed after meeting ACU students through the intervention. Several described the university students as “like” themselves. For many this was a powerful discovery and had a profound effect. One example of this effect was Deborah (Year 10) who had initially aspired to become a lawyer. However, after a school excursion to the law courts, Deborah “saw how they interact with each other and I kinda changed my mind… I just didn’t feel that I was meant to be in that position… I don’t think I’d ever learn those terms they use” (Deborah, Identity, refs. 1, 2). Despite her high aspirations, Deborah was not able to identify with these professionals or envisage herself in that role. Later, however, Deborah recalled meeting Eli during the Year 9 Pathways strategy:

Just his looks, I remember. And the way he talked to us – like he was talking to teenagers, not to adults. And just the communication between – the bonding and that… Someone like me… He was from the Middle East. (Deborah, Identity, refs. 9, 10).

The fact that Eli was “like” Deborah in both ethnic background and age (relatively speaking, compared to other role models such as parents and teachers) made it easier for her to relate to him. This in turn helped her to envisage herself as a university student, as she thought “if this guy can do it, everyone else can.” (Deborah, Identity, ref. 11).

Once again, this effect was strongest among older students, as they had more opportunities to interact with the ACU role models during the Role Modelling and Shadowing strategies. Elijah (Year 11) spoke of the impact of meeting students during his Shadowing visit to campus: “Going there is pretty good, like talking with… meeting the people, but they’re not like real “students”. They’re “normal” students just like us. Like, they’re pretty cool”. (Elijah, Beliefs about University, ref. 8).

Carly (university student) also recalled the effect of meeting university students during the Role Modelling visit: “people at my school felt that not everybody will go to
uni, but these students made us feel like we can be part of it” (Carly, Identity, ref. 1). The fact that “When I saw them I knew their faces, they were very familiar to me” had a powerful impact (Carly, Role Modelling, ref. 2). Catherine (Year 11) said she had not been able to picture herself as a university student because “I was a bit scared to” (Catherine, Identity, ref. 3). However, when she met the students during the Shadowing strategy, Catherine said “I got over it and then I could” (Catherine, Identity, ref. 3). She found that “they were just like me… the shadowers that we had, just got out of Year 12, and when I look at Year 12 in school here, they are more like me.” (Catherine, Identity, refs. 1, 2). For both Carly and Catherine, the fact that the university role models were “just like me” made all the difference.

Before taking part in the intervention, Maria (university student) had always seen students at the “city” universities as different from herself. Here she recalled her perceptions:

I’ve always thought that in uni you have to be like the smartest kid, like I really thought it was impossible. Like, everyone who goes to uni in the city are just smart, like just brainiacs, they aren’t really like us like where I was living. I really looked at people who went to uni in the city like highly valued type people. (Maria, Beliefs about University, ref. 6).

This changed dramatically after meeting the university role models:

It seemed more possible to get there. ’Cause I thought uni students would live far away, ’cause they go to uni so far away. But these students, it’s like an indication that they’re not from far away. Like they’re just normal westies or wherever they live that go to uni too… they would just say “I live around here” or “I used to go to a high school in our area”… it just made it more close… Just seeing students from my school go to uni was, like, more real. (Maria, Identity, ref. 6).

Despite having it “in my head that I have to be at uni at some point” (Maria, Identity, ref. 6), and although striving to go to a prestigious “city” university, Maria had believed that this would be “impossible”. It appears that meeting people from her own school who had successfully gone to university was instrumental in enabling Maria to envisage such things as possible for herself.
In stark contrast, those students who had a close family member who was working in a profession and had gone to university ahead of them expressed having no difficulty in imagining themselves either as university student or working in the profession to which they aspired. For many, this was as a result of observing relatives in the role. One example of this was Albert (Year 10), who had spent time on a university campus where his uncle worked. His ability to envisage himself as a university student was evident in this exchange:

Jo:
Do you ever picture yourself at university?
Albert:
A few times, yes.
Jo:
And do you see yourself as fitting in?
Albert:
Yes. Definitely.
Jo:
Have you always felt that way?
Albert:
Yes. (Albert, Identity, ref. 7).

Lisa also talked confidently about how she saw herself in the future. Her ability to envisage herself as a lawyer is evident in the following exchange:

Jo:
Do you think you’d be good at being a lawyer?
Lisa:
Yes (laughs).
Jo:
Do you sometimes imagine yourself being a lawyer?
Lisa:
Yes, I do. Often. (Laughs).
Jo:
You don’t have any difficulty picturing yourself?
Lisa:
Not at all! (laughs). (Lisa, Identity, ref. 1).

Lisa’s father’s experience as a lawyer clearly helped her to see herself in the same role.

In another example Nancy (Year 11), who wanted to be a teacher, had observed relatives who were teachers, starting “when I was in Year 2. I remember attending the school… and my aunty was teaching me and I just loved it.” (Nancy, Other Role Models, ref. 4). Tracey (university student), whose father went to university, told a similar story:

I think it was because we used to play in the street, we had a lot of kids in the street, so we’d have like a little “school” and I would be the teacher with my other friends! (laughs)… So it’s just always been, I guess cause it’s something that I saw it at school and I liked it…yes, I just always wanted to do it. Even through high school, I wanted to do it. (Tracey, Identity, ref. 1).

For Nancy and Tracey, observing teachers had enabled them to see themselves in the role.

In summary, the intervention appears to have had a significant positive impact on the self-efficacy of many participants’ in terms of their ability to gain entry to university and their belief that they could cope with university work. Furthermore, it enhanced their ability to identity with university students and to envisage themselves at university.

**Embodied cultural capital: Beliefs about higher education**

The importance of the impact of a “significant other” in shaping the beliefs and aspirations of the young people in this study cannot be overemphasised. Findings thus far have consistently demonstrated a strong relationship between parental education and a young person’s knowledge of and beliefs about higher education, indicating the effect of having a close family member who has successfully completed a university education. While having parents with low levels of education did not limit the aspirations of participants in this study, it nonetheless appears to have shaped their beliefs about the university experience.
It is proposed that young people are influenced by their parents’ and other close role models’ beliefs about education. As we have seen, the majority of participants’ parents did not have a university education so we might expect that the young people would not have developed accurate perceptions of university and might be less inclined to view university as relevant and attainable, even where they might see it as desirable. The following section of the chapter explores these beliefs about university in terms of its desirability and relevance; the university experience; and its attainability.

**Beliefs about the desirability and relevance of a university education**

Survey questions 12 to 20 asked participants to compare their perceptions of their post-secondary alternatives (University, TAFE, Full-time job or Unsure) in terms of their desirability, utility and degree of interest and challenge. Unlike their counterparts in the James study (James 2002), the majority of respondents demonstrated positive perceptions of post-secondary study in general, with university consistently rating most highly.

**Prior to the intervention**

In the pre-survey, university overwhelmingly rated highest in all categories relating to beliefs. The majority of Year 8, 9 and 10 respondents believed that university: would be the most challenging option (Question 20: 83% of Years 8 and 9); would develop the knowledge and skills they need to enter their chosen career (Question 18: 67% of Years 8 and 9); and would be the most interesting option (Question 19: 60% of Years 8 and 9). Most also believed that university would lead to: the most highly paid careers (Question 16: 81% of Years 8 and 9); the most career options (Question 17: 76% of Years 8 and 9); and the most satisfying career (Question 15: 68% of Years 8 and 9). Thus, the young people in this study generally held positive beliefs with regard to the relevance and benefits of attaining a university education.

**After the intervention**

All categories of beliefs in Questions 15 to 20 showed a positive impact from the intervention. There were significant increases in Year 8 and Year 9 participants’

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21 The Year 10 cohort was only surveyed after the intervention.
beliefs that a university education would: help develop the necessary skills and knowledge for their chosen career (Question 18: Years 8 and 9 up 15%; 62.5% of Year 10); lead to a more satisfying career (Question 15: Years 8 and 9 up 13%; 75% of Year 10); and provide the most career options (Question 17: Years 8 and 9 up 12%; 69% of Year 10). There were also increases, though less significant, in the beliefs that university: would be the most interesting alternative (Question 19: Years 8 and 9 up 9%; 62.5% of Year 10); would lead to a more highly paid career (Question 16: Years 8 and 9 up 6%; 75% of Year 10); and would be the most challenging alternative (Question 20: Years 8 and 9 up 5%; 62.5% of Year 10). Overall, the intervention led to more positive perceptions of the relevance and desirability of a university education in an average of ten percent of Year 8 and Year 9 participants. (Refer to Figure 6.8. See also Appendix 11: Beliefs about work and study for a full report of results).

Beliefs about the university experience

A qualitative difference can be observed in the beliefs held by interview participants who had close positive role models compared to those who did not. Participants who had close role models were able to develop a reasonably accurate
picture of university study and life, while those without close role models often held misconceptions. This changed significantly after the intervention, with many of the older students in particular demonstrating an enhanced understanding of the breadth of the university experience. For many, this broke down perceived barriers such that they perceived university to be more desirable, relevant and attainable.

Prior to the intervention
Young people without a relevant role model either reported having little or no idea of what university might be like or were reliant on American television and movies for their impressions of university. Consequently, many of them believed that universities were “huge” and “daunting” places where learning was a case of sitting in an auditorium and taking notes, and that student’s life was nothing but study. Jennifer (Year 9), whose parents both went to TAFE, could not imagine university. When asked if she had a picture in her mind of what it would be like, she simply replied “No, not really”. (Jennifer, Beliefs about University, ref. 2). Margaret (Year 10) also felt she knew little about university life, saying:

I’ve been thinking oh, is it going to be like school? Like, there’s an exam you have to actually study for it, or assignments in like three weeks time and then hand it in. I didn’t know how it’s like. Or if you have like homework. I wasn’t sure about that. (Margaret, Beliefs about University, ref. 8).

In the absence of anyone who could provide her with information, Maria (university student) turned to American movies for her perceptions of what university might be like. This had given her the impression that it was like:

those American movies. Like big and rowdy and you’ve got flags everywhere… I thought it was students with lots of books. ’Cause I thought they were all smarties – you had to be to be at uni – so I always assumed they all had like heaps of books with them and there would be a teacher in front but he would never come close to you… He’d just be at the front and after that you’d go home and do whatever work it was. I just thought it was a really big place. (Maria, Beliefs about University, ref. 6).
Tracey (university student) held similar beliefs, from similar influences:

The image I would have had, I guess, was from American TV, and I think a lot of people have that image because my sister would talk to me and she’d say ‘Is your classroom like on TV, with that great big hall?’ and I’d say ‘Yes, we’ve got one or two of them’. (Tracey, Beliefs about University, ref. 1).

Similarly Sean (Year 11), whose parents had attended university in Lebanon, said his ideas were “highly influenced by what you see in the media – the movies and American college in the movies… adults everywhere, classes going on, giant rooms filled with people, lectures going on, giant campuses and dorm rooms and societies and clubs” and students would be “taking notes, listening to the lecturer” (Sean, Beliefs about University, ref. 1).

Several other participants imagined simply that university study would be hard work. For example Amanda (Year 9), whose mother went to university in the Philippines, said: “I think it would be more work… the teachers wouldn’t be as lenient… And there’d have to be more concentration stuff” (Amanda, Beliefs about University, refs. 5, 6). Jennifer (Year 9), whose mother went to TAFE, also felt it would be “pretty full-on… really demanding, and hard work.” (Jennifer, Beliefs about University, ref. 7).

The notion of university as a “big” place was a common theme among those without role models and even among some whose parents had gone to university. For example Catherine (Year 11), whose parents went to university in India, said “Before I visited I imagined it would be big and would be all students hanging around” (Catherine, Beliefs about University, ref. 4). Similarly Tina (Year 8), whose mother went to university, believed it would have “this big hall and you’re just listening to someone talk and just writing down lots of notes and everything… lots and lots of people in rows and just listening”. (Tina, Beliefs about University, ref. 1).

In summary, the young people without close positive role models perceived university as either unimaginable or as big, unfriendly and daunting. Most also held the belief that university was all work, that the work would be hard, and that teaching and learning at university comprised lectures, passive listening and note-taking, reading and
completing long written assignments. While these perceptions may hold some truth, they in no way can be said to represent an accurate view of the breadth of experience that is studying at university.

In contrast, those whose parents had attended university generally held perceptions that were broader, more detailed, more accurate and more positive. In many cases, these young people had visited a university campus and this experience had helped to break down negative or frightening images of university. One example was Lisa (Year 8), whose father is a lawyer. He had taken her to university open days and she said “It wasn’t as scary as I thought. I thought it would be massive, really scary… but it wasn’t… Nothing really freaky about it, just classrooms and stuff like that… It was cool – I can’t wait!” (Lisa, Beliefs about University, ref. 1). In another example Albert (Year 10), whose mother went to university, had visited Macquarie University with his uncle who was an academic. He had found that university was “A good environment… trees everywhere, the teachers are nice, the students all friendly” (Albert, Beliefs about University, ref. 2).

Students with close role models seem to have developed a broader picture of university life and study, in part from conversations with these role models. For example, Anna (Year 9), whose mother went to university in Vietnam, mentioned an old school acquaintance who had told her:

you have to be committed to what you are – actually do the work. If you don’t do the work, no-one is going to come and tell you to get on with it. You have to be really independent and you have to work every day. (Anna, Beliefs about University, ref. 5).

Similarly, Nancy (Year 11) gained some insight into what it might be like to study at university through her sister’s friend. This contact had told her: “It’s a lot harder than Year 12 and there’s a lot more knowledge and skills for you to learn”. (Nancy, Conversations, ref. 3). Nancy was also developing a picture of the social aspects of university life, where “friends are very supportive… and the teachers of course. If you need any help ask – she asks and they’re willing to help and get through”. (Nancy, Conversations, ref. 4). While they still clearly understood that university study might be
hard, these participants’ social connections had helped them to shape more varied, detailed and positive perceptions of university.

*After the intervention*

The intervention appears to have had a dramatic impact on many participants’ perceptions of the experience of going to university. This effect was particularly strong among the Year 10 and Year 11 cohorts who had each spent a day on campus. It was most powerful on those involved in the SUIT program, who were currently undertaking two university units as part of their Higher School Certificate.

The campus visit changed Year 10 students’ perceptions of the realities of university study. Deborah (Year 10) initially thought “it would be huge, like, you’d sleep there all the time and won’t go home. But it was different when I experienced it for myself”. (Deborah, Beliefs about University, ref. 5). Then the campus visit showed Deborah that “university’s not boring. It’s fun” (Deborah, Beliefs about University, ref. 1). This had a motivating effect on her, such that after the visit she said “I liked the experience to go and see it. It made a difference to what my opinions were … it really showed us what university is like. Now I really want to go to uni.” (Deborah, Beliefs about University, refs. 10, 13).

Other Year 10 students reported similar effects. John, whose mother was educated at TAFE, had originally believed “there’d always be lectures and then stuff like study hall… just a really huge campus” (John, Beliefs about University, ref. 4). Then the visit gave John “a little view into their life” and he saw that “it was more… closer community”. (John, Beliefs about University, refs. 3, 4). The visit also changed Margaret’s (Year 10) beliefs. Initially, she “never knew that uni could be good as well. I thought… that uni was always about reading for 10 hours and never having fun.” (Margaret, Beliefs about University, ref. 1). During her visit, however, she found that “I liked the lecture – they really made it fun for us. It was good. I saw how it’s like”. (Margaret, Beliefs about University, ref. 4). This caused Margaret to consider going to university: “That’s when I actually got into ‘Now I need to look and see how university is like’. I’d never thought about it before.” (Margaret, Beliefs about University, ref. 7).
Several Year 11 students reported similar impacts from both the Role Modelling – where they met university students – and the Shadowing – where they attended university classes for a day. The experience gave Elijah insight into the varied models of learning encountered at university: “We went there expecting to do heaps of work and stuff. But they do practicals and experiments and all that. It’s not just lectures and tutors” (Elijah, Beliefs about University, ref. 2). Consequently, he found that “it’s not boring, it’s interesting. It’s not all writing and talking and listening to people” (Elijah, Beliefs about University, ref. 5). For Elijah, the experience was “heaps helpful” and it “changed my image of how university was” (Elijah, Beliefs about University, ref. 6).

Another Year 11 student, Michael, reported a similar effect. He had initially envisaged university as “Just like the stuff on TV – big cafeteria, people walking around with textbooks… stuff like that” (Michael, Beliefs about University, ref. 1). Through the Shadowing he found out “how they can come in whenever they want – they don’t have to pay attention” (ref. 5). He found this motivating as it was “a good experience. It was fun… and made it enjoyable. Just to see the environment everyone works in, all the students there enjoy it as well. You see the freedom they get… that is something I want to do as well”. (Michael, Beliefs about University, ref. 6).

Sean (Year 11) also found the university experience “much different” to what he’d expected. He said the Shadowing visit “really showed me what university life is like… it really showed me how the students interact with each other, with lecturers, how they participate in classes… it was very informative” (Sean, Beliefs about University, ref. 2). In addition, the university role models “answered any questions like what university life is like” (Sean, Beliefs about University, ref. 5). Through contact with the university role models, Sean learned that “there is a balance… they all go to university to socialize but also to learn and follow their studies” (Sean, Beliefs about University, ref. 2).

In retrospect, the university student participants all acknowledged a profound impact from the time they spent at Shadowing and from their interactions with university students in the Role Modelling activity. Maria learned from Shadowing that university was “not as big as I imagined it would be. ‘Cause I’d always think ‘uni –
big’.” (Maria, Beliefs about University, ref. 8). Maria also found learning at university to be more practical than she had imagined:

I had this mindset that uni students were always in front of the computer typing up theses [sic] and that’s it. When we went to North Sydney they were all very hands-on with the models and hospital appliances. So then I had this mindset that uni was more practical. But I don’t think I would have thought that if I didn’t actually see it. Like, uni would be this door that you can’t get into unless you… see it through the window first… It was the biggest eye-opener for me. (Maria, Beliefs about University, ref. 11).

Once again, experiencing university first-hand was enlightening.

**Impact of SUIT**

Students who undertook the SUIT program were similarly positively influenced by the experience. In addition to opening a window into university life, the SUIT provided first-hand experience in undertaking full university units, thereby preparing them for university study. Like the Year 10 and 11 students, Lucy (Year 12) had initially thought university would be a lot of hard work and very individual as well. Mostly essays and not much practical… But that’s changed as I’ve spoken to people at university. They’ve said it depends on the course you do, whether it’s practical or not. (Lucy, Beliefs about University, ref. 2).

However, Lucy found doing the SUIT “not as hard as I expected… more interesting than I expected” and it had shown her “how it’s like. So it is not a shock.” (Lucy, Beliefs about University, refs. 8-10).

Through her experience in the SUIT Sarah (Year 12) also said she learned “what uni was like, what things I learn and how much to study”. (Sarah, Beliefs about University, ref. 5). It also changed how she felt in the university environment: “I felt really comfortable in the environment with the smaller uni… like big unis I felt intimidated”. (Sarah, Beliefs about University, ref. 11). Carly, a university student, recalled the difference participating in SUIT made to her: “It was like a reality of the expectations, as well as the fact that… university life was explained to us as well” (Carly, Beliefs about University, ref. 1). Undertaking the program “definitely did
prepare me… the workload… the referencing style as well. I wasn’t quite sure of that but those two courses really did help me understand.” (Carly, Beliefs about University, ref. 5).

Clearly, having a real-life experience on a university campus, attending classes and interacting with university students, all had a powerful positive impact on participants’ perceptions of university study and university life. After the Role Modelling and Campus Visits, all participants found university to be a more interesting, less alien place, with more to offer than passive models of teaching and learning. In addition, the opportunity to undertake university units while still at school provided further preparation for the realities of university study. In most cases this was both motivating and encouraging. For some, it made a crucial difference to their post-secondary aspirations. The following section explores these aspirations.

**Post-secondary aspirations and expectations**

The construct of aspirations as used here encompasses participants’ career and study goals. The term expectations refers to participants’ beliefs about where they are most likely to end up. This section now explores participants’ goals, the extent to which they changed over time, and the extent to which the intervention influenced their choices.

As parental occupation represents one of the prime indicators of a young person’s post-secondary destinations, we would expect to see young people’s aspirations broadly mirroring the career choices of their parents. However, this was not the case for the survey respondents in this study. Parental occupation did not limit their career aspirations in that two in three survey respondents were aiming for a professional career. A large proportion, therefore, looked beyond their parents as role models for their choice of occupation. However, as was seen in the James study (James, 2002), there was a significant gap between participants’ aspirations and their expectations of where they were most likely to end up. This section explores participants’ aspirations and expectations, and the impact of the intervention upon them.
Prior to the intervention

Question 5 of the survey asked respondents to *Name the career or careers you wish to pursue*. Responses were then grouped into categories according to the level of training that would normally be required to enter these careers. These categories were: *university degree or higher; TAFE and/or apprenticeship or equivalent*; and *school only*. Almost two in three respondents – 64% in the pre-survey – aspired to enter a career that would require a university-level qualification. It appears that the aspirations of the young people in this study are not constrained by the absence of role models in the family home, as they aspire to a higher education at around twice the rate of parents with a university education and aspire to higher status careers than that of their parents’ occupations.

After the intervention

There was very little overall difference pre- and post- intervention in the proportion of participants’ aspiring to careers requiring a university education. However, 56% of Year 8 and Year 9 did change their career goal in the interim. These changes took many forms. 9% raised, while 4% lowered, their aspirations (or perhaps chose a more realistically achievable career). The remaining 43% changed their goals to a career that would require the same level of training. In addition to raising (or lowering) aspirations, the intervention seems to have encouraged many students to consider a wider or more focused range of career options. Thus, while overall levels of education required for participants’ desired careers remained stable, 26% broadened their chosen career options after the intervention and 21% narrowed their focus to a more specific career after the intervention. The remaining 9% chose a substantively different career. It should be noted that neither broadening nor narrowing of choices is considered to be a more desirable result. Both changes show that the young person has given some consideration to their choices, and it is quite appropriate for people in this age group to be both exploring a wider range of options and/or focusing more specifically, depending on the stage they are at in their career planning.

Question 9 – *When did you first start thinking you would like to pursue this career path?* – sought to ascertain the stage or stages at which young people generally begin to think about their future careers and to shape their aspirations. Over half of
respondents – 50% of Year 10 students and 58% of Year 8 and Year 9 students – reported first thinking about their chosen career in their current school year. The large proportion changing their minds and selecting new careers goals each year, indicates the importance of focusing intervention efforts on the times when young people are most likely to be receptive, which appear to be during the early years of secondary schooling. It also suggests that it might be helpful to provide regular opportunities for young people to explore their career options throughout secondary schooling.

**Gap between aspirations and expectations**

*Prior to the intervention*

Going to university was widely considered a desirable option by around two in three students surveyed. As well as choosing careers requiring a university education, 65% of Year 8 and Year 9 students in the pre-survey stated that they would *most like to go* to university (Question 12). However, only 47% in the pre-survey believed that they would be *most likely to go* to university (Question 13), a gap of 18%. This gap between aspirations and expectations has been identified in other studies of students from similar backgrounds. For example, James (2002) found one in two students from low socio-economic backgrounds expressed a preference for university, but only 37% believed they would get there (James, 2002, p. 31). This indicates that an intervention needs to focus not so much on raising aspirations, which are already high, but more on altering beliefs such that university is perceived as attainable. Even lower was the belief expressed by the majority of participants regarding what their friends were aspiring to, with only 36% believing that most of their friends *intend to go* to university (Question 14).

These responses reflect the realities of the young people’s social worlds. Given that only one third have immediate family members who have gone to university, it is understandable that the young people develop the belief that they and their friends have a less than even chance of going there. This suggests another role of an intervention program. While it needs to work to enhance young people’s beliefs about the desirability of a higher education, it is of greater importance to instil in young people the belief that a higher education is a viable and attainable alternative for themselves.
After the intervention

The intervention appears to have raised the young people’s already high aspirations. Aspirations for university rose from 65% of Year 8 and 9 students in the pre-survey to 74% in the post-survey. Expectations also rose, from 47% in the pre-survey to over 60% in the post-survey believing that they are most likely to go to university (up 13%). This represents a narrowing of the gap between aspirations and expectations from 18% to 14%. (Refer to Figure 6.9). It appears that the intervention has had a significant impact on altering the young people’s beliefs about the attainability of a university education. However, the strongest effect of the intervention was on the belief that their friends intend to go to university, from 36% in the pre-survey, to 54% in the post, a positive change of 18%. 50% of Year 10 students also believed that most of their friends would go on to university, indicating that this positive impact was sustained. By encouraging the young people to share their aspirations, the intervention appears to have raised awareness of the goals of their peers. As was demonstrated in the discussion on social capital, having peers with similar aspirations has a powerful encouraging effect.

Interview data: Aspirations

Prior to the intervention all but one of the interview participants aspired to enter a profession and/or to go to university. While some changed their career aspirations between the first and second interviews, the level of education required remained the
same. For most participants, their hopes to go to university were driven by their desire to enter a specific profession. In the majority of cases, the young people selected a career that closely modelled the work of people in their social worlds. Others found role models in the media. Appendix 15 summarises the career goals of the interview participants and the apparent sources of inspiration behind their aspirations.

Twelve of the 23 interview participants aspired to become teachers. This proportion is skewed by two constraints in the sampling process. First, the university students accessible to the researcher were already enrolled in Education degrees. Second, the Year 12 students were enrolled in the SUIT program which was designed to facilitate entry into an Education degree. When these seven participants are removed from the sample, the remaining proportion aspiring to become teachers is five in sixteen.

As was explored in the sections on Role Models and Identity, there was no shortage of teachers as role models in these participants’ social worlds. Martha, Elijah, Lucy, Nancy, Sarah, Maria and Paolo all had people in their lives – mostly family members – who were teachers and could demonstrate to the young person that people “like them” worked in this profession. For example Martha (Year 8) said that “My aunty’s a teacher, my cousin’s a teacher, and so I want to be a teacher” (Martha, Aspirations, ref. 1). For Elijah it was his own sports and fitness trainers and for Paolo it was a close personal friend. While others – Katie, Jennifer, Patricia, Carly and Tracey – did not have family members in teaching, they would have had opportunities to observe their own teachers at work and may have looked to them as role models. Michael, for example, mentioned being inspired to enter the field of Science by a Science teacher at school. There was no evident gender effect in the influence of role models, with both sexes citing influential people of both sexes. However, given the small number of males in the interview sample, there is insufficient data to draw any meaningful conclusions with regard to gender effects.

Other participants also followed their parents’ examples when selecting their careers. Lisa aspired to study Law, as her father had done. Deborah first aspired to become a lawyer like her godfather, then to become a doctor like her brother-in-law.
John, whose mother had studied Cookery at TAFE, aspired to become a chef. Margaret wanted to become a pharmacist as “half my generation are pharmacists” (Margaret, Aspirations, ref. 6). Catherine’s goal to study Business Administration perhaps reflected her mother’s work in an insurance company. In all, half the interview participants selected a career that closely reflected the work of family members or other close role models.

This leaves only five participants for whom there was no apparent role model behind their career selection. These looked to the media, to their interests, or to other personal experiences for inspiration. Tina decided to become a fighter pilot after her father took her to see an RAF air show. Anna’s inspiration to become a forensic pathologist came from watching Crime Scene Investigation shows on television. Albert’s desire to enter the police force came from watching news and current affairs shows on television, and from his drive “to help… to do something for my country” (Albert, Aspirations, ref. 2). Amanda, who wanted to become a journalist, and Sean, who wanted to become a computer programmer, based their career goals on their interests and on what they perceived were their strengths. These were considerations for all participants, as has been covered in the section on Pragmatism, earlier in this chapter.

Several participants formed their career aspirations at a very young age. For example Carly (university student) said “My whole life I’ve always wanted to be a primary school teacher” (Carly, Aspirations, ref. 1). The same appeared to be true for others who aspired to become teachers. Martha (Year 8) said “Ever since I was little I’ve wanted to be a teacher” (Martha, Aspirations, ref. 1) and Tracey said “Well, since Year 4 I always wanted to be a teacher” (Tracey, Aspirations, ref. 1). Nancy also “used to play teachers when I was little” (Nancy, Aspirations, ref. 2). Similarly, Sean had wanted a career working with computers “since I was a child… maybe four or five” (Sean, Aspirations, ref. 2). In each of these cases, the participants were developing career goals based on their interest in the field and on their belief that they would be good at it.
Two participants aspired specifically to go to university, without necessarily having settled upon a particular career, in the knowledge that a university education would open the door to a more desirable career. For example, despite the fact that Michael (Year 11) “didn’t know what [he] wanted to do” (Michael, Aspirations, ref. 4) he nonetheless wanted “to do more study… to get into a job that obviously pays well, that I like doing” (Michael, Aspirations, ref. 5). Amanda also said that she wanted to go to university “because if you go to university you can get a better job” (Amanda, Aspirations, ref. 1).

Interview data: Impact on aspirations and expectations

With such high hopes as were held by this group of young people, there was little room for the intervention to raise their aspirations to any significant extent. However, there is some evidence that it did raise or reinforce some participants’ hopes. Amanda found the Year 8 Goal-Setting strategy “helped to… figure out what I wanted to do” (Amanda, Goal-Setting, ref. 2). The following conversation with Patricia describes the impact of the Goal-Setting on her aspirations:

*Patricia:*
You were talking to us about what we could be and at that time I wanted to be a sports coach… and then you started talking about university… and then I changed my mind and I decided that I wanted to be a lawyer.

*Jo:*
What was it about that session that changed your mind?

*Patricia:*
I saw that a lot of my friends had higher expectations of themselves and I wasn’t looking at something like that… like, being a PE teacher was something that I could achieve, but I could achieve something better… and that was being a lawyer. (Patricia, Goal-Setting, ref. 1).

Michael also recalled his interest in university starting after participating in the Year 8 and Year 9 strategies. He had not thought about going to university before those strategies – both parents having left school after Year 10 – but these experiences: gave you something to look forward to, like an option after school. And then it was like I thought, “Yeah, I want to go to uni. I don’t want to go straight into work and stuff. Better money and stuff”. (Michael, Aspirations, ref. 6).
After visiting the campus and meeting the ACU students, Deborah also said “Now I really want to go to uni” (Deborah, Aspirations, ref. 4).

While such explicit mentions of the impact of the intervention on aspirations were few, it has been demonstrated that it had a strong impact on many participants’ self-efficacy and identity and that this in turn raised their expectations. That is, while almost all hoped to go to university, many initially did not expect that they would get there. Some participants related the difference it made when they gained accurate information about the costs of university study. Others spoke about the impact of the intervention on their belief in their ability to gain entry to university and to envisage themselves as university students. These effects have been covered in the sections on Knowledge, Self-Efficacy and Identity, and Beliefs. These effects appear to have indirectly raised participants’ expectations that they would one day go to university.

A number of participants spoke directly about the way their expectations changed after the intervention. Paolo (university student) talked about the impact of the Year 10 campus visit on his expectations: “I didn’t expect to be going to uni. But when I did come… it didn’t really seem that much different to school” (Paolo, Impact on Expectations, ref. 2). The following conversation with Sarah (Year 12) illustrates the impact of SUIT program on the expectations of students who took part (emphasis added):

Jo: What are they planning, your friends?
Sarah: Most of them want to go to uni. I guess, um, like they have a really negative view on it. They go “Oh, I’m not gonna pass anyway, I’m not gonna get into this or that”, so they’re looking like towards TAFE more.
Jo: And are these other friends of yours, are they doing the Step-Up as well?
Sarah: No.
Jo: So do you talk to the other people in the Step-Up program about their plans?
Sarah:
Yep.
Jo:
And what’s their view on their chances?
Sarah:
They’re actually, that’s the difference that I saw… I guess it gives them a sense of… of security that, you know, because I’m doing a uni course now, there’s maybe even a greater possibility that I could go to uni, so they look forward to going to uni. So… in comparison to the people that I talk to at school to the people that do Step-Up, the Step-Up course, when they talk about their plans they actually say “I’m gonna go to uni, to ACU, and that’s what I’m gonna do”.
(Sarah, Step-Up into Teaching, ref. 4, author’s emphasis).

When viewed along with the survey data, this provides a clear illustration of the effect of the intervention in narrowing the gap between participants’ post-secondary aspirations and their expectations of where they might end up.

Conclusion

This chapter has first explored the influence of social capital, in terms of family and social connections, on the development of young people’s embodied cultural capital, in terms of their knowledge of, beliefs about and aspirations for a higher education. It has described a clear correlation between the levels of parental occupation and education histories – and those of other significant role models – and the young people’s knowledge and beliefs. Second, it has explored the impact of the ACULink intervention on these characteristics, and found significant positive impact on participants’ knowledge, beliefs and post-secondary expectations.

In the first instance, participants whose parents had higher levels of education and/or occupation demonstrated more accurate and in-depth knowledge about university entry requirements, about the costs of university study and about the nature of university work and life. They presented as having greater self-efficacy with regard to their ability to gain entry to university and to cope with university work. They also found it easier to envisage themselves as university students and working in their
desired profession. Finally, while levels of post-secondary aspirations did not differ according to family background, participants with close positive role models expressed a stronger sense of expectation that they would make it to university. These differences appear to be the result of opportunities to experience the world of work in a professional context and/or the world of university. Primarily, however, they reflected conversations held among those in their close social worlds.

Second, this chapter has demonstrated that the intervention had a significant and often powerful impact on participants’ knowledge, beliefs and aspirations. This impact worked in varied ways. For some, it encouraged more effective utilisation of their existing social connections, prompting conversations around their career and study goals with parents, teachers and peers. For others, it simply increased their knowledge and corrected misconceptions around course options, entry requirements, costs and the university experience, through the provision of timely and accurate information. In many cases this had the effect of breaking down perceived barriers to entry to university. The most powerful effects, however, came from those strategies involving “real world” experiences of university and/or interaction with a university student perceived to be “like me”. Many participants reported enhanced self-efficacy, and an enhanced ability to envisage themselves at university, after spending time on campus and talking to university students from backgrounds similar to their own. While not necessarily raising aspirations, the intervention demonstrably raised participants’ expectations of the likelihood that they would one day go to university. In all, participation in ACULink appears to have raised knowledge, motivation, self-efficacy, aspirations and post-secondary expectations.

Importantly, the majority of school student interview participants reported that the intervention had been a key factor in their intentions to pursue a higher education, while those who were already university students reported it as a key factor in their making the transition. The following chapter explores the means by which the intervention appears to be operating, and ultimately develops these results into a theory of intervention in the process of constructing beliefs about, and aspirations for, a university education.
Chapter 7: Towards a theory of intervention

Introduction

The purpose of this thesis was to interrogate two central propositions: (i) that a young person’s bonding social capital plays a significant role in the construction of their embodied cultural capital; and (ii) that it is possible to intervene in the accumulation of a young person’s bridging social capital and embodied cultural capital, and thereby to raise their aspirations for higher education. Specifically, it sought to ascertain the extent to which, and the means by which, the ACULink project enhanced the social and cultural capital of young people from low socio-economic backgrounds. To this end, four research questions were interrogated:

1. What was participants’ pre-existing knowledge of, and what were their pre-existing beliefs about and aspirations for, university?
2. What were the key influences on the construction of participants’ knowledge of, beliefs about and aspirations for university?
3. To what extent did the intervention alter participants’ knowledge of, beliefs about and aspirations for university? and
4. In what ways did the intervention alter participants’ knowledge of, beliefs about and aspirations for university?

These questions have been explored through in-depth interviews with 19 participants from Years 8 to 12 of secondary school and four currently enrolled university students, and a pre- and post-intervention survey of almost 100 Year 8 to Year 10 school students.

This research has two central findings. First, it found that a young person’s bonding social capital – specifically, the presence or absence of an academically successful role model in the family – played a significant role in shaping her/his embodied cultural capital – that is, their knowledge and beliefs, identity and self-efficacy, and post-secondary expectations – through a complex interplay of processes. Second, it found that it was possible to provide access to bridging social capital and to intervene in the processes of the accumulation of embodied cultural capital. That is, the ACULink project demonstrably altered the young people’s knowledge of and beliefs
about university, and their self-efficacy and identity, which in turn enhanced their expectations that university might be a possibility for themselves.

The means by which the intervention operated to bring about these changes were found to be multiple and interconnected. First, the provision of accurate information has been shown to be critical in correcting misconceptions and removing perceived barriers. Second, experiencing a day at university was shown to be helpful, with many participants reporting that it gave them a more realistic and positive view of university life and work. Third, the provision of role models who came from backgrounds similar to the school students was shown to have a powerful effect on their self-efficacy and identity. In these ways, the intervention seems to have filled a gap in the young people’s lives where their families, peers and school lives were not providing sufficient opportunities.

This chapter identifies the relationships between these phenomena and participants’ resulting habitus. It begins by exploring the role of bonding social capital in the construction of habitus. It then explores the impact of the intervention in relation to each construct within social capital and cultural capital theories: that is, its role in enhancing the bridging social capital and embodied cultural capital of the participants. Ultimately, a model for intervention is proposed, based on using bridging social capital to enhance young people’s habitus.

The role of bonding social capital in developing embodied cultural capital

This research is based upon theories of social and cultural capital, as developed first by Bourdieu and Passeron (1977, and Bourdieu, 1986, 1988, 1990), and further developed by Granovetter (1973) and Gittell and Vidal (1998). Social capital is here defined as the network of social relationships which connect individuals to resources. A distinction has been drawn between bonding social capital and bridging social capital, where bonding social capital refers to an individual’s connections with others “like” themselves, and bridging social capital refers to connections to people from a wide range of backgrounds.
Cultural capital is here defined as the cultural goods transmitted by the family (Bourdieu & Passeron, 1977). This study is primarily concerned with cultural capital as it occurs in its *embodied* state, that is, as long-lasting dispositions which become an integral part of the person, referred to as *habitus* (Bourdieu, 1986). For the purposes of this study, a young person’s knowledge and beliefs about university, in addition to aspects of their self-efficacy, their identity and their post-secondary aspirations and expectations, have all been construed as elements of their habitus.

It was hypothesised that an individual’s bonding social capital is instrumental in shaping – and in many cases, limiting – their habitus. It was proposed that the presence in their close social world of a significant other who has successfully gone to university, builds positive habitus in young people with regard to university. That is, it helps them to build an accurate body of information on career and study options, to shape positive beliefs about the university experience itself, to identify with university students, and also enhances their self-efficacy with regard to their ability to gain entry to university. Ultimately, it was proposed that these factors all help to make university a realistic option for young people to consider.

As illustrated in Chapter Five, a young person’s bonding social capital is the key influence on the construction of a young person’s knowledge and beliefs, identity and self-efficacy, and post-secondary expectations. The data showed that the workings of this influence are multi-faceted and inter-related. (See Figure 7.1 and 7.2: The impact of bonding social capital on knowledge and beliefs about and expectations for university). The first way in which a young person’s close social world has been shown to operate is through family and peers acting as role models, thereby influencing the young person to construct her/his self-efficacy and identity based on the education and occupation histories of those in their close social worlds. Another way it has been shown to operate is through the encouragement of ambitions, and financial and other practical forms of support, which help to shape a young person’s aspirations and work ethic. Another form of influence is through the provision of information, and through conversations in daily life, the accuracy and depth of which reflect the giver’s own experience of higher education or lack thereof. Together, these inputs work to influence the construction of a
young person’s habitus such that her/his knowledge and beliefs come to reflect the experiences of those in their close social worlds.

Figure 7.1. The impact of bonding social capital on knowledge of, beliefs about, and expectations for, university: Young people from middle to high socio-economic backgrounds.
The ultimate effect of these phenomena on the young people in this study was shown to be the development of knowledge and beliefs about, together with expectations for, their post-secondary pathways, which generally reflected levels of education within their families. Thus, young people whose bonding social capital included people who went to university (Figure 7.1) were more likely to grow up believing that they too would go to university. Conversely, young people whose bonding social capital did not include people who went to university (Figure 7.2) were more likely to grow up believing that they were not likely to go to university.
Introducing the participants: 6 stories.

Appendix 16 contains summaries of six of the interview participants – one from each year cohort (Lisa, Year 8; Alison, Year 9; Deborah, Year 10; Elijah, Year 11; Lucy, Year 12; and Carly, university). The cases were selected to include a mix of male and female, and young people with different family histories. These cases have been written as individual stories, providing an overview of their backgrounds, the education histories of their bonding social capital, their personal characteristics and their habitus with regard to university, both before and after the intervention. This helps to tell the stories of the participants on an individual level, and helps to bring the impact of the intervention into a more personal focus.

The role of bonding social capital in developing cultural capital

Bonding social capital as role models

The first way in which a young person’s bonding social capital was seen to operate was through family and peers acting as role models. It was proposed that the presence of an academically successful role model might provide an example of what is possible and thereby increase the young person’s belief that s/he might also be able to go to university. The data supported this proposition, in that participants’ self-efficacy, identities and expectations largely reflected the education and occupation histories of those in their close social worlds.

The majority of participants in this study were from low socio-economic backgrounds with regard to parental occupation and level of education. There was not a direct relationship, however, between parental occupation and participants’ career aspirations: the majority of participants aspired to a university education and a professional occupation regardless of their parents’ education and work histories. Nonetheless, most of the young people in this study were inspired in their career choices by role models in their extended families. (Refer to Appendix 15: Career aspirations and sources of inspiration: Interview participants). Those who did not have relevant role models in their families looked further afield for their inspiration, to their extended families, or to figures in the media they related to. In a few cases, role models acted as examples of “what not to do”, which was itself a powerful motivator.
While career aspirations were not limited by parents’ occupations, there was an observed relationship between parental education and occupation, and the interview participants’ sense of identity and self-efficacy, which ultimately affected their expectations regarding their post-secondary destinations. Almost without exception, those whose parents had an Australian university qualification:

- had a more detailed understanding of university entry requirements and the costs of university study;
- held more accurate and detailed perceptions of university work and life;
- had higher self-efficacy with regard to their ability to gain entry to university;
- had higher self-efficacy with regard to their ability to cope with university work;
- were more able to envisage themselves as university students; and ultimately
- had higher expectations that they would go to university.

This relationship operated through two key mechanisms. First, participants with family members in professional occupations had opportunities to observe them in their work. For example, Margaret had visited her relatives in their pharmacies, Lisa had visited her CEO father’s office, Deborah had worked in her brother-in-law’s doctor’s surgery and Nancy had spent some time at the school where her aunt taught. This generally positive experience motivated participants, helped to familiarise them with and to feel comfortable in the professional world, and encouraged them to envisage themselves in similar roles. The second mechanism was that of conversations in the family about family members’ experiences of university, which the young people had often been participants in or observers of. The nature and impact of these is explored in the upcoming section on conversations.

Bourdieu (1998) proposed that there is a critical mass, such that when a large enough proportion of a person’s bonding social capital make the transition to university, or holds similar ambitions, going to university comes to be seen as not unusual, which encourages young people to consider university as an option. The data suggested that this is indeed the case, as the young people in this study were more likely to construct their identities as university student and/or as professional when there were a number of academically successful role models in their close social worlds. Further, this group
were more likely to develop high self-efficacy with regard to their ability to gain entry to university and to cope with university work. These factors enhance their expectation that they might go to university. Conversely, for young people from low socio-economic backgrounds, the dearth of academically successful roles models within their bonding social capital reduces their capacity to construct their identities as university students. It also leads to the development of low self-efficacy with regard to their beliefs in their ability to gain entry to university and to cope with the university work, all of which reduce their expectations that they might go to university.

**Bonding social capital as source of support**

Another way in which a young person’s bonding social capital was shown to operate was through the provision of support, from personal encouragement of ambitions to assistance with homework and financial and other practical forms of support. These forms of support were seen to enhance the young people’s self-efficacy and to help to shape and to encourage their work ethic and aspirations.

There was no apparent relationship between parents’ levels of education and the personal encouragement they gave their daughters’ and sons’ ambitions, as the majority of both survey and interview participants rated their parents as the most important source of support regardless of parents’ education histories. Personal encouragement from parents acted as a motivator and, in some cases, enhanced the young person’s self-efficacy with regard to their perceived ability to achieve their goals. In addition to encouraging their daughters’ and son’s aspirations, many parents encouraged them to work hard to achieve their goals, which generally had a motivating effect. In two cases (Tracey and Maria) this support was manifested as pressure to perform. Once again, this bore no relation to parents’ education histories.

Parental support often took more practical forms, the most common being assistance with homework. In this area, there was a clear relationship between parental levels of education and the degree and nature of assistance they were able to provide. While most parents monitored their daughters’ and sons’ homework, those who had attained higher levels of education were more able to provide specific assistance such as proof-reading assignments or helping with computers. This had the effect of enhancing
the young people’s self-efficacy with regard to their academic ability. It is also highly likely that such focused assistance – sometimes extending to arranging tutoring – improved young people’s academic results, though evidence for this is beyond the boundaries of this study.

Another form of practical intervention from parents was when some accompanied their daughters or sons to university, either for informal visits or for open days. Again, this was closely related to parents’ levels of education and, with one exception, occurred only when the parent had been to, or was currently studying at, university. Young people who had visited a university campus generally held more detailed perceptions of university work and life, felt more comfortable and less daunted in the university environment, and were more readily able to envisage themselves as university students.

In addition to family members, the young people reported their peers as important sources of support for their aspirations. While not many participants reported having friends or siblings who shared their aspirations for higher education, those who did (for example, the Year 8 cohort) found it encouraging. Conversely, several participants (for example, Lisa and Deborah) reported that their friends actively discouraged them from their goal to go to university. While being in a minority did not act as an explicit deterrent to any participants, there was nonetheless an observable absence of the encouraging effect of having close peers who held similar ambitions with whom to share aspirations and plans.

In summary, parents generally encouraged the young people’s ambitions, irrespective of their own experiences of education. However, there was a clear relationship between parents’ levels of education and the nature of support they were able to provide their children, which resulted in differences in the young people’s self-efficacy and ability to envisage themselves as university students. Peers were less likely to encourage aspirations for university, unless they shared the aspiration. This had a slight discouraging effect.
Bonding social capital providing financial support

A relatively small yet significant percentage of survey participants (18%) initially felt that the costs of fees would likely stop them going to university (Question 34). In addition, 5% initially believed that their families could not afford to support them while they studied at university (Question 36) and 24% initially believed they would need to earn a full-time living straight after finishing school (Question 38). Notwithstanding the many studies which have demonstrated that HECS is not a deterrent, these figures indicate that financial constraints act as a perceptual barrier to a significant proportion of young people from low socio-economic backgrounds.

This trend was supported by the qualitative data. While interview participants generally reported that their parents were prepared to support them financially while they studied at university, a number (for example Carly, Catherine, Sean and Margaret) reported feeling concerned that their parents would not be able to afford the tuition fees. Each of these young people was ignorant of the HECS system of deferred repayment and was under the impression that they would need to pay tuition fees up-front. None had close family members who had studied at university in Australia, and each expressed the belief that the cost of study might prevent them from going to university.

This indicates a heightened sense of barrier to entry among those from low socio-economic backgrounds who have few or no people in their close social worlds who can share their experiences and provide a more accurate understanding of the fee payment system in Australia. This brings us to the important role played by close family members as a source of information, and highlights the importance of everyday conversations in shaping young people’s knowledge and beliefs.

Bonding social capital providing conversations and information

Another important means by which young people’s bonding social capital influenced their embodied cultural capital was through the provision of information, and through conversations in daily life, the accuracy and depth of which reflected the giver’s own experience of higher education or lack thereof. This worked to shape the young people’s habitus such that their knowledge, beliefs, self-efficacy and expectations closely reflected the experiences of those in their social worlds.
The small proportion of participants who came from families where one or more members had gone to university (for example, Lisa and Tracey) reported taking part in conversations about university life and work. These participants demonstrated a more accurate knowledge of university entry requirements and processes. Several other participants reported gaining useful information from their teachers or from another person working in the field they hoped to enter. Hearing people close to themselves talking about their experiences of university built more detailed pictures of university life and developed the sense that “people like me go to university”. This enabled the young people to envisage themselves there and raised their expectations that they too would go to university.

Participants without access to academically successful role models reported either no conversations, or conversations of a different nature. These conversations tended to paint university as difficult to get into, large and unfriendly, and university work as hard. These young people often held vague or inaccurate knowledge of entry requirements. They also displayed beliefs that university was large and daunting, the work was hard and uninteresting, and that people “like” themselves did not go there. The absence of positive conversations made it hard for these young people to envisage themselves at university, while the negative conversations led to low self-efficacy with regard to university entry. These factors lowered their expectations that they would be able to go to university themselves.

A clear distinction between aspirations and expectations emerged from the data. Although the majority of survey and interview participants aspired to go to university, only half of these believed that they were likely to. Prior to the intervention, there was an observable relationship between parental levels of education and the expectations held by the young people with regard to where they felt most likely to go after completing school. Those whose parents held an Australian university qualification had considerably higher expectations. This phenomenon has been identified before (James, 2002) and data from this study support both the distinction between aspirations and expectations, and the relationship between parental levels of education and young people’s post-secondary expectations.
The impact of bonding social capital on embodied cultural capital summarised

The education and employment experiences of a young person’s bonding social capital have a profound effect on the young person’s embodied cultural capital. (Refer to Figure 7.1, The impact of bonding social capital on knowledge and beliefs about, and expectations for, university: Young people from middle to high socio-economic backgrounds). There was a clear encouraging effect evident from having family members who had gone to university. Through acting as role models, these family members provided inspiration and enhanced self-efficacy and identity. Through everyday conversations, they provided accurate knowledge and built positive beliefs about university. Consequently, these young people developed higher expectations that they would go to university.

Those without access to academically successful role models experienced an absence of these encouraging effects and exhibited a stronger sense of barriers to their entry to university. (Refer to Figure 7.2, The impact of bonding social capital on knowledge and beliefs about, and expectations for, university: Young people from low socio-economic backgrounds). Without ready access to such role models, they often developed little or no knowledge of university entry, and negative perceptions of university work and the university environment. This led to the development of a gap between their post-secondary aspirations and their expectations that they might go to university. The next section of this chapter explains the ways in which the intervention was able to improve this knowledge, alter these beliefs and raise the expectations which the young people developed in their social worlds, such that university came to be viewed as more relevant, desirable and attainable.

Impact of the intervention: Overview of the findings

The first half of this chapter has illustrated the ways in which a young person’s embodied cultural capital is shaped by their bonding social capital. These have been both multiple and inter-connected. It was hypothesized that an intervention which made use of (a) early intervention; (b) the provision of accurate information about post-secondary pathways, entry requirements and the costs of study; (c) successful academic role models from backgrounds similar to the young people; and (d) opportunities for
young people to experience university study and life; might have a positive impact on young people’s knowledge and beliefs, their self-efficacy and identity, and their post-secondary expectations. This section explores the impact of an intervention which employs these features, the ACULink program, on the knowledge, beliefs and expectations of the participants.

The impact of the intervention was not the same for all participants, and was brought about in a number of inter-related ways. For some, it motivated simply by virtue of offering words of encouragement. For many, the provision of accurate information around entry requirements and costs enhanced their self-efficacy with regard to their ability to gain entry to university, or removed perceived barriers presented by misconceptions around the costs of university study. For others, the experience of life on campus was instrumental in shaping positive beliefs about the nature of university work and life. Finally, the interaction with role models was most powerful, enhancing the young people’s self-efficacy and helping them to construct their identities as university students. The culmination of these many effects was an increased expectation among many participants that they would go to university. These effects are outlined in Figure 7.3: The impact of the intervention on knowledge and beliefs about, and expectations for, university.

**Changing cultural capital: Knowledge of and beliefs about higher education**

After the intervention, the majority of participants demonstrated improved knowledge of their post-secondary alternatives, of university entry requirements, and of the costs of university study. Further, they demonstrated more positive perceptions of the desirability and relevance of a university education. This operated through the provision of information, through experiencing a taste of university life, and through interaction with university student role models from backgrounds similar to their own.

The first and most obvious means by which participant’s knowledge was enhanced was through the straightforward provision of accurate information. Delivering information is a component of both the Year 10 campus visits and the Year 11 role modelling strategies, and it is a major focus of the Year 8 and 9 strategies. This access to information was critical in enabling many of the young people to make informed and
realistic decisions, particularly among the two in three who did not have such access within their close social worlds.

The survey data showed a marked improvement in Year 8 and 9 participants’ knowledge of appropriate levels of training for entry into their chosen careers areas (from 37% with accurate knowledge pre-, to 72% post-intervention). There were similar improvements in their knowledge of pre-requisite subjects (from 32% with accurate knowledge pre-, to 54% post-intervention); and in their knowledge of UAI entry requirements (from 27% with accurate knowledge pre-, to 40% post-intervention).

This trend was supported in the interview data, where many participants were better informed after the intervention. For Sarah (Year 12), Margaret (Year 10) and Amanda (Year 8), the intervention was their introduction to the knowledge that they would need to go to university to enter the professions they aspired to. For some (for example Tina, Year 8), it raised their awareness of the range of post-secondary options available to them. For others (for example Paolo, university student; Lucy, Year 12; Sean, Year 11; John, Year 10; and Patricia, Year 9) it improved their knowledge of entry requirements including subject pre-requisites and UAI cut-offs.

The information which had the most powerful impact on participants’ post-secondary expectations was that concerning the HECS system of deferred repayment of fees. The intervention reduced Year 8 and Year 9 survey participants’ perceptions that financial concerns might be a barrier, with only 10% reporting that the cost of fees might stop them going to university, down from 18% before the intervention. Several interview participants (for example Carly, university student; Catherine, Michael and Sean, Year 11; and Margaret, Year 10) reported that they had initially believed they would have to pay fees upfront, and that they therefore believed they would not be able to go to university. These participants all reported that learning of HECS came as a relief to them and their parents, and thereby removed a perceived barrier.

In addition to providing information, there is evidence that the intervention promoted conversation between some participants and their friends, teachers and/or parents. For Martha (Year 8) the goal-setting visit prompted a conversation with her
parents about her going to university. For Deborah, the parent information booklet prompted a conversation with her parents about her career and study aspirations, while those in the Year 8 cohort reported sharing their ideas with each other after the session. In this way, the intervention possibly had a slight influence on participants’ bonding social capital such that they also became better informed, more positive and more able to assist the young people.

The intervention not only informed, but also enhanced participants’ beliefs about the desirability and relevance of a university education. After the intervention, survey participants demonstrated more positive perceptions, with a significant proportion more positive in their belief that university would provide the most career options, would lead to a more satisfying and lucrative career and would develop the skills they required for their chosen careers. They also demonstrated enhanced perceptions of its desirability, and were more positive that university would be the most interesting and challenging alternative.

The primary way in which the intervention improved participants’ perceptions was through opportunities to spend time on campus. Prior to the intervention, many interview participants reported having little idea of what university might be like (for example Margaret, Year 10; and Jennifer, Year 9). Several others (for example Maria and Tracey, university students; and Sean, Year 11) said they had gleaned what notions they had from (mainly American) television and movies. Many participants (for example Catherine, Year 11) initially imagined university as a large, unfriendly, frightening place. Others had seen university study as uninteresting, teacher-centred, predominantly theoretical, comprising mainly reading and writing, and generally too hard for themselves (for example Anna and Jennifer, Year 9; Tina, Year 8).

The Year 10 campus visits, along with the Year 11 Shadowing strategy and the Year 12 Step-Up Into Teaching units, provided real-life experience of a university environment and of lectures and tutorials. Consequently the vast majority of participants developed a more detailed picture of university work and more positive perceptions of the university experience. Through these experiences, many participants (for example Carly and Maria, university students; Elijah, Year 11; Deborah, Year 10) realised that
university is filled with people not unlike themselves. Others (such as Maria, university student; Elijah, Michael and Sean, Year 11; and Deborah, John and Margaret, Year 10) came to realise that it can be enjoyable, practical and varied in its approach. This was both informative and motivating. While recognising that university study is nonetheless demanding, many (including Carly, university student; and Lucy, Year 11) came to view it as manageable. This broke down the commonly held perception that university work would be too hard.

In addition to sampling university life, many participants found interaction with role models, who were able to provide a student’s-eye perspective, encouraging. As Sarah (Year 12) explained, the information was more meaningful coming from the role models because “they’re the ones who are actually doing it” (Role Modelling, ref. 1). It appears that the information was rendered more accessible by virtue of coming from “actual students” (Sarah, op. cit). Interaction with the role models also had a powerful impact on the young people’s identity and self-efficacy, which is explored in the upcoming section.

**Changing personal characteristics: Goal-orientation, work ethic and pragmatism**

The school student interview participants in this study came from the upper-ability half of their cohorts, and almost all described themselves as working hard to achieve their goals. They had been selected for the study on the basis that their teachers believed them to be capable of going to university, which is likely to have led to a bias in the sample with regard to their attitude to school work.

The majority of participants were already highly motivated before the intervention, and several (for example Lucy, Year 12; Sean, Year 11; Albert, Year 10; Anna, Year 9; and Lisa, Year 8) felt that their own motivation was the most important factor helping them to attain their goals. There was little evidence of any significant change in this respect after the intervention. Only four participants (Paolo, university student; Nancy, Year 12; and Deborah and John, Year 10) described themselves as not working as hard as they would need to. Of these, only Paolo described an impact of the intervention in motivating him to work harder. This sample is too small to make a
judgement about the impact of the intervention on work ethic among less motivated young people.

Prior to the intervention, most interview participants applied a moderately pragmatic approach to their career choices, in that they generally gave consideration to their interests and perceived abilities. However, only a few (Michael, Year 11; Albert, Year 10; and Tina, Year 8) were pragmatic to the extent that they had considered alternatives in the event that they did not make it into their first choice of course or occupation. After the intervention a number of participants (for example Margaret, Year 10; and Anna and Patricia, Year 9) adopted a more pragmatic approach, in that they undertook further research into their post-secondary alternatives. This worked primarily through the provision of information which presented a wide range of career choices and alternative training pathways and prompted them to explore further. This did not present as a major effect.

**Changing personal characteristics: self-efficacy and identity**

The most powerful effect observed was on participants’ self-efficacy and identity. After the intervention, participants demonstrated enhanced belief in their ability to gain entry to university and in their ability to cope with university work. In addition, many demonstrated an enhanced ability to envisage themselves as university students. This operated in part through the provision of information (as discussed above), with many participants finding it helpful hearing from someone who had an accurate idea of university entry requirements and costs. It also operated through sampling university life, where many discovered that they could cope. Most powerful, however, was the impact of the university student role models. Interacting with people “like” themselves who were successfully undertaking university study significantly enhanced participants’ self-efficacy with regard to their ability to gain entry to university and to cope with university study.

The survey data showed significant changes in Year 8 and 9 participants’ beliefs in their ability to get high enough marks to get into one of their chosen university courses (Question 25), with 77% strongly agreeing or agreeing post-intervention, up from 64% pre-intervention. There were similar improvements in their beliefs that they
would be able to cope with the workload at university (Question 39), with 69% strongly agreeing or agreeing post-intervention, up from 60% pre-intervention.

This trend was supported in the interview data, where many participants (for example Paolo and Carly, university students; Sarah, Year 12; Elijah and Sean, Year 11; Deborah and Margaret, Year 10; and Martha, Year 8) reported being initially concerned that they would not get the marks they needed to get into their desired university course. After the intervention, this fear was largely removed for each of these participants. This effect was particularly marked – and important – for those without academically successful role models in the home. Those with access to successful role models (for example Tracey, university student; Albert, Year 10; and Lisa, Year 8) were already quite confident that they would gain entry to university.

The results were similar, though less marked, for self-efficacy with regard to participants’ belief in their ability to cope with university work. Several without access to relevant role models initially reported believing that the work would be “too hard” (Elijah, Self-Efficacy, ref. 6). This changed after the intervention such that most felt they would “probably get through it” (Patricia, Self-Efficacy, ref. 4).

These changes came about through several inter-connected means. For some, the provision of information around university entry requirements and alternative pathways was helpful (for example, Margaret and Deborah, Year 10). In general, however, the provision of information alone did not have a significant impact on self-efficacy (with the exception of information about HECS, as discussed earlier).

One of the most powerful ways in which the intervention brought about these changes was through interaction with the university student role models. Meeting other young people from similar backgrounds who had successfully made the transition to university provided a living example of what could be achieved by someone “like me”. For several participants (for example Maria, university student; Sarah, Year 12; Elijah, Year 11; and Margaret and Deborah, Year 10), meeting the university role models during the Year 9 Pathways strategy or the Year 11 Role Modelling strategy, was
instrumental in building their confidence that they too “can do it” (Deborah, Self-Efficacy, ref. 7).

Experiencing university life and work, either through one-day visits or the SUIT program, was another powerful means by which the intervention enhanced many participants’ beliefs in their abilities. After spending time on campus, several (for example Sean, Year 11; Deborah, Year 10) reported feeling that “after I went to university I thought I could” (Sean, Identity, ref. 1). This operated both through interaction with role models, who demonstrated that it could be done, and through experiencing actual university classes, which demonstrated that the work was achievable.

Not surprisingly, those who had undertaken the two SUIT units showed the greatest increase in their self-efficacy. Successfully completing the units was the best way to demonstrate to the young people that they could in fact manage university work. The added feature of a 5-mark leeway was also helpful to the three participants concerned (Carly, university student; and Lucy and Sarah, Year 12) in removing a perceived barrier – and in Carly’s case, an actual barrier – to their entry to university.

Closely related to self-efficacy, the survey data showed significant changes in Year 8 and 9 participants’ beliefs that “people like me often go to university” (Question 42), with 73% strongly agreeing or agreeing post-intervention, up from 51% pre-intervention. There were similar improvements in their beliefs that “people like me often get work in my chosen career” (Question 44), with 63% strongly agreeing or agreeing post-intervention, up from 53% pre-intervention.

These findings were supported by interview data, where many participants who did not have access to academically successful role models reported initially finding it difficult to envisage themselves as university students. For many, meeting university students from similar backgrounds to their own was a powerful demonstration of what was possible. For Carly (university student), meeting students who had gone to her school had an enormous impact. For Elijah (Year 11), it was discovering that university students were “normal... just like us” which worked (Elijah, Beliefs about University,
ref. 8). For Maria (university student) it was the fact that these students were “Westies” like her (Maria, Identity, ref. 6). For Deborah (Year 10), it was the fact that the role model was “someone like me... from the Middle East” which showed her that she could do it; for Catherine it was simply that the students were “just like me” (Catherine, Identity, ref. 1).

For many participants, however, it was no one element which affected their self-efficacy and identity. Rather, it was the combination of access to accurate information, some experience of university life and work, and interaction with role models, which worked together to build their confidence in their abilities. Their enhanced self-efficacy and identity made all the difference to many participants, such that several (for example Carly and Paolo, university students; and Elijah, Year 11) reported that they would not have considered going to university before meeting the university student role models.

**Changing aspirations and expectations**

The aspirations of the young people in this study were not constrained by the absence of role models in the family home, as they aspired to a higher education at around twice the rate of parents with a university education, and aspired to professional careers regardless of their parents’ occupations. Thus, while the intervention raised career aspirations of many individual participants, overall it did not significantly raise their already high career aspirations. It did, however, raise overall aspirations for university, while also significantly raising expectations. Thus, the intervention narrowed the gap between participants’ career aspirations and their expectations that they would enter higher education after completing secondary schooling.

The raising of aspirations and expectations was brought about through a number of inter-related mechanisms. First, it operated through providing information about career opportunities. Second, it worked through providing opportunities to experience university life and work. Third, it operated through interactions with university student role models. These combined to enhance knowledge, beliefs, self-efficacy and identity, which in turn raised expectations.
Through the provision of information, along with the opportunities and guidance to explore post-secondary options, the intervention raised participants’ awareness of the range of career opportunities available to them. This led many to change their career aspirations, though this did not lead to an overall increase in the levels of career that the young people aspired to. It did, however, raise aspirations for higher education, from 65% of Year 8 and Year 9 survey participants pre-, to 74% post-intervention, reporting that they would most like to go to university (Question 12). Most significantly, it raised expectations for higher education from 47% of Year 8 and Year 9 survey participants pre-, to 60% post-intervention, reporting that they were most likely to go to university (Question 13).

These findings were expanded in the interview data, where many participants reported that the information they received raised their aspirations and/or expectations. The information provided in the Year 8 and Year 9 strategies raised the aspirations of some (for example, Michael, Year 11; and Amanda and Patricia, Year 9). As discussed earlier, removal of the barrier of financial concerns, through providing information about HECS, raised the expectations of several interview participants. Others spoke about the impact that information about entry requirements had on their self-efficacy with regard to university entry, and in turn on their expectations (also discussed earlier).

The interview data also illuminated the impact of experiences of university life and work. For many participants (for example, Maria and Paolo, university students; and Sarah, Year 12), becoming more familiar with the university environment helped to make it a less daunting prospect. Others (for example Maria, university student; Elijah, Michael and Sean, Year 11; and Deborah and Margaret, Year 10) were motivated by a glimpse of university learning, which demonstrated that it could be both interesting and achievable. This effect was most powerful among SUIT participants (Carly, university student; and Lucy and Sarah, Year 12), who all reported that undertaking the university units enhanced their self-efficacy with regard to their ability to cope with university work, which raised their expectations that they could and would go to university.

Once again, the most powerful impact observed was that of the interaction with university students who came from similar backgrounds to the participants. As
discussed in the section on self-efficacy and identity, seeing and talking to others who they perceived to be “like” themselves enhanced participants’ belief in their ability to gain entry to university and to cope with university work, and enabled them to envisage themselves at university. This effect was particularly important for those who did not have access to academically successful role models in their close social worlds.

In all, the combination of information, experience of university and interaction with role models informed and motivated, removed perceived barriers, and enhanced self-efficacy and identity. These effects combined to raise participants’ aspirations for higher education and, more significantly, to raise their expectations that they could and would go to university.

An emerging theory of intervention: A model developed

The construction of a young person’s habitus has been shown to be a constantly evolving and complex process, shaped by a myriad of influences in their social worlds. Analysis of the data from this study has indicated that a young person’s bonding social capital is instrumental in shaping their embodied cultural capital in terms of their knowledge of, beliefs about and aspirations for university. However, the data supports the notion that this embodied cultural capital is not fixed and that it is possible, through a structured intervention program, to intervene in the process of the acquisition of a young person’s habitus.

The majority of the participants in this study came from low socio-economic backgrounds in terms of parental occupations and levels of education, such that their bonding social capital was generally lacking in academically successful role models. Consequently, their embodied cultural capital generally included:

- **Knowledge:**
  - Little or inaccurate knowledge of post-secondary options, university entry requirements and the costs of university study;
  - Little understanding of / misconceptions around university life and work.

- **Personal characteristics:**
  - Strong goal-orientation and work ethic;
- Moderate pragmatism but lacking the required skills and/or resources;
- Low self-efficacy with regard to their ability to gain entry to university and to cope with university work;
- Difficulty identifying themselves as university students.

- Beliefs about university:
  - Belief that university is alien: big, unfriendly and daunting;
  - Belief that university work is hard, uninteresting and predominantly theoretical;
  - High career and study aspirations but low expectations for university entry;
  - Belief that *people like me don’t go to university*; leading to the belief that

  *I am not likely to go to university.*

(Refer to Figure 7.2).

Although the majority of participants had high aspirations, a much smaller proportion held the expectation that they would go to university. Without intervention, the consequence may well have been that many of these young people would gradually have lowered their expectations and followed more closely the career paths of those in their close social worlds.

For a significant proportion of survey and interview participants, participation in the intervention materially enhanced their knowledge of, beliefs about and expectations for university. Figure 7.3 illustrates the proposed model which has emerged from this study. In changing the young people’s habitus, the intervention operated in a number of ways. Through the straightforward provision of accurate information, it filled in gaps in knowledge and corrected misconceptions around post-secondary alternatives, university entry requirements and the costs of university study. Through the experience of the world of university, it developed more accurate and detailed perceptions of university work and life, and helped young people to feel more at home in the environment. Through the introduction of bridging social capital in the form of university student role models, it enhanced participants’ self-efficacy and their ability to identify themselves as university students. In combination, these elements encouraged participants’ aspirations and enhanced their expectations that they might go to university.
Figure 7.3. Model of the impact of the intervention on the knowledge, beliefs and expectations of young people from low socio-economic backgrounds.
The theory of the acquisition of embodied capital, and the processes by which it may be altered, as outlined in this chapter, suggest that an intervention based on the following features would likely have a positive impact on young people’s knowledge and beliefs; self-efficacy and identity; beliefs about university; and aspirations and expectations for university. Such a model would:

- Be based on ongoing partnerships between the university and school/s with historically low rates of transition to university:
  - to establish ongoing relationships with the young people, such that they come to recognise and relate to people from university as part of their world as opposed to someone “other” or alien;
  - to re-visit schools regularly to cater to young people’s constantly changing goals;

- Work closely with school staff:
  - such that the intervention is viewed as a partnership in which all parties work together towards a common goal;
  - so that teachers’ knowledge of, and accessibility to, the students is valued and utilised; and
  - to integrate elements of the intervention into ongoing school curricula.

- Commence early in secondary schooling:
  - in order to plant the seeds of planning for the future, and the idea that university is a possibility, before negative perceptions become entrenched; and
  - to enhance habitus before critical educational decisions are made.

- Encourage young people to aim high and to work to achieve their goals:
  - By providing information about the range of career opportunities available, and the post-secondary training options;
  - by emphasising a “you can do it” message;
  - so that aspirations drive work ethic and academic success, as opposed to academic results limiting aspirations.

- Involve families, particularly parents:
  - to value parental influence and encourage parental support of young people’s aspirations; and
by providing accurate information to parents – for example, regarding the HECS system of payment – in order to correct misconceptions at the source before they present as barriers to university entry.

- Provide accurate, timely information about post-secondary options, entry requirements and costs
  - to correct misconceptions, particularly with regard to university entry requirements and the costs of going to university, before inaccurate and negative beliefs become entrenched and present as a barrier to entry; and
  - to encourage realistic goal-setting and pragmatic decision-making.

- Provide young people with the skills and resources needed to undertake independent research into post-secondary alternatives in their area of interest:
  - to encourage the development of a pragmatic approach to goal-setting and decision-making.

- Initiate interaction with currently enrolled university student role models from similar backgrounds to the school students:
  - to provide examples of what can be achieved;
  - to enhance self-efficacy and encourage the belief that they, too, can go to university; and
  - to encourage the development of young people’s identities such that they can more readily envisage themselves as university students.

- Initiate positive conversations about university life and work:
  - to fill a gap that may be missing in young people’s social worlds; and
  - to encourage the development of positive beliefs about university.

- Provide opportunities to experience the “real world” of university:
  - to build accurate and positive perceptions of university work and life;
  - to enhance self-efficacy with regard to young people’s beliefs in their ability to cope with university work; and
  - to enhance identity such that young people recognise that “people like me” can and do go to university.

This model has implications for schools, for universities and for federal student equity policy and funding. These implications are outlined in the following chapter.
Conclusion

The last three chapters have explored the role played by a young person’s bonding social capital in the development of their embodied cultural capital, and have begun to develop an understanding of the means by which it is possible to intervene in these processes. Specifically, they have described the impact of the ACULink project on the social and cultural capital of young people from low socio-economic backgrounds.

It has been demonstrated that a young person’s bonding social capital plays a significant role in shaping their embodied cultural capital with regard to their knowledge of, beliefs about, and aspirations for higher education, through a number of inter-related means. It has also been demonstrated that the ACULink project enhanced the young people’s knowledge of and beliefs about university, and their self-efficacy and identity, which in turn enhanced their expectations that they might go to university.

The means by which the intervention brought about these changes were shown to be multiple and interconnected. They include the provision of accurate information, experience of university, and interaction with role models who come from backgrounds similar to the school students. In these ways, the intervention has been show to enhance the young people’s bridging social capital and, through this and other means, to alter their embodied cultural capital. Ultimately, a model for intervention has been proposed, based on using bridging social capital to enhance habitus. The implications for equity policy and practice are significant. These are explored in the final chapter.
Chapter 8: Conclusions and implications

Introduction

This study has investigated the impact of an intervention program on the knowledge of, and beliefs and aspirations about, higher education among a group of young people from low socio-economic backgrounds. Having explored the phenomenon of under-representation and identified a need for action to address inequitable rates of participation, this thesis began by presenting a critical reading of higher education student equity policy over the past half a century, examining the intentions and the impact of policy changes. Specifically, it noted that this research is timely in the light of current Federal Government policy which promotes the implementation of early-intervention programs aimed at raising the aspirations of young people from low socio-economic backgrounds.

The thesis then developed a framework, based on theories of social and cultural capital, upon which to interrogate two central propositions. First, it was proposed that a young person’s bonding social capital plays a significant role in shaping – and in many cases, limiting – their embodied cultural capital with respect to their beliefs about university. Second, it was proposed that it is possible to intervene in the processes of the accumulation of social and cultural capital and thereby to raise expectations.

Summary of findings

The central findings of this study have largely supported these two propositions. First, it has been observed that young people’s habitus with regard to their knowledge of, beliefs about and expectations for higher education is primarily shaped by the information, beliefs and identities to which they are exposed in their everyday social worlds. This set of embodied cultural capital, in its turn, reflected the educational experiences of the role models themselves. Consequently, those young people whose close family members had not attended university displayed less positive habitus with regard to university. That is, they were less knowledgeable about their post-secondary...
alternatives and university entry requirements and often held misconceptions about the costs. In the absence of personal or second-hand experience of the world of university, many expressed inaccurate or negative perceptions of university work and life. Most participants presented as hard-working and held high career aspirations, irrespective of their family backgrounds. However, those from families with lower levels of education generally held weak self-efficacy beliefs with regard to their ability to gain entry to university and to cope with university work. In the absence of academically successful role models, they often found it difficult to envisage themselves as university students. These effects compounded so that the young people from these backgrounds, their high career aspirations notwithstanding, exhibited low expectations that they might be able to go to university.

Second, it has been observed that the construction of a young person’s habitus is a dynamic, constantly evolving process and that it is possible to intervene in this process to enhance bridging social and embodied cultural capital. It has been demonstrated that participating in the ACULink program altered the participants’ dispositions in the areas of their knowledge of university and their beliefs about the desirability, relevance and attainability of a university education. It has also been demonstrated that it enhanced their self-efficacy beliefs around university, and their ability to identify themselves as university students, which in turn raised their expectations that they might go to university.

The data presented in Chapters 5 and 6 have illustrated that the ways in which these phenomena operated were multiple and inter-connected, with access to accurate information, experience of university life and interaction with academically successful role models all having an encouraging effect. The provision of accurate information was shown to enhance participants’ knowledge of their post-secondary options and of university entry requirements. In addition, it corrected the misconceptions many held around the costs of a university education, thereby removing a significant perceived barrier to entry. Opportunities to visit a university campus and experience university work made university seem more welcoming and attainable and enhanced self-esteem with regard to participants’ belief in their ability to cope with university work. Finally, interaction with university students from backgrounds similar to their own enhanced
participants’ self-esteem with regard to their ability to gain entry to university and enabled the young people to envisage themselves as university students. The combined effect was that the young people developed higher expectations that they might be able to go to university.

In the light of these findings, the thesis has proposed a model for intervention programs based on (a) ongoing partnerships between universities and schools; (b) early intervention; (c) provision of accurate information; (d) interaction with university students from backgrounds similar to the young people; and (e) opportunities to experience university work and life. The findings are invaluable: they are already being used to shape the structure of the ACULink program and may be applied to similar interventions at other institutions. Further, they may inform wider student equity policy in higher education. They have also indicated a number of areas for potential future research. This chapter outlines the implications of these findings at the levels of Federal policy, institutional practice and research.

**Limitations of the Study**

As with most qualitative research, this study is in-depth rather than large in scale, which must necessarily impact upon the transferability of the findings. The findings are not intended to be automatically generalisable to wider populations nor should they be viewed as representative of all school students from low socio-economic backgrounds. Nonetheless, the findings do shed light on the accumulation of bridging social and embodied cultural capital and on the potential for intervention in these processes. Thus, they inform the design of intervention projects aimed at improving rates of transition to higher education for people from disadvantaged backgrounds.

One limitation with regard to the transferability of the findings is that the campus visits took place on a particular campus, which is small in comparison to most metropolitan universities, and therefore likely to be experienced as both physically less daunting and socially more welcoming than its larger counterparts. The success of the ACULink project is in part due to its ability to make the young people feel comfortable on the campus which may be aided by the nature of the campus. This effect may not be
present when similar interventions are employed on larger universities. In such cases, the intervention would need to find ways to mitigate any potential negative effects from the size of the campus and student body.

A third limitation is the fact that, in the survey, there was no opportunity to collect pre-intervention data, making it difficult to draw firm conclusions on the impact of the intervention from the quantitative component. This limitation is, however, somewhat mitigated by the fact that the study was predominantly qualitative and the in-depth interviews were able to fill in some of these gaps.

A fourth limitation stems from the gender bias in the interview sample. As there were only seven males interviewed – making up approximately one quarter of the sample – it was difficult to identify any gender-based trends.

A final but important limitation is that this research focused only on the short-term impacts of the intervention on young people’s knowledge, beliefs and aspirations. No attempt has been made to ascertain the success of the intervention in translating these altered beliefs into actual transition to university among participants. This would be an important area for further study.

**Importance of the study for equity of access to higher education**

Equity of access for students from low socio-economic groups has been targeted by the Federal Government as an area of priority in their aim to increase the percentage of the population participating in Higher Education. This is viewed as important on moral grounds – so that all Australians should have equal access to the personal, social and financial benefits of a higher education, regardless of socio-economic background; and on economic grounds – to enhance national productivity through a more highly educated workforce. After two decades of policy support and institutional interventions, it is widely regarded that it is timely to evaluate the efficacy of the targeted approach. There is an oft-cited need for more research in this area, and this study makes a contribution to this field.
Attitudes towards education have been identified as the primary influence on young people’s academic success, and this research develops our understanding of the processes by which young people construct their habitus with regard to higher education. Further, it illuminates ways in which it might be possible to improve rates of transition to higher education among people from low socio-economic backgrounds by altering this habitus and raising expectations.

**Implications for policy**

The findings of this study will make a contribution to Federal policy and practice in the area of the government’s target to increase the rate of participation in higher education of people from low socio-economic backgrounds to 20% of university populations by the year 2020. The Federal Government is currently investing significant sums in initiatives aimed at improving participation levels of students from under-represented groups (Australia, Commonwealth of, 2008). Evidence that the intervention has been effective in changing the beliefs held by young people from low socio-economic backgrounds about higher education, suggests that the federal government should continue the funding of such equity initiatives. The findings of this study will potentially inform the allocation and impact of these investments through:

- the identification of the factors affecting knowledge of, beliefs about and aspirations and expectations for higher education among young people from low socio-economic backgrounds; and
- the development of a evidence-based model for intervention, to enhance knowledge, change beliefs and thereby raise aspirations and expectations for higher education among young people from low socio-economic backgrounds.

In addition to the funding and structuring of outreach programs, the absence of evidence around transition rates suggests that there is also a need to fund further research, particularly longitudinal, into the efficacy and outcomes of such intervention programs. This is explored further in the recommendations for further research.
Recommendations for practice at higher education institutional level

The current social, economic and political climate strengthens the imperative for higher education institutions to act to address persistent inequities in participation. The findings from this study contribute to an evidence base which can inform higher education institutions as they develop intervention programs.

Clearly, the students’ social context must be taken into account when designing an intervention program. Both the literature and the data highlight the key role parents play in shaping a young person’s knowledge, beliefs, self-efficacy, identity, and their aspirations and expectations. Therefore, an intervention is likely to be more effective if it can find ways in which to engage parents in the process.

In the absence of academically successful role models in the lives of the school students from disadvantaged backgrounds, the part played by university student role models takes on greater significance. In these contexts, it is imperative that an intervention provides opportunities for interaction with university students from similar backgrounds to the school students, in order to fill the gap in the students’ existing social world.

Finally, universities must consider whether their responsibilities extend beyond raising aspirations. Convincing vulnerable young people that a university education is attainable can be misleading, and potentially devastating, to those who aspire and miss out. It is recommended that universities put in place strategies to facilitate the transition to university of those whose expectations have been raised through participation in intervention programs. Such strategies might include, for example, alternative access routes, differential entry scores, enabling courses and financial assistance.

Altering the way universities are perceived – making them seem more relevant and attainable – implies changing not only perceptions but also actualities. If Federal policy and institutional actions result in improved participations rates, there are implications for university support structures and pedagogies. There will be a need to implement strategies that will facilitate the engagement, retention and success of the growing proportion of the student body who will be from educationally disadvantaged
backgrounds. Such strategies might include academic assistance, advice on financial concerns, mentoring of first-year students, and structured social activities. Finally, universities will need to develop pedagogies which engage, rather than exclude, people from educationally disadvantaged backgrounds.

Finally, there is an imperative for higher education institutions to conduct their own, site-specific, research into transition rates and engagement, including retention and success, among participating cohorts.

**Recommendations for schools**

Many participants in this study reported that the information provided by the intervention was new to them. For some, this information was transformative. This indicates a need for schools to spend more time on goal-setting and guided career planning, in order to develop students’ knowledge of post-secondary alternatives, to encourage pragmatic decision-making, and to ensure that university is presented as a viable alternative throughout. The dynamic nature of the construction of young people’s habitus suggests that it would be beneficial for schools to provide regular opportunities for students to re-visit these concepts, in order to accommodate their constantly evolving plans.

This study has highlighted the powerful impact that interaction with university students had on those young people who had little access to such role models in their existing social worlds. Schools have a role to play in enhancing the bridging social capital of their students. In addition to working in partnership with universities to provide opportunities for students to interact with university students, it is recommended that schools exploit the potential bridging social capital within their own communities. One way to do this is to use their past students who have gone onto university as a resource and as role models for students.

Another powerful impact observed was that of experiencing the world of university. Again, schools have an important role in informing all students of opportunities to visit universities, in promoting events such as university open days and taster days, and in facilitating these visits.
The data also indicated that many students held some significant misconceptions around the costs of a university education. It is recommended that schools ensure ALL students are informed of the structure of the HECS payment system, not just the select few who teachers deem likely to go to university, so that no student precludes university as an option due to misconceptions about the costs of a higher education.

The data around the perceived helpfulness of teachers, and the impact of teacher encouragement and expectations, highlight the important role that teachers play in influencing young people’s career and study choices. Teachers should therefore communicate high expectations of all students and encourage all students to aim high, so that aspirations and expectations drive achievement rather than achievement being limited by low aspirations and expectations.

Finally, the data highlighted the primacy of parents in shaping their daughters’ and sons’ habitus, which suggests that an intervention would be more effective if it engaged parents. Schools are in a key position to gain access to parents, and it is therefore recommended that they develop strategies to inform and involve parents in all of the above processes. Strategies might include informing parents of upcoming opportunities for their daughters and sons to visit universities and, where relevant, reassurance that the young people will be well supervised. Schools could consider providing a shuttle service to university open days, or providing funding to cover transport costs. At information evenings dealing with careers information and school subject choice, the alternative of going to university should be presented as a realistic and achievable alternative for students from their school. Schools could also distribute information to parents, such as the booklet prepared by ACULink. In particular, schools could endeavour to inform all parents about the structure of the HECS, in order to prevent parents discouraging their daughters and sons due to misplaced concerns about the costs of going to university.
Recommendations for further research

This research makes a contribution to the growing body of research which provides evidence of the impact of intervention programs on the post-secondary choices and destinations of young people from disadvantaged backgrounds. However, it is small in scope and site-specific in nature. It would therefore be beneficial for other universities to conduct, or continue to conduct, research into the efficacy and impact of their intervention programs, in order to establish whether the effects observed in this study are consistent across other contexts and groups. Where such evaluations have already taken place, it is recommended that the results be published in order to build a shared understanding of the factors which encourage transition.

Second, while this research provides evidence that it is possible to change young people’s knowledge, beliefs and expectations, it has not investigated the success of the intervention in terms of “bums-on-seats”. There is a need for further research to ascertain the impact on actual transition rates among cohorts participating in this and other similar intervention programs.

Third, this study focused only on students from low socio-economic backgrounds in outer metropolitan areas. It has not explored issues of compounded disadvantage, such as the added dimension of rural and isolated students, or Indigenous students. There is need for further research to examine the extent to which the findings from this study might offer insight into their circumstances.

Conclusion

The Federal Government has set a target that, by 2020, people from low socio-economic backgrounds will make up 20% of university populations. Consecutive DEST figures have illustrated that people from low socio-economic backgrounds attend university at a fraction of the rate of those from high socio-economic backgrounds, and this has remained the case despite decades of policy promoting equity of access. While a number of factors contribute to this imbalance, several studies have highlighted the primacy of family attitudes to higher education in determining post-secondary destinations. Using theories of social and cultural capital as a framework, this study has investigated the potential for altering young people’s existing disposition in the areas of
their knowledge and beliefs about, and aspirations and expectations for, higher education.

Within the constraints of a small study, it has been demonstrated that it is possible to alter young people’s beliefs about and expectations for university. A model of a school-university intervention which involves the provision of accurate information, interaction with academically successful role models and experiences of the world of university has been shown to remove some perceived barriers to entry and thereby to make university seem more accessible. In particular, the interaction with university students who are “like” themselves encourages school students to perceive university as both relevant and attainable.

These findings are invaluable in shaping the future content of the ACULink project and may be useful to other universities planning such an intervention. More importantly, it is hoped that raising the expectations of the young people concerned will ultimately facilitate their transition to university.

Federal policy currently promotes and funds access and equity projects involving sustained linkages between schools and universities. The findings from this study suggest that these projects should involve early intervention, ongoing partnerships, the provision of timely and accurate information, experiences of the world of university and interaction with academically successful role models from similar backgrounds to the school students. This research indicates that such a model can have a powerful impact on school students’ knowledge and beliefs about, and raise expectations for, further education. At its most successful, this will make a significant contribution towards the long term agenda of a more equitable distribution of the benefits of higher education.
Epilogue

For reasons of privacy, it was not possible to trace the destinations of all interview participants. However, I have been in contact with the following young people, who have kindly consented to having this information included.

University students in 2007
Tracey: Teaching English, History and Religious Education in a secondary school.

Year 12 students in 2007
Sarah: Studying a B.Sci at a large metropolitan university.
Nancy: Studying a B.Sci/BA: Museum Studies and Heritage, at a large metropolitan university
Lucy: In her final year of a BT/BA at ACU.

Of 197 students in the Year 12 class of 2008 at St Thomas More Senior High School, 75 (38%) received offers of a place at university. This is over the Sydney metropolitan average, and around three times the 2006 overall participation rate for the Mountain View and Valley View areas.
References


Suburb names have been changed to protect the anonymity of schools and individual participants.

Suburb names have been changed to protect the anonymity of schools and individual participants.


Australia by the Centre for the Study of Higher Education, University of Melbourne.


Williams, B. R. (1979). *Education, Training and Employment: An address to the Annual General Meeting of the N.S.W. Chapter of the Australian College of*


Appendices
Appendix 1: Human Research Ethics Approval

1.1 University of Sydney

The University of Sydney
NSW 2006 Australia

18 October 2005

Professor J Sachs
PVC, Teaching and Learning
Main Quadrangle – A14
The University of Sydney

Dear Professor Sachs

I am pleased to inform you that the Human Research Ethics Committee at its meeting on 18 October 2005 approved your protocol entitled “Improving participation in higher education for young people from low socioeconomic backgrounds: Changing beliefs about university”

Details of the approval are as follows:

Ref No.: 10-2005/2/8621
Approval Period: October 2005 – October 2006
Completion Date of Project: 30 August 2007
No. of Participants: 512 [500 questionnaires (approximate); 12 interviews]
Authorised Personnel: Professor J Sachs
Ms J Harris

To comply with the National Statement on Ethical Conduct in Research Involving Humans, and in line with the Human Research Ethics Committee requirements this approval is for a 12-month period. At the end of the approval period, the HREC will approve extensions for a further 12-month, subject to a satisfactory annual report. The HREC will forward to you an Annual Progress Report form, at the end of each 12-month period. Your report will be due on 31 October 2006.

Conditions of Approval Applicable to all Projects

(1) Modifications to the protocol cannot proceed until such approval is obtained in writing. (Refer to the website www.usyd.edu.au/ethics/human under ‘Forms and Guides’ for a Modification Form).

(2) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
(3) All research subjects are provided with a Participant Information Sheet and Consent Form, unless otherwise agreed by the Committee.

(4) The Participant Information Sheet and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee.

(5) The following statement must appear on the bottom of the Participant Information Sheet. *Any person with concerns or complaints about the conduct of a research study can contact the Manager, Ethics Administration, University of Sydney, on (02) 9351 4811.*

(6) The standard University policy concerning storage of data and tapes should be followed. While temporary storage of data or tapes at the researcher’s home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of seven years.

(7) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely

Associate Professor J D Watson
Chairman
Human Research Ethics Committee

Encl. Parental (or Guardian) Information Sheet – Questionnaire
Parental (or Guardian) Information Sheet – Interviews
Parental (or Guardian) Consent Form
Participant Information Sheet
Participant Consent Form
Questionnaire
Interview Topic Guide – Year 8-12 students
Interview Topic Guide – university students
4 August 2005

Joanne Harris
School of Education
Australian Catholic University
Mount Saint Mary Campus
25A Barker Road
Strathfield NSW 2135

Dear Ms Harris,

Our Executive Director of Schools, Dr. Anne Benjamin, is happy for you to approach schools in our diocese in order to carry out research on your improving participation in higher education for young people from low socioeconomic backgrounds: changing beliefs about university study. We always stress the following points in relation to research requests:

- It is the school principal who gives final permission for research to be carried out in his/her school.
- Confidentiality needs to be observed in reporting.
- There should usually be some feedback to schools and a copy of the findings of the research forwarded to the Catholic Education Office.
- This letter of approval should accompany any approach to schools.

I look forward to the results of your very interesting study and wish you the best over the coming months. If you would like to further discuss any aspect of this research in our diocese, please do not hesitate to contact me at the Catholic Education Office on 9840 5613 or by email on lan.jackson@parra.catholic.edu.au.

Best wishes,

Yours sincerely,

[Signature]

Senior Professional Officer
Policy, Planning and Equity
Office of the Executive Director

www.parra.catholic.edu.au

Schools in the Diocese of Parramatta seek to be: ● authentically Catholic ● inviting, inclusive and just ● committed to quality teaching ● supportive of the ongoing development of staff
Appendix 2: Institution consent

2.1 Australian Catholic University

Ms Joanne Harris
Lecturer, School of Education
Australian Catholic University
Strathfield Campus
25A Barker Road
Strathfield 2135
1 August 2005

Dear Joanne

Thank you for the details of your research entitled Improving Participation in Higher Education for Young People from Low Socioeconomic Backgrounds: Changing beliefs about university to be conducted as one of the requirements for the completion of the Doctor of Philosophy at the University of Sydney under the supervision of professor Judyth Sachs and Dr Kevin Laws.

I understand that as part of this research you propose to interview a small number of ACU School of Education students in 2005 and 2006. Permission is granted for your proposal to include interviews of ACU students. When your proposal is successful, those interviews may be conducted with the individual student’s permission.

I wish you every success with your proposed research, and anticipate with interest the implications for future equity and access initiatives to be implemented by ACU and its partners.

Yours sincerely

Dr Marea Nicholson
Head, School of Education
61 2 97014322
m nicholson@mary.acu.edu.au
7th September 2005

Ms Joanne Harris
School of Education
Australian Catholic University
Mount Saint Mary Campus
25A Barker Road
Strathfield 2135

Dear Joanne

Re: Permission to conduct research into the impact of CUI ink with _______________
students.

I would be very pleased to have you carry out the research entitled:

Improving participation in Higher Education for Young People from Low Socioeconomic Backgrounds; Changing beliefs about university.

Permission for your proposal to survey and interview students from _______________
Catholic High School is granted.

Yours sincerely,

Principal
2.3
(Note

TO WHOM IT MAY CONCERN

I, __________________, grant permission to Ms Joanne Harris, Lecturer, School of Education, Australian Catholic University, Mount Saint Mary Campus, to conduct research into the impact of ACULink with _______ students.

Specifically, Ms Harris is permitted to conduct research on *Improving Participation in Higher education for Young people from Low Socioeconomic Backgrounds: Changing beliefs about university.*

This permission is granted in accordance with the conditions set out in Ms Harris’ letter to me, received on 19 August 2005, and in compliance with the requirements of the Catholic Education Office, Diocese of Parramatta [Letter dated 4 August, 2005 from Mr Ian Jackson, Senior Professional Officer - Policy, Planning and Equity - Office of the Executive Director for School].

__________________________
Principal
Appendix 3: Information letters and consent forms

3.1 Survey information sheet: Participants

PARTICIPANT INFORMATION SHEET

Research Project

TITLE: Changing Young People’s Beliefs about University.

Dear student,

You are invited to take part in a research project being conducted by Joanne Harris.

1. What is the study about?
The study is investigating the processes young people go through when making decisions about their futures, in particular, choices about their study and career. Specifically, it will try to determine whether the ACULink program has been effective in encouraging the young people involved to go to university.

2. Who is carrying out the study?
The study is being conducted by Joanne Harris, lecturer from Australian Catholic University and Coordinator of the ACULink project. It will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Judyth Sachs and Doctor Kevin Laws.

3. What does the study involve?
The study involves completing a five page questionnaire.

4. How much time will the study take?
The questionnaire will take approximately twenty minutes to complete.

5. Can I withdraw from the study?
Being in this study is completely voluntary - you are not under any obligation to consent. Your decision whether or not to participate will not prejudice your future relations with the University or the researcher. If you decide to participate, you are free to withdraw your consent and to discontinue your participation at any time without prejudice.
6. Will anyone else know the results?
Questionnaires will be completed anonymously. All aspects of the study, including results, will be strictly confidential and only the researcher will have access to information on participants. A report of the study will be submitted for assessment, but individual participants will not be identifiable in such a report.

7. Will the study benefit me?
There is no form of payment or incentive available for participating in this study. It is anticipated that you will find the interview a positive experience, and you can feel good knowing that your experiences may help other young people like yourself in the future.

8. Can I tell other people about the study?
There is no need to keep your participation in the study confidential.

9. What if I require further information?
When you have read this information, Joanne Harris will discuss it with you further and answer any questions you may have. She can be contacted on (02) 9701 4307.

10. What if have a complaint or concerns?

This study has been approved by the Human Research Ethics Committee at the University of Sydney.
Any person with concerns or complaints about the conduct of a research study can contact:
The Manager for Ethics Administration
University of Sydney
Tel (02) 9351 4811.

This information sheet is for you to keep.

If you agree to participate in this research, please sign the Parent/Guardian Consent Form and return it to the researcher via your Home Class teacher. Retain this information sheet for your records. Thank you for your time.
3.2 Survey information sheet: Parents

The University of Sydney

PARENTAL (OR GUARDIAN) INFORMATION SHEET

Research Project

TITLE: Changing Young People’s Beliefs about University.

Dear parents/guardians,
Your daughter/son is invited to take part in a research project. All students in Years 8, 9 and 10 at St Agnes, plus Year 11 and 12 students from Loyola, who have taken part in the ACULink program, are invited to participate.

11. What is the study about?
The study is investigating the processes young people go through when making decisions about their futures, in particular, choices about their study and career. Specifically, it will try to determine whether the ACULink program has been effective in encouraging the young people involved to go to university.

12. Who is carrying out the study?
The study is being conducted by Joanne Harris, lecturer from Australian Catholic University and Coordinator of the ACULink project. It will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Judyth Sachs and Doctor Kevin Laws.

13. What does the study involve?
The study involves completing a five page questionnaire.

14. How much time will the study take?
The questionnaire will take approximately twenty minutes to complete.

15. Can I withdraw from the study?
Being in this study is completely voluntary - you are not under any obligation to consent. Your decision whether or not to allow your daughter/son to participate will not prejudice her/his future relations with the University or the researcher – s/he will still be welcome to participate in all ACULink programs. If you consent to her/his participation, you are free to withdraw your consent and to discontinue her/his participation at any time without prejudice.
**TITLE: Changing Young People’s Beliefs about University.**

16. Will anyone else know the results?
Questionnaires will be completed anonymously. All aspects of the study, including results, will be strictly confidential and only the researcher will have access to information on participants. A report of the study will be submitted for assessment and may be published in a professional journal, but individual participants will not be identifiable in such a report.

17. Will the study benefit me?
There is no form of payment or incentive available for participating in this study. It is anticipated that participants will find the interview a positive experience, and s/he can feel good knowing that her/his experiences may help other young people in the future.

18. Can I tell other people about the study?
There is no need to keep your daughter’s/son’s participation in the study confidential.

19. What if I require further information?
When you have read this information, your daughter’s/son’s class teacher will answer any questions you may have. Alternatively, the Principal Researcher (Joanne Harris) can be contacted on (02) 9701 4307 in the School of Education, Australian Catholic University, Mount Saint Mary Campus, 25A Barker Road Strathfield NSW 2135.

20. What if have a complaint or concerns?

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This study has been approved by the Human Research Ethics Committee at the University of Sydney.

Any person with concerns or complaints about the conduct of a research study can contact:
The Manager for Ethics Administration
University of Sydney
Tel (02) 9351 4811.

This information sheet is for you to keep.

If you agree to your daughter/son participating in this research, please sign the Parent/Guardian Consent Form and return it to the researcher via your daughter’s/son’s Home Class teacher. Retain this information sheet for your records. Thank you for your time.
3.3 Interview information sheet: Participants

PARTICIPANT INFORMATION SHEET

Research Project
TITLE: Changing Young People’s Beliefs about University.

Dear student,
You are invited to participate in a research project being conducted by Joanne Harris.

1. What is the study about?

The study is investigating the processes young people go through when making decisions about their futures, in particular, choices about their study and career. Specifically, it will try to determine whether the ACULink and UNILink programs have been effective in encouraging the young people involved to go to university.

2. Who is carrying out the study?

The study is being conducted by Joanne Harris, lecturer from Australian Catholic University and Coordinator of the ACULink project. It will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Judyth Sachs and Doctor Kevin Laws.

3. What does the study involve?

The study involves an in-depth one-on-one interview between you and the researcher. With your permission, this interview will be recorded on audio-tape.

4. How much time will the study take?

Each interview will take approximately twenty to thirty minutes.

5. Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent. Your decision whether or not to participate will not prejudice your future relations with the University or the researcher. If you decide to participate, you are free to withdraw your consent and to discontinue your participation at any time without prejudice. You may ask for the tape to be stopped and/or erased at any time without prejudice.
6. Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researcher will have access to information on participants. A report of the study will be submitted for assessment, but individual participants will not be identifiable in such a report.

7. Will the study benefit me?

There is no form of payment or incentive available for participating in this study. It is anticipated that you will find the interview a positive experience, and you can feel good knowing that your experiences may help young people like yourself in the future.

8. Can I tell other people about the study?

There is no need to keep your participation in the study confidential.

9. What if I require further information?

When you have read this information, Joanne Harris will discuss it with you further and answer any questions you may have. She can be contacted on (02) 9701 4307.

10. What if have a complaint or concerns?

This study has been approved by the Human Research Ethics Committee at the University of Sydney. Any person with concerns or complaints about the conduct of a research study can contact:
The Manager for Ethics Administration
University of Sydney
Tel (02) 9351 4811.

This information sheet is for you to keep.

If you agree to participate in this research, please sign the Participant Consent Form and return it to the researcher. Retain this information sheet for your records. Thank you for your time.
3.4 Interview information sheet: Parents

The University of Sydney

PARENTAL (OR GUARDIAN) INFORMATION SHEET

Research Project
TITLE: Changing Young People’s Beliefs about University.

Dear parents/guardians,
Your child is invited to take part in a research project. All students in Years 8, 9 and 10 at St Agnes, plus Year 11 and 12 students from Loyola, who have taken part in the ACULink and/or UNILink programs, are invited to participate.

1. What is the study about?
The study is investigating the processes young people go through when making decisions about their futures, in particular, choices about their study and career. Specifically, it will try to determine whether the ACULink program has been effective in encouraging the young people involved to go to university.

2. Who is carrying out the study?
The study is being conducted by Joanne Harris, lecturer from Australian Catholic University and Coordinator of the ACULink project. It will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Judyth Sachs and Doctor Kevin Laws.

3. What does the study involve?
The study involves two in-depth one-on-one interviews between each school student and the researcher. With your permission, these interviews will be recorded on audio-tape.

4. How much time will the study take?
Each interview will take approximately twenty to thirty minutes.

5. Can I withdraw from the study?
Being in this study is completely voluntary - you are not under any obligation to consent. Your decision whether or not to allow your daughter/son to participate will not prejudice her/his future relations with the University or the researcher – s/he will still be welcome to participate in all ACULink and Unilink programs. If you consent to her/his participation, you are free to withdraw your consent and to discontinue her/his participation at any time without prejudice. S/he may ask for the tape to be stopped and/or erased at any time without prejudice.
6. Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researcher will have access to information on participants. A report of the study will be submitted for assessment, but names will be changed so that individual participants will not be identifiable in such a report.

7. Will the study benefit me?

There is no form of payment or incentive available for participating in this study. It is anticipated that participants will find the interview a positive experience, and s/he can feel good knowing that her/his experiences may help other young people in the future.

8. Can I tell other people about the study?

There is no need to keep your daughter's/son's participation in the study confidential.

9. What if I require further information?

When you have read this information, your daughter's/son's class teacher will answer any questions you may have. Alternatively, the Principal Researcher (Joanne Harris) can be contacted on (02) 9701 4307 in the School of Education, Australian Catholic University, Mount Saint Mary Campus, 25A Barker Road Strathfield NSW 2135.

10. What if have a complaint or concerns?

This study has been approved by the Human Research Ethics Committee at the University of Sydney.

Any person with concerns or complaints about the conduct of a research study can contact:
The Manager for Ethics Administration
University of Sydney
Tel (02) 9351 4811.

This information sheet is for you to keep.

If you agree to your daughter/son participating in this research, please sign the Parent/Guardian Consent Form and return it to the researcher via your daughter’s/son’s Home Class teacher. Retain this information sheet for your records. Thank you for your time.
PARTICIPANT CONSENT FORM

I, .............................................. , give consent to my participation in the research project
Name (please print)

**TITLE: Changing Young People's Beliefs about University.**

In giving my consent I acknowledge that:

1. The procedures required for the project have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Sheet and have been given the opportunity to discuss the information and my involvement in the project with the researcher.

3. I understand that my participation is voluntary and that I can withdraw from the study at any time, without affecting my relationships with the researcher now or in the future.

4. I have been given a copy of the Participant Information Statement to keep.

5. I understand that my involvement is strictly confidential and no information about me will be used in any way that reveals my identity.

6. I understand that overall data from the research may be published in a professional journal, but that no information about me will be used in any way that reveals my identity.

Signed: .................................................................
Name: .................................................................
Date: .................................................................
3.6 Survey and interview consent forms: Parents

The University of Sydney

PARENTAL (OR GUARDIAN) CONSENT FORM

I, ........................................................ agree to permit ........................................................, who is aged ......................... years, to participate in the research project –

**TITLE: Changing Young People’s Beliefs about University.**

In giving my consent I acknowledge that:

1. I have read the Parental/Guardian Information Sheet and the time involved for my child’s participation in the project. The researcher/s has given me the opportunity to discuss the information and ask any questions I have about the project and they have been answered to my satisfaction.
2. I understand that my child’s participation is voluntary and I can withdraw my child from the study at any time without affecting my or my child’s relationship with the researcher now or in the future.
3. I agree that research data gathered from the results of the study may be published provided that neither my child nor I can be identified.
4. I understand that if I have any questions relating to my child's participation in this research I may contact the researcher/s who will be happy to answer them.
5. I acknowledge receipt of the Parental/Guardian Information Sheet.

........................................................................................................
Signature of Parent/Guardian

........................................................................................................
Please PRINT name

........................................................................................................
Date

........................................................................................................
Signature of Child

........................................................................................................
Please PRINT name

........................................................................................................
Date
Appendix 4: Survey questionnaire

Code name:

Research Project

Changing Young People’s Beliefs about University.

Career and Study Beliefs Questionnaire

(Year 10)

Thank you for taking the time to complete this questionnaire. Your time and honesty are appreciated. The questionnaires are to be completed anonymously, so the researchers will not know your identity. It should take approximately twenty minutes to complete.

The study is being conducted by Joanne Harris, lecturer from Australian Catholic University and Coordinator of the ACULink project. It will form the basis for the degree of Doctor of Philosophy at The University of Sydney under the supervision of Professor Judyth Sachs and Doctor Kevin Laws.
Section 1: Background Information

Q1. Mother’s occupation: ________________________________

Q2. Father’s occupation: ________________________________

Q3. Place a tick in the column next to your mother’s and your father’s highest levels of education:

<table>
<thead>
<tr>
<th></th>
<th>Mother’s highest level of education</th>
<th>Father’s highest level of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>a University Degree or higher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Diploma from university and/or TAFE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a TAFE Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other formal qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School only – Yr 12 Higher School Certificate (or equivalent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School only – Yr 10 School Certificate (or equivalent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q4. Place a tick in the column next to highest level of education attained by your older brothers and/or sisters: *(If you have no older brothers or sisters, tick N/A)*

<table>
<thead>
<tr>
<th></th>
<th>Sibling 1</th>
<th>Sibling 2</th>
<th>Sibling 3</th>
<th>Sibling 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>a University Degree or higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Diploma from university and/or TAFE</td>
<td></td>
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<tr>
<td>a TAFE Certificate</td>
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<tr>
<td>Apprenticeship</td>
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<tr>
<td>Other formal qualification</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>School only – Yr 12 Higher School Certificate (or equivalent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School only – Yr 10 School Certificate (or equivalent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal qualifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A (no older brothers or sisters)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 2: My Future Career

Q5. Name the career or careers you wish to pursue. If you are considering more than one, mark your 1st, and 2nd preferences. If you have no idea, write “no idea” and go to question 10.
1. ______________________________________________________________________
2. ______________________________________________________________________

Q6. Tick the levels of training/qualifications you need to enter your chosen career/s. If there is more than one possible training pathway, you may tick more than one.

<table>
<thead>
<tr>
<th>Training/Qualifications</th>
<th>1st preference</th>
<th>2nd preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>a University Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Diploma from university and/or TAFE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a TAFE Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School only – Higher School Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School only – School Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal qualifications required</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q7. Tick the school subject/s you need to gain entry to your chosen courses/ careers.

<table>
<thead>
<tr>
<th>Subject</th>
<th>1st pref.</th>
<th>2nd pref.</th>
<th>1st pref.</th>
<th>2nd pref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: General</td>
<td></td>
<td></td>
<td>History</td>
<td></td>
</tr>
<tr>
<td>English: Advanced level</td>
<td></td>
<td></td>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Mathematics: General</td>
<td></td>
<td></td>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>Mathematics: Advanced level</td>
<td></td>
<td></td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>Religious Education</td>
<td></td>
<td></td>
<td>Drama</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td></td>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
<td>Languages</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td></td>
<td></td>
<td>Food Technology</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td></td>
<td></td>
<td>Textiles and Design</td>
<td></td>
</tr>
<tr>
<td>Science: General</td>
<td></td>
<td></td>
<td>Design Technology</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td>PD/H/PE</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td>IT/Computers</td>
<td></td>
</tr>
</tbody>
</table>

Q8. Tick the column next to the marks you need to get in your Higher School Certificate (UAI) to gain entry to your chosen courses and/or careers.

<table>
<thead>
<tr>
<th>Marks</th>
<th>1st preference</th>
<th>2nd preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 – 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 – 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 – 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 – 70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 – 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80 – 90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90 – 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Section 3: Making My Decision**

**Q9.** When did you first start thinking you would like to pursue this career path? *Tick next to the sentence which best describes when you first thought of it.*

<table>
<thead>
<tr>
<th></th>
<th>Very helpful</th>
<th>Somewhat helpful</th>
<th>Not at all helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>During years 11 – 12.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During years 9 – 10.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During years 7 – 8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During primary school.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Q10.** Place a tick in the column next to the people you have talked to about your future. Note whether each was very helpful, somewhat helpful, or not at all helpful to you in locating information and making your decision. *You need not tick every row.*

<table>
<thead>
<tr>
<th>People</th>
<th>Very helpful</th>
<th>Somewhat helpful</th>
<th>Not at all helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends at school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends outside school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brothers and/or sisters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Someone in the career I would like to pursue.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University students from ACU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students from other universities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counsellors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Q11.** Place a tick in the column next to each of the activities listed below. Rate whether each was very helpful, somewhat helpful or not at all helpful to you in making decisions about your study and career. *If you have not experienced the activity, tick “N/A”*

<table>
<thead>
<tr>
<th>Activities</th>
<th>Very helpful</th>
<th>Somewhat helpful</th>
<th>Not at all helpful</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 PD/H/PE lessons on goal-setting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 8 session with Joanne from ACU on Goal-setting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9 PD/H/PE lessons on career options and training pathways.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9 session with Joanne from ACU on career pathways and training options.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 PD/H/PE lessons on Work and Careers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 visit to workplace.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 visit to TAFE campus.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 visit to ACU university campus at Strathfield.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other activity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 4: My Beliefs about Work and Study

For questions 12 – 20, place a tick in the column that best fits your beliefs.

<table>
<thead>
<tr>
<th>Statement</th>
<th>University</th>
<th>TAFE</th>
<th>Full-time job</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Where would you most like to go after finishing school?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Where are you most likely to go after finishing school?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Where do most of your friends intend to go after finishing school?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Which will lead to a more satisfying career for you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Which qualification will lead to a more highly paid job/career?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Which qualification will give you the most career options in the future?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Which will best help you to develop the skills and knowledge you need?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Which will allow you to explore the most interesting things?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Which would be the most challenging option?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For questions 21 – 27, place a tick in the box that best fits your beliefs.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 I know where to locate information to help me in making career and study choices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 I am studying (or have chosen) the subjects I need to get into one of my first two choices of university course.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 I am studying (or have chosen) the subjects I need to get into one of my first two choices of TAFE course.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 I am studying (or have chosen) the subjects I need to get a job in one of my first two choices of job/career.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 I expect to get a high enough mark to get into one of my first two choices of university course.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 I expect to get a high enough mark to get into one of my first two choices of TAFE course.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 I expect to do well enough at school to get into one of my first two choices of job/career.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section 5: Factors that Encourage or Discourage Me

For questions 28 – 44, place a tick in the box that best fits your beliefs.

SA = Strongly Agree; A = Agree; U = Unsure; D = Disagree; SD = Strongly Disagree

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 My parents would like me to go to university.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 My teachers encourage me to go to university.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 My parents would like me to go to TAFE and/or get an apprenticeship.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 My teachers encourage me to go to TAFE and/or get an apprenticeship.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 My parents would like me to get a job straight after finishing school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 My teachers encourage me to look for a job straight after finishing school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 The cost of university fees is likely to stop me attending university.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 The cost of TAFE fees is likely to stop me from attending TAFE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 My family can afford to support me while I study at university.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37 My family can afford to support me while I study at TAFE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38 I need to earn a full-time living straight after finishing school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 I would be able to cope with the workload at university.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 I would be able to cope with the workload at TAFE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41 I would be able to cope with the workload if I got a job straight after finishing school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 People like me often go to university.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43 People like me often go to TAFE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 People like me often get work in my chosen career.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5: Interview topic guides

5.1 University students

Opening (open) question: personal characteristics: aspirations, influences and self-efficacy beliefs

- Tell me your story of how you came to be at university.
- What were your plans for when you finished school? What career were you hoping to pursue?
- Why did you decide you wanted to be a …..?
- Did you always believe you would achieve this goal? Why / why not?
- When did you decide you wanted to be a …..? How did your plans change over time?
- Who / what changed your mind each time?

Cultural capital: Participant’s knowledge of pathways

- When did you first find out what you needed to do in order to enter your chosen career/s?
- Was there more than one way to enter your chosen career? What was your preferred pathway?
- How did you find out what institutions offer courses in this area?
- How did you know what subjects you needed to take at school in order to gain entry into this course?
- How did you know what UAI (HSC mark) you needed to gain entry to this course?
- Was there anything else you had to do in order to gain entry to this course?

Social Capital: Bonding and bridging role models

- Did you know anyone who is working in this area? How well did you know this person?
- When did you decide you wanted to go to university? (Or realise you needed to go to university?)
- Was there any person / event that influenced you/helped you to decide?
- Did you talk about your study / career plans with your family?
• What did your parents say about your goals?
• What do your parents do for a living? Did either of them go to university?
• What do they say about their time at university? About you and university?
• When you were still at school, did you talk about your career/study plans with your friends?
• What did your friends intend/hope to do after they finish school?
• How many of them planned to go to university? How many did go on to university?
• Is there anyone else outside your immediate family and circle of friends who you spoke to about your study/career plans? Who? (Teachers? Other university students?)
• To what extent did they influence your plans/help you to decide?

Cultural Capital: Experience of/perceptions of university
• What were your impressions of what university would be like? (Mention the surroundings and facilities, teachers, other students, learning experiences, workload, social life, etc.)
• What had you heard/seen to create this impression? How accurate were your impressions?
• Did you always have this impression? Who/what changed your mind?

Cultural capital: Perceptions of barriers/encouraging effects
• Once you set yourself the goal of going to university, was there anything/anyone who helped you to achieve your goal?
• Did you feel there were any barriers you had to overcome? What were they?
• How did you overcome them? Did any person or event help you to do this?

Final question: Impact of ACULink
• What can you remember about the ACULink program?
• Do you recall the (refer to relevant ACULink strategies)?
• What influence, if any, did it have on your plans?
• What was it about the program that made a difference?
5.2 School students.

Opening (open) question: personal characteristics: aspirations, influences and self-efficacy beliefs

- What are your plans for when you finish school? What career would you like to pursue? (Interview 2: Has this changed since we last spoke?)
- Why do you want to be a …..?
- Do you think you will achieve this goal? Why / why not?
- When did you decide you wanted to be a …..? How your plans have changed over time?
- Who / what has changed your mind each time?

Cultural capital: Participant’s knowledge of pathways

- What do you need to do after finishing school in order to enter your chosen career/s?
- Do you need to do any further study? If so, would that be at university, TAFE, or other?
- Is there more than one way to enter your chosen career? What is your preferred pathway?
- Do you know what institutions offer courses in this area?
- What subjects do you need to take at school in order to gain entry into this course?
- What UAI (HSC mark) do you need to gain entry to this course?
- Where / how did you / could you find out this information?
- Is there anything else you need to do in order to achieve your goal?

Social Capital: Bonding and bridging role models

- Do you know anyone who is working in this area? How well do you know this person?
- When did you decide you want to go to university? (Or realise you need to go to university?)
- Was there any person / event that influenced you / helped you to decide?
- Do you talk about your study / career plans with your family?
- What do your parents say about your goals?
- What do your parents do for a living? Did either of them go to university?
- What do they say about their time at university? About you and university?
- Do you have any siblings / cousins / close friends who went to university or are at university now?
- What do they say about their time at university? About you and university?
- Do you talk about your study / career plans with your friends?
- What do your friends intend / hope to do after they finish school?
- How many of them plan to go to university?
- Is there anyone else who you have spoken to about your study / career plans?
  Who? (Teachers? Other university students?)
- To what extent did they influence your plans/help you to decide?

_Cultural Capital: Experience of / perceptions of university_

- What are your impressions of what university would be like? (Mention the surroundings and facilities, teachers, other students, learning experiences, workload, social life, etc.)
- What have you heard / seen to create this impression?
- Have you always had this impression? Who / what has changed your mind?

_Cultural capital: Perceptions of barriers / encouraging effects_

- Now that you have set yourself the goal of going to university, is there anything that/ anyone who you think could help you to achieve your goal?
- Can you think of anything that might prevent you from going to university?
- Do you think there will be any barriers you will have to overcome?
- Have you already encountered some barriers? What are they?
- How will you / have you overcome them? Who / what will help you to do this?

_Final question: Impact of ACULink_

- What can you remember about the ACULink program?
- Do you recall the (refer to relevant ACULink strategies)?
- What influence, if any, did it have on your plans?
- What was it about the program that made a difference?
### Appendix 6: Schema for analytical codes

#### 6.1 Preliminary schema

<table>
<thead>
<tr>
<th>Encouraging Factors (+)</th>
<th>Social Capital</th>
<th>Cultural Capital</th>
<th>Structural Factors</th>
<th>Personal Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Bonding</td>
<td>Parents’ / Siblings’ / Peers’ influence is positive. Access to role models who went to university in immediate social world.</td>
<td>+ Positive perceptions of uni Believes university to be worthwhile and relevant.</td>
<td>+ Information / Financial issues Has access to timely / accurate information re costs; courses; entry requirements; workload; uni life. Money is not a concern; financial assistance is available.</td>
<td>+ Identity Can see self-as-professional / self-as-uni student. Believes “I can do this”.</td>
</tr>
<tr>
<td>+ Bridging</td>
<td>Teachers and/or other role models’ influence is positive. Has access to role models outside immediate social world who went to university.</td>
<td>+ Positive perceptions of uni Believes university to be attainable and possible for themselves.</td>
<td>+ University intervention / Alternative Access Has access to university intervention and/or alternative access route.</td>
<td>+ Goal-oriented Has clear goal/s for career / study. Realizes their career goal requires higher education.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barriers (-)</th>
<th>Social Capital</th>
<th>Cultural Capital</th>
<th>Structural Factors</th>
<th>Personal Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Bonding</td>
<td>Parents’ / Siblings’ / Peers’ influence is negative or absent. Has no access to role models who went to university in immediate social world.</td>
<td>- Negative perceptions of uni Does not consider university to be worthwhile or relevant.</td>
<td>- Information: Lack Lack of accurate information re costs; courses; entry requirements; workload; and uni life. Has concerns about financial issues: fees; living expenses; loss of income.</td>
<td>- Absence of Identity Does not see self-as-professional / self-as-uni student. Believes “I do not have the ability to do this”.</td>
</tr>
<tr>
<td>- Bridging</td>
<td>Teachers’ and other role models’ influence is negative. Has no access to role models outside immediate social world who went to university.</td>
<td>- Negative perceptions of uni Does not consider university to be attainable or possible for themselves.</td>
<td>- University intervention / Alternative Access Does not have access to university intervention or alternative access route.</td>
<td>- Not goal-oriented Lacks career goal/s OR career goal/s do not require higher education.</td>
</tr>
</tbody>
</table>
### 6.2 Stage 2: Pre-existing social and cultural capital

<table>
<thead>
<tr>
<th>Encouraging Factors (+)</th>
<th>Social Capital</th>
<th>Cultural Capital</th>
<th>Structural Factors</th>
<th>Personal Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BONDING: Parents</strong></td>
<td>+ Perceptions of Uni: Worthwhile</td>
<td>+ Information</td>
<td>+ Identity</td>
<td></td>
</tr>
<tr>
<td>Family / parental support; high parental expectations.</td>
<td>Views university as worthwhile / necessary for chosen career.</td>
<td>Has access to timely / accurate information re costs; courses; entry requirements; workload; uni life.</td>
<td>Sees self-as-professional / self-as-uni student.</td>
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</tr>
<tr>
<td>Parents as role models.</td>
<td><strong>Perceptions of Uni: Relevant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ BONDING: Peers</td>
<td>Most friends intend to go to university.</td>
<td>+ Financial issues</td>
<td>+ High self-efficacy</td>
<td></td>
</tr>
<tr>
<td>Siblings went to / at university.</td>
<td>Views university as relevant – “People like me go to uni”.</td>
<td>Money is not a concern; financial assistance is available.</td>
<td>Believes “I can do this”.</td>
<td></td>
</tr>
<tr>
<td>+ BRIDGING: Teachers</td>
<td>+ Perceptions of uni: Attainable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers / counsellors encouraging.</td>
<td>Views university as attainable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ BRIDGING: Other role model</td>
<td>+ Perceptions of uni: Costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact with role model at university; intervention.</td>
<td>Understands HECS; views costs as investment in own future.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ BRIDGING: Teachers / counsellors encouraging.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ BRIDGING: Other role model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absence of parental support; inappropriate expectations.</td>
<td>- Perceptions of uni: Not worthwhile</td>
<td>- Information: Lack</td>
<td>- Absence of Identity</td>
<td></td>
</tr>
<tr>
<td>Parents not role models.</td>
<td>Views university as not worthwhile: not needed for chosen career.</td>
<td>Lack of accurate information re costs; courses; entry requirements; workload; and university life.</td>
<td>Does not see self-as-professional / self-as-uni student.</td>
<td></td>
</tr>
<tr>
<td>+ BONDING: Peers</td>
<td>- Perceptions of uni: Not relevant</td>
<td>- Financial issues</td>
<td>- Low self-efficacy</td>
<td></td>
</tr>
<tr>
<td>Most friends’ do not intend to go to university.</td>
<td>Views university as irrelevant – “People like me don’t go to uni”.</td>
<td>Concerned about financial issues: fees; living expenses; loss of income.</td>
<td>Believes “I do not have the ability to do this”.</td>
<td></td>
</tr>
<tr>
<td>No siblings went to university.</td>
<td></td>
<td>- Not goal-oriented</td>
<td>Lacks career goal/s OR not working to achieve them OR goal/s do not require higher ed. OR does not realize they do.</td>
<td></td>
</tr>
<tr>
<td>- BONDING: Teachers</td>
<td>- Perceptions of uni: Not attainable</td>
<td>- No alternative access</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers / counselors are not encouraging.</td>
<td>Views uni as unattainable: too hard to get in; the work is too hard.</td>
<td>Absence of alternative access route/s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- BONDING: Other role model</td>
<td>- Perceptions of uni: Costs</td>
<td>- University intervention: Lack</td>
<td>- Not pragmatic</td>
<td></td>
</tr>
<tr>
<td>Absence of role model at university/ no intervention.</td>
<td>Has misconceptions re cost of fees; living expenses; HECS; long-term benefits.</td>
<td>Absence of intervention.</td>
<td>Is not considering interests / abilities; not considering options.</td>
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</table>
### 6.3 Stage 3: Resulting social and cultural capital

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<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+ve impact on parents</td>
<td>+ve impact on perceptions of worth Enables S to view university as worthwhile and desirable</td>
<td>+ve impact on financial issues Helps S realize that lack of money need not be a barrier.</td>
<td>+ve impact on identity Enables S to see self as student / professional.</td>
<td></td>
</tr>
<tr>
<td>Encourages conversations about careers / university with parents.</td>
<td>+ve impact on perceptions of relevance Enables S to see that “people like me” can and do go to university.</td>
<td>+ve impact on access Provides alternative access route.</td>
<td>+ve impact on self-efficacy Helps S believe “I can do this”.</td>
<td></td>
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<tr>
<td>+ve impact on peers</td>
<td>+ve impact on perceptions of relevance Enables S to see that “people like me” can and do go to university.</td>
<td>+ve impact on access Provides alternative access route.</td>
<td>+ve impact on goal-orientation Raises S’s aspirations. Encourages S to work towards goals.</td>
<td></td>
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<tr>
<td>Encourages conversations about university with friends / siblings.</td>
<td>+ve impact on perceptions of attainment Enables S to recognize that university entry / work are within their abilities.</td>
<td>+ve impact on intervention N/A</td>
<td>+ve impact on pragmatic behaviours Helps S to consider her / his interests, abilities and options</td>
<td></td>
</tr>
<tr>
<td>University staff / students encourage S. Encourages conversations about university with teachers / counsellors.</td>
<td>+ve impact on costs Aids understanding of costs of going to university and payment methods. Helps S realize they can afford it.</td>
<td>+ve impact on intervention N/A</td>
<td>+ve impact on pragmatic behaviours Helps S to consider her / his interests, abilities and options</td>
<td></td>
</tr>
<tr>
<td>+ve impact on peers</td>
<td>+ve impact on costs Aids understanding of costs of going to university and payment methods. Helps S realize they can afford it.</td>
<td>+ve impact on intervention N/A</td>
<td>+ve impact on pragmatic behaviours Helps S to consider her / his interests, abilities and options</td>
<td></td>
</tr>
<tr>
<td>Provides S with role model “like me” who is currently studying at university.</td>
<td>+ve impact on perceptions of worth Causes S to consider university as not worthwhile or desirable.</td>
<td>-ve impact on information Does not provide accurate information re costs; courses; entry requirements; workload; uni life. OR confuses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barriers (-)</td>
<td>-ve impact on perceptions of worth Causes S to consider university as not worthwhile or desirable.</td>
<td>-ve impact on information Does not provide accurate information re costs; courses; entry requirements; workload; uni life. OR confuses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-ve impact on parents</td>
<td>-ve impact on perceptions of worth Causes S to consider university as not worthwhile or desirable.</td>
<td>+ve impact on identity Enables S to see self as student / professional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discourages conversations about university with parents.</td>
<td>-ve impact on perceptions of relevance Causes S to consider university as not relevant for “people like me”.</td>
<td>+ve impact on identity Enables S to see self as student / professional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-ve impact on peers</td>
<td>-ve impact on perceptions of relevance Causes S to consider university as not relevant for “people like me”.</td>
<td>+ve impact on identity Enables S to see self as student / professional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discourages conversations about university with friends / siblings.</td>
<td>+ve impact on perceptions of attainment Causes S to consider university access / work / life as too hard.</td>
<td>+ve impact on goal-orientation / aspirations Lowers aspirations OR discourages S from working towards their goal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ve impact on teachers</td>
<td>+ve impact on perceptions of attainment Causes S to consider university access / work / life as too hard.</td>
<td>+ve impact on goal-orientation / aspirations Lowers aspirations OR discourages S from working towards their goal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff / students discourage S. OR discourages conversations about university with teachers / counsellors.</td>
<td>-ve impact on perceptions of costs Causes S to believe that they cannot afford to go to university.</td>
<td>-ve impact on self-efficacy Causes S to believe “I cannot do this”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-ve impact on peers</td>
<td>-ve impact on perceptions of costs Causes S to believe that they cannot afford to go to university.</td>
<td>+ve impact on self-efficacy Causes S to believe “I can do this”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides inappropriate role models.</td>
<td>+ve impact on perceptions of costs Causes S to believe that they cannot afford to go to university.</td>
<td>+ve impact on self-efficacy Causes S to believe “I can do this”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-ve impact on peers</td>
<td>-ve impact on perceptions of costs Causes S to believe that they cannot afford to go to university.</td>
<td>+ve impact on self-efficacy Causes S to believe “I can do this”.</td>
<td>+ve impact on pragmatic behaviours Helps S to consider her / his interests / abilities / options OR confuses.</td>
<td></td>
</tr>
<tr>
<td>-ve impact on peers</td>
<td>-ve impact on perceptions of costs Causes S to believe that they cannot afford to go to university.</td>
<td>+ve impact on self-efficacy Causes S to believe “I can do this”.</td>
<td>+ve impact on pragmatic behaviours Helps S to consider her / his interests / abilities / options OR confuses.</td>
<td></td>
</tr>
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</table>
6.4 NVivo tree nodes

- **Social capital**
  - parents as role models
  - parental support
  - siblings as role models
  - peer aspirations and destinations
  - peer support
  - teachers/counsellors
  - ACU students as role models
  - other role models
  - absence of role models

- **Cultural capital**
  - conversations
  - information sources
  - experience of university
  - beliefs about university
  - course and career options
  - entry requirements
  - financial aspects
  - non English-speaking background
  - school program
  - emotions

- **Personal characteristics**
  - aspirations
  - goal-orientation
  - hard worker
  - pragmatic
  - initiative/research
  - self-efficacy
  - identity

- **Decision making**
  - process
  - proximity
  - transition
  - which university

- **Barriers**
- **Encouraging effects**
- **Alternative access**
- **Intervention**
  - Year 8 Goal-Setting
  - Year 9 Pathways Awareness
  - Year 10 campus Visit
  - Year 11 Role Modelling
  - Year 11 Shadowing
  - Step-Up Into Teaching
Appendix 7: Demographic Information

### 7.1 Questions 1/2: Parental Occupations

Categories assigned by researcher

Years 8/9/10. (N=94)

<table>
<thead>
<tr>
<th></th>
<th>Mother</th>
<th></th>
<th>Father</th>
<th></th>
<th>Desired Career 1st Preference</th>
<th>Desired Career 2nd Preference</th>
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<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
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<td>19.2</td>
<td>6</td>
<td>17</td>
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<td>63.8</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>Managerial</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Trade</td>
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<td>62.8</td>
<td>24</td>
<td>60.6</td>
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<td>29.8</td>
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<tr>
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<td>23</td>
<td>33</td>
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<td>Low-skilled</td>
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<td>33</td>
<td>7</td>
<td>8</td>
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<td></td>
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<tr>
<td>Low-skilled</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed/ Other</td>
<td>9</td>
<td>9.6</td>
<td>10</td>
<td>10.6</td>
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<td>1</td>
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<tr>
<td>Unemployed/ Other</td>
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<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
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<td>Don’t know</td>
<td>8</td>
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<td>11</td>
<td>11.7</td>
<td>5</td>
<td>5.3</td>
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<tr>
<td>Don’t know</td>
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<td></td>
<td>7</td>
<td>7.5</td>
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</tbody>
</table>

### 7.2 Question 3: Parental Educational Levels

Years 8/9/10. (N=94)

<table>
<thead>
<tr>
<th></th>
<th>Mother</th>
<th></th>
<th>Father</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>University Degree or higher</td>
<td>21</td>
<td>22.3</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Diploma (University/TAFE)</td>
<td>12</td>
<td>27.7</td>
<td>11</td>
<td>25.5</td>
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<tr>
<td>TAFE certificate</td>
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<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
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<td></td>
<td>4</td>
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<tr>
<td>Other formal qualifications</td>
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<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>School only Yr 12 Higher School Certificate (or equiv)</td>
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<td>17</td>
<td>9</td>
<td>20.2</td>
</tr>
<tr>
<td>School only Yr 10 School Certificate (or equiv)</td>
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<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>No formal qualifications</td>
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<td>2.1</td>
<td>2</td>
<td>2.1</td>
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<tr>
<td>Don’t know</td>
<td>29</td>
<td>30.9</td>
<td>33</td>
<td>35.1</td>
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</table>
### 7.3 Question 4: Highest level of education attained by ANY older sibling

Years 8/9/10. (N=94)

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<tr>
<th>Education Level</th>
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<td>University Degree or higher</td>
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<td>Diploma (University/TAFE)</td>
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<td>TAFE certificate</td>
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<tr>
<td>Apprenticeship</td>
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<tr>
<td>Other formal qualifications</td>
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</tr>
<tr>
<td>School only Yr 12 Higher School Certificate (or equivalent)</td>
<td>9</td>
<td>19.1</td>
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<tr>
<td>School only Yr 10 School Certificate (or equivalent)</td>
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<tr>
<td>No formal qualifications</td>
<td>5</td>
<td>5.3</td>
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<tr>
<td>Don’t know</td>
<td>5</td>
<td>5.3</td>
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<tr>
<td>Not applicable no older siblings</td>
<td>41</td>
<td>43.6</td>
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</table>
Appendix 8: Participants’ career aspirations

Question 5: Education requirements for chosen careers

Categories assigned by researcher

Pre-intervention: First preference only

Years 8/9/10. (N = 94)

<table>
<thead>
<tr>
<th>Desired occupation requires (Freq)</th>
<th>Uni Degree or higher</th>
<th>Diploma (Uni /TAFE)</th>
<th>TAFE Certificate</th>
<th>Apprentice ship</th>
<th>Year 12 HSC equiv /less</th>
<th>Don’t Know</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>60</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
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<tr>
<td>%</td>
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<td>29.8</td>
<td>1.1</td>
<td>5.3</td>
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</table>

Change to chosen career pre- to post-intervention.

<table>
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<th>Change</th>
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<th>%</th>
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<tbody>
<tr>
<td>No change</td>
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<tr>
<th>Change up</th>
<th>Change down</th>
<th>Similar level</th>
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<td>Freq</td>
<td>%</td>
<td>Freq</td>
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<td>7</td>
<td>8.9</td>
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</table>

<table>
<thead>
<tr>
<th>Broader</th>
<th>More focused</th>
<th>Similar</th>
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<td>%</td>
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<td>20</td>
<td>25.6</td>
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Appendix 9: Knowledge of entry requirements

Questions 6/7/8: pre- and post-intervention

Paired t-tests
Years 8/9. (N = 78)

<table>
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<tr>
<th>Item</th>
<th>Pre-survey mean</th>
<th>Post-survey mean</th>
<th>Difference</th>
<th>Two-tailed P value</th>
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<tbody>
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<td>6.</td>
<td>2.00</td>
<td>2.53</td>
<td>+0.53</td>
<td>&lt; 0.0001</td>
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<td></td>
<td>Appropriate post-secondary requirements identified</td>
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<td>7.</td>
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<td>&lt; 0.0001</td>
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<td>Appropriate school subjects identified</td>
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<td>= 0.0012</td>
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<tr>
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<td>Appropriate UAI identified</td>
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Appendix 10: Decision making

10.1 Question 9: Started thinking about pursuing this career path

Cohorts reported separately.

Year 10. (N = 16)

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<td>18.75</td>
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Year 9. (N = 39)

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<th>Pre</th>
<th>Post</th>
<th>%</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>During Year 9-10</td>
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<td>20</td>
<td>25.6</td>
<td>51.3</td>
</tr>
<tr>
<td>During Years 7-8</td>
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<td>8</td>
<td>38.5</td>
<td>20.5</td>
</tr>
<tr>
<td>During Primary School</td>
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<td>5</td>
<td>18.0</td>
<td>12.8</td>
</tr>
<tr>
<td>More than one</td>
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<td>4</td>
<td>7.7</td>
<td>10.3</td>
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Year 8. (N = 39)

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<th>Pre</th>
<th>Post</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>During Years 7-8</td>
<td>20</td>
<td>25</td>
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</table>
10.2 Question 10: Helpful people, pre- and post-intervention

Weighted: Very = 3; Somewhat = 2; Not at all / NA = 1
A mean >1.5 is a positive result

Years 8/9. (N = 78)

<table>
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<tr>
<th>Item</th>
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<th>Post-survey mean</th>
<th>Difference</th>
<th>Two-tailed P value</th>
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<td>Parents</td>
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<td>Siblings</td>
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<td>&lt; 0.0001</td>
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10.3 Question 11: Helpfulness of the strategies

Post-intervention only, descending order of importance
Weighted: Very = 3; Somewhat = 2; Not at all = 1; NA = 0 and deducted from N.
A mean >1.5 is a positive result.

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<th>Somewhat</th>
<th>Not at all</th>
<th>NA</th>
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<td>Not at all</td>
<td>NA</td>
<td>Mean</td>
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Appendix 11: Beliefs about work and study

Questions 12-20: pre- and post-intervention

Years 8/9. \((N=78)\)

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<th>TAFE or equivalent</th>
<th>Job</th>
<th>Other (specify)</th>
<th>Unsure</th>
<th>Change to uni</th>
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<td>Pre</td>
<td>Post</td>
<td>Pre</td>
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<td>Post</td>
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<td>------</td>
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<td>18. Which will best help you to develop the skills and knowledge you need?</td>
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<td>8</td>
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<td>2</td>
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<td>1.3</td>
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<td>19. Which will allow you to explore the most interesting things?</td>
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<td>54</td>
<td>17</td>
<td>12</td>
<td>7</td>
<td>6</td>
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<td>%</td>
<td></td>
<td>%</td>
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<td></td>
<td>2.6</td>
<td></td>
<td>1.3</td>
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<tr>
<td>20. Which would be the most challenging option?</td>
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<td>5</td>
<td>2</td>
<td>4</td>
<td>0</td>
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Post-intervention only

Year 10. \((N = 16)\)

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<th>TAFE or equivalent</th>
<th>Job</th>
<th>Other (please specify)</th>
<th>Unsure</th>
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<tbody>
<tr>
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<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
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<td>13. Where are you most likely to go after finishing school?</td>
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<td>0</td>
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<td>14. Where do most of your friends intend to go after finishing school?</td>
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<td>3</td>
<td>0</td>
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<td>15. Which will lead to a more satisfying career for you?</td>
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<td>1</td>
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<td>18. Which will best help you to develop the skills and knowledge you need?</td>
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Appendix 12: Self-Efficacy Beliefs

Questions 21-27: pre- and post-intervention

Years 8/9. \( N = 78 \)

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<th>Pre</th>
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<td>7</td>
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<td>22. I am studying (or have chosen) the subjects I need to get into one of my first two choices of university course</td>
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<td>43</td>
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<td>17</td>
<td>18</td>
<td>18</td>
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<td>23.1</td>
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<td>21.8</td>
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<td>76.9</td>
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<td>5.1</td>
<td>30.8</td>
<td>18</td>
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<td>43</td>
<td>44</td>
<td>13</td>
<td>15</td>
<td>22</td>
<td>19</td>
<td>+ 1.3</td>
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<td>56.4</td>
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<td>19.2</td>
<td>28.2</td>
<td>24.4</td>
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<td>60</td>
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<td>6</td>
<td>13</td>
<td>12</td>
<td>- 2.6</td>
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<td>7.7</td>
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Post-intervention only
Year 10. \((N = 16)\)

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<th>%</th>
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<td>18.8</td>
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<tr>
<td>24. I am studying (or have chosen) the subjects I need to get a job in one of my first two choices of job/career</td>
<td>12</td>
<td>75.0</td>
<td>1</td>
<td>6.3</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>25. I expect to get a high enough mark to get into one of my first two choices of university course</td>
<td>12</td>
<td>75.0</td>
<td>1</td>
<td>6.3</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>26. I expect to get a high enough mark to get into one of my first two choices of TAFE course</td>
<td>10</td>
<td>62.5</td>
<td>1</td>
<td>6.3</td>
<td>5</td>
<td>31.3</td>
</tr>
<tr>
<td>27. I expect to do well enough at school to get into one of my first two choices of job/career</td>
<td>13</td>
<td>81.3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>18.8</td>
</tr>
</tbody>
</table>
Appendix 13: Encouraging and discouraging factors

Questions 28-44: pre- and post-intervention

Weighted: Strongly agree = 5; Agree = 4; Unsure = 3; Disagree = 2; Strongly disagree = 1.
* Weightings reversed for negative questions.
A mean of >3 is a positive result.

Years 8/9. (N = 78)

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-survey mean</th>
<th>Post-survey mean</th>
<th>Difference</th>
<th>Two-tailed P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. My parents would like me to go to university</td>
<td>4.5</td>
<td>4.56</td>
<td>+ 0.06</td>
<td>0.0958</td>
</tr>
<tr>
<td>29. My teachers encourage me to go to university</td>
<td>4.03</td>
<td>4.19</td>
<td>+ 0.17</td>
<td>0.0002</td>
</tr>
<tr>
<td>30. My parents would like me to go to TAFE and/or get an apprenticeship</td>
<td>3.51</td>
<td>3.54</td>
<td>+ 0.03</td>
<td>0.4177</td>
</tr>
<tr>
<td>31. My teachers encourage me to go to TAFE and/or get an apprenticeship</td>
<td>3.22</td>
<td>3.29</td>
<td>+ 0.08</td>
<td>0.1093</td>
</tr>
<tr>
<td>32. My parents would like me to get a job straight after finishing school</td>
<td>3.41</td>
<td>3.29</td>
<td>- 0.12</td>
<td>0.0059</td>
</tr>
<tr>
<td>33. My teachers encourage me to look for a job straight after finishing school</td>
<td>3.45</td>
<td>3.36</td>
<td>- 0.09</td>
<td>0.0186</td>
</tr>
<tr>
<td>34. The cost of university fees is likely to stop me attending university</td>
<td>3.82</td>
<td>3.55</td>
<td>- 0.27</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>35. The cost of TAFE fees is likely to stop me attending TAFE</td>
<td>3.94</td>
<td>4.10</td>
<td>+ 0.17</td>
<td>0.0006</td>
</tr>
<tr>
<td>36. My family can afford to support me while I study at university</td>
<td>3.91</td>
<td>4.03</td>
<td>+ 0.12</td>
<td>0.0059</td>
</tr>
<tr>
<td>37. My family can afford to support me while I study at TAFE</td>
<td>3.77</td>
<td>3.93</td>
<td>+ 0.18</td>
<td>0.0003</td>
</tr>
<tr>
<td>38. I need to earn a living straight after finishing school</td>
<td>3.31</td>
<td>3.38</td>
<td>+ 0.07</td>
<td>0.1093</td>
</tr>
<tr>
<td>Item</td>
<td>Pre-survey mean</td>
<td>Post-survey mean</td>
<td>Difference</td>
<td>Two-tailed P value</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>39. I would be able to cope with the workload at university</td>
<td>3.76</td>
<td>4.01</td>
<td>+ 0.26</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>40. I would be able to cope with the workload at TAFE</td>
<td>3.74</td>
<td>3.95</td>
<td>+ 0.21</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>41. I would be able to cope with the workload if I got a job straight after finishing school</td>
<td>3.58</td>
<td>3.71</td>
<td>+ 0.13</td>
<td>0.0012</td>
</tr>
<tr>
<td>42. People like me often go to university</td>
<td>3.68</td>
<td>4.05</td>
<td>+ 0.37</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>43. People like me often go to TAFE</td>
<td>3.51</td>
<td>3.69</td>
<td>+ 0.18</td>
<td>0.0003</td>
</tr>
<tr>
<td>44. People like me often get work in my chosen career</td>
<td>3.63</td>
<td>4.01</td>
<td>+ 0.38</td>
<td>&lt; 0.0001</td>
</tr>
</tbody>
</table>
### Appendix 14: Parental occupation and education histories: Interview participants

<table>
<thead>
<tr>
<th>School Year</th>
<th>Participant</th>
<th>Mother Education</th>
<th>Mother Occupation</th>
<th>Father Education</th>
<th>Father Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Katie</td>
<td>TAFE (Sewing)</td>
<td>Bar Attendant + homemaker.</td>
<td>School only.</td>
<td>Refuse Collector (now deceased). Stepfather – TAFE (boiler-making)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stepfather – TAFE (boiler-making)</td>
<td>Stepf. – scaffolder</td>
</tr>
<tr>
<td>8</td>
<td>Lisa</td>
<td>TAFE (medications)</td>
<td>Enrolled Nurse. Formerly bank + cleaning.</td>
<td>University as mature-age – Law + Masters in Finance</td>
<td>CEO of mortgage finance company</td>
</tr>
<tr>
<td>8</td>
<td>Martha</td>
<td>3 attempts at teaching. Children stopped her completing</td>
<td>Homemaker</td>
<td>Year 10 (?)</td>
<td>State Rail SSO (?) Admin work</td>
</tr>
<tr>
<td>8</td>
<td>Tina</td>
<td>University – Computing</td>
<td>Homemaker</td>
<td>TAFE (?)</td>
<td>Mechanic and Panel-beater</td>
</tr>
<tr>
<td>9</td>
<td>Amanda</td>
<td>University – Accountancy (Philippines)</td>
<td>TAB</td>
<td>Not sure (probably not university)</td>
<td>Courier</td>
</tr>
<tr>
<td>9</td>
<td>Anna</td>
<td>University (Unknown field) Vietnam</td>
<td>Librarian at the University of Sydney</td>
<td>Started University in Taiwan but didn’t finish</td>
<td>Bus driver (Police force in Taiwan)</td>
</tr>
<tr>
<td>9</td>
<td>Jennifer</td>
<td>TAFE. Currently doing Counselling at UWS</td>
<td>DOCS: Escort in Child Protection</td>
<td>Unknown</td>
<td>Unknown (“not around”)</td>
</tr>
<tr>
<td>9</td>
<td>Patricia</td>
<td>TAFE – Interpreting</td>
<td>Interpreter</td>
<td>TAFE – Interpreting</td>
<td>Interpreter</td>
</tr>
<tr>
<td>10</td>
<td>Deborah</td>
<td>Didn’t finish high school</td>
<td>Homemaker</td>
<td>Didn’t finish high school</td>
<td>Cleaner (retired)</td>
</tr>
<tr>
<td>10</td>
<td>John</td>
<td>TAFE (Commercial Cookery). Started university in Philippines (Vet Science?)</td>
<td>Warehouse Packer</td>
<td>School only</td>
<td>Warehouse Packer</td>
</tr>
<tr>
<td>10</td>
<td>Margaret</td>
<td>TAFE – Beautician, Computers</td>
<td>Homemaker. Formerly retail assistant</td>
<td>TAFE</td>
<td>Builder</td>
</tr>
<tr>
<td>10</td>
<td>Albert</td>
<td>University – Nursing (?) (Hungary) + TAFE – Real Estate</td>
<td>Runs a cleaning business. Also Latin Dance teacher</td>
<td>TAFE</td>
<td>Mechanical Engineer/ Factory Supervisor</td>
</tr>
<tr>
<td>School Year</td>
<td>Participant</td>
<td>Education</td>
<td>Occupation</td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>11</td>
<td>Catherine</td>
<td>Possibly university (India)</td>
<td>Secretary to the Manager in an insurance company</td>
<td>University (Engineering) India</td>
<td>Working in Sales at David Jones but qualified Engineer specialising in OH&amp;S</td>
</tr>
<tr>
<td>11</td>
<td>Elijah</td>
<td>“Dropped out” in Year 9</td>
<td>Warehouse packer</td>
<td>“Dropped out” in Year 8. On-the-job carpentry training</td>
<td>Carpenter</td>
</tr>
<tr>
<td>11</td>
<td>Michael</td>
<td>“Dropped out” after Year 10</td>
<td>Retail Manager</td>
<td>“Dropped out” after Year 10. Carpentry and Chef at TAFE</td>
<td>Carpenter (formerly a chef)</td>
</tr>
<tr>
<td>11</td>
<td>Sean</td>
<td>University (?) – Accounting (Philippines)</td>
<td>Office Administration</td>
<td>University (?) – Engineering (Philippines)</td>
<td>Machine Operator</td>
</tr>
<tr>
<td>12</td>
<td>Lucy</td>
<td>University as mature-age – Nursing</td>
<td>Registered Nurse</td>
<td>Year 12</td>
<td>Enrolled Nurse (office work)</td>
</tr>
<tr>
<td>12</td>
<td>Nancy</td>
<td>Year 10 (?)</td>
<td>Homemaker</td>
<td>Year 10 (?)</td>
<td>Musician</td>
</tr>
<tr>
<td>12</td>
<td>Sarah</td>
<td>University – Zoology, then IT (Philippines)</td>
<td>IT support</td>
<td>University – IT (Philippines)</td>
<td>Maintenance Manager in an alarm system company</td>
</tr>
<tr>
<td>Uni</td>
<td>Carly</td>
<td>Unknown – possibly TAFE. Not university</td>
<td>Homemaker. Just begun a secretarial job in a school</td>
<td>TAFE.</td>
<td>Payroll Accounts officer (Sydney CEO)</td>
</tr>
<tr>
<td>Uni</td>
<td>Maria</td>
<td>University – Chemical Engineering (Philippines)</td>
<td>Project Manager for Mission Australia (Administration)</td>
<td>University – Business (Philippines)</td>
<td>Driving Instructor. Formerly forklift driver</td>
</tr>
<tr>
<td>Uni</td>
<td>Tracey</td>
<td>Year 11 Currently doing Animal Welfare – Correspondence (?)</td>
<td>Delivers mail</td>
<td>Year 11 then TAFE Uni as mature age</td>
<td>Financial Director / Chartered Accountant</td>
</tr>
<tr>
<td>Uni</td>
<td>Paolo</td>
<td>School Only</td>
<td>QANTAS safety maintenance</td>
<td>2 years of University (Unknown field) – Philippines</td>
<td>Machine Operator/Weekend Singer</td>
</tr>
</tbody>
</table>
### Appendix 15: Career aspirations and sources of inspiration: Interview participants

<table>
<thead>
<tr>
<th>School Year</th>
<th>Participant</th>
<th>Career Aspiration/s</th>
<th>Level of Education Required</th>
<th>Main source of inspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Katie</td>
<td>PE Teacher</td>
<td>University</td>
<td>“Since I was in Year 6” Own accident and recovery process.</td>
</tr>
<tr>
<td>8</td>
<td>Lisa</td>
<td>Lawyer</td>
<td>University</td>
<td>Father studied Law and Finance</td>
</tr>
<tr>
<td>8</td>
<td>Martha</td>
<td>Primary School Teacher</td>
<td>University</td>
<td>Aunty and cousin teachers. “Ever since I was little”</td>
</tr>
<tr>
<td>8</td>
<td>Tina</td>
<td>(i) Law / Fashion Design (ii) Fighter Pilot</td>
<td>University</td>
<td>Interests and perceived abilities, Visit to RAF Air Show</td>
</tr>
<tr>
<td>9</td>
<td>Amanda</td>
<td>Journalist</td>
<td>University</td>
<td>Interests and perceived abilities, No apparent role models</td>
</tr>
<tr>
<td>9</td>
<td>Anna</td>
<td>Forensic Pathologist</td>
<td>University</td>
<td>CSI television shows</td>
</tr>
<tr>
<td>9</td>
<td>Jennifer</td>
<td>(i) Lawyer (ii) Teacher</td>
<td>University</td>
<td>Aunt a lawyer</td>
</tr>
<tr>
<td>9</td>
<td>Patricia</td>
<td>(i) Lawyer (ii) PE Teacher</td>
<td>University</td>
<td>Interests and perceived abilities, No apparent role models</td>
</tr>
<tr>
<td>10</td>
<td>Deborah</td>
<td>(i) Lawyer (ii) Doctor</td>
<td>University</td>
<td>Godfather a lawyer, Worked for brother-in-law: a doctor</td>
</tr>
<tr>
<td>10</td>
<td>John</td>
<td>Chef</td>
<td>TAFE</td>
<td>Interests and perceived abilities, Mother did Cookery at TAFE</td>
</tr>
<tr>
<td>10</td>
<td>Margaret</td>
<td>Pharmacist</td>
<td>University</td>
<td>Interests and perceived abilities, “Half my generation are pharmacists”</td>
</tr>
<tr>
<td>10</td>
<td>Albert</td>
<td>Police Force</td>
<td>University</td>
<td>Television news and current affairs shows.</td>
</tr>
<tr>
<td>11</td>
<td>Catherine</td>
<td>Business Administration</td>
<td>University</td>
<td>Mother a PA in an insurance company</td>
</tr>
<tr>
<td>11</td>
<td>Elijah</td>
<td>PE Teacher</td>
<td>University</td>
<td>Interests and perceived abilities, Own sports and fitness trainers</td>
</tr>
<tr>
<td>11</td>
<td>Michael</td>
<td>Science – Medicine or Physiotherapy</td>
<td>University</td>
<td>Effective Science teacher at school</td>
</tr>
<tr>
<td>11</td>
<td>Sean</td>
<td>Computer Programmer</td>
<td>University</td>
<td>Interests and perceived abilities, No apparent role models</td>
</tr>
<tr>
<td>School Year</td>
<td>Participant</td>
<td>Career Aspiration/s</td>
<td>Level of Education Required</td>
<td>Main source of inspiration</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------------------------------</td>
<td>----------------------------</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>Lucy</td>
<td>Secondary School Teacher</td>
<td>University</td>
<td>Aunt and Uncle teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Interests and perceived abilities</td>
</tr>
<tr>
<td>12</td>
<td>Nancy</td>
<td>Primary School Teacher</td>
<td>University</td>
<td>Aunt (overseas) a teacher</td>
</tr>
<tr>
<td>12</td>
<td>Sarah</td>
<td>Teacher</td>
<td>University</td>
<td>Distant relatives teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Interests and perceived abilities</td>
</tr>
<tr>
<td>Uni</td>
<td>Carly</td>
<td>Primary School Teacher</td>
<td>University</td>
<td>Interests and perceived abilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No apparent role models</td>
</tr>
<tr>
<td>Uni</td>
<td>Maria</td>
<td>First IT/Business; then Secondary School Teacher</td>
<td>University</td>
<td>Father studied Business at university</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University</td>
<td>Role models through church mission</td>
</tr>
<tr>
<td>Uni</td>
<td>Tracey</td>
<td>Primary School teacher</td>
<td>University</td>
<td>Interests and perceived abilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No apparent role models</td>
</tr>
<tr>
<td>Uni</td>
<td>Paolo</td>
<td>Pilot</td>
<td>University</td>
<td>Interests and perceived abilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nurse</td>
<td>University</td>
<td>Relatives nurses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Resources</td>
<td>TAFE</td>
<td>Interests and perceived abilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary School Teacher</td>
<td>University</td>
<td>Peers and close friend</td>
</tr>
</tbody>
</table>
Appendix 16: Introducing the participants

16.1 Lisa

Context

Lisa was a Year 8 student at one of the ACULink partner schools, a Catholic Years 7 to 10 school in the Mt Druitt area of outer-western Sydney. The school is relatively large (approximately 180 students in each year group) and very multi-cultural, comprising over 50 nationalities such that English is not the main language spoken in a large proportion of the families. The school had been highly involved in the ACULink project since its inception. Two interviews were conducted at her school, the first shortly before and the second some months after she had participated in the ACULink Year 8 goal-setting strategy. Year 8 classes at her school were broad-banded academically and Lisa was in the class which most teachers agreed was the brightest.

Lisa’s Background

Lisa and her parents are Anglo-Australian and were born in Australia. Unlike most of her peers, Lisa’s father was CEO of a finance company in the city and was a qualified lawyer. He finished school at Year 10 and later studied at university as a mature age student. While she was not able to name his university degree or level of qualification, Lisa could state that “he’s done Finance and Law and stuff like that”. She believed that his first degree was in Law, and in Finance “it was a Masters degree and he got a distinction. He was one of only three people studying it who got a distinction”. Lisa had “been to a few of his graduations” at the University of Western Sydney’s Paramatta campus.

Lisa’s mother worked as an enrolled nurse (EN). She had never been to university but Lisa said that she loves what she does and doesn’t want to have to become an RN, you know the university one, because they have to do all this stuff and they’re not casual…. She’s happy where she is so she went to TAFE and she’s done Med courses and stuff like that.
Lisa had one older brother and one older sister, both of whom were nurses. Her brother went to TAFE and worked as an enrolled nurse, her sister went to the University of Western Sydney and was working as a registered nurse.

Lisa had a clear goal to go to a university and become a lawyer. It was apparent that Lisa had had many conversations with her parents about her ambitions and they were both highly supportive. Lisa believed that “my mum wants me to carry on that (nursing) tradition” but that she was “really supportive too”. Her father actively encouraged her ambitions to become a lawyer. This included everything from buying her crime novels to read, to telling her all about university and taking her to open days and to visit the Moot Court at the University of Western Sydney. This seems to be a response to Lisa’s enthusiasm rather than his, and he did say that if she changes her mind “there’s no pressure”. Through him, Lisa had “spoken to one or two people who are lawyers now… just had a quick chat”. She had also spoken to university lecturers in Law during her visits to open days.

Of her friends at school, only one had decided what she wants to do when she finished school – a teacher. However, when she tried to speak to this friend about the notion of going to university, she found that “She doesn’t really care at the moment. She’s like ‘I’m too young you know… it doesn’t matter now…. I’ll wait till I’m older to worry about stuff like that’.” Lisa had had many conversations with her friends about her plans, to the extent that “they are sick of hearing about it”. Their response had sometimes been “God, you’re an idiot… you’re only thirteen, what are you doing this for?”

Despite there being no timetabled Careers subject at her school, Lisa had found her teachers encouraging. She mentioned several impromptu conversations she had had with several of her teachers and she believed they all thought she was well suited to becoming a lawyer. Her woodwork teacher told her that “he already knew that I was going to be a lawyer the first time he met me ’cause I’m so outgoing and you know, public speaking and debating…”. With him she had “actually had massive conversations which went for like half an hour on law and stuff ’cause he’s got a sister who works for the Melbourne Law Courts”. The English Coordinator and debating
coach was another significant teacher. Such was his impact that “a lot of it is thanks to him ’cause if he hadn’t chosen me … I wouldn’t have been so sure that I actually could do law”.

Personal Characteristics

Lisa presented as intelligent, cheerful, confident and vivacious. She also came across as highly goal-oriented, saying she had her “heart set on being a lawyer” and that she had “always wanted to be a lawyer… since I was five”. She described herself as “set on it”, “very determined” and “focused”. She had looked at alternative universities and course offerings, and had already decided that she would like to go to the University of Western Sydney as at the University of Sydney “the UAI was 98 or 99 and it’s too far away”. She had even given consideration to which branch of law she would like to specialise in, and to which elective subjects she would like to take. Describing her ambition, Lisa laughingly said that one day she will “become the most powerful lawyer in the world”.

Of all the school student participants, Lisa had done the most to find out about what the job involves and how to gain entry to the profession. In addition to talking to her parents and teachers, she had attended university open days, sought and read relevant pamphlets and looked up the University of Western Sydney’s website. Consequently, she had a good understanding of subject pre-requisites and UAI cut-offs. She had even taken it upon herself to spend a day observing the Mount Druitt courthouse, which she did on her own as her parents were both working and “my friends would be really bored if they went”. She felt this visit had given her a realistic view of the work of a lawyer, particularly the potential negatives aspects such as waiting around for cases to be heard and clients not showing up. This was not enough to prompt her to rethink her career choice, as she recognised that “there is no one perfect job where it is all ups and no downs”.

Lisa had a strong sense of self-efficacy with regard to her academic ability and her ability to ultimately become a lawyer and she had “been told by many people that that’s what I’d be good at because I love debating and public speaking”. She said she was “pretty good” doing school work and study, and that “I usually don’t hand in
assignments very late and I usually don’t have a lot of homework piled up on my desk ’cause I usually get it done in school”. She described herself as “pretty confident” that she would get the marks she will need and believed she was “good at writing essays and stuff like that so English will be a breeze”. She was also confident that she had the necessary attributes to win a local council Leadership scholarship, saying “you have to show you are a born leader… and I think I can do that”. She rated her own abilities as the most important factor that would help her to achieve her goals, as “if I had no talent at being a lawyer it would be no help if dad was supportive… so I guess my talent and stuff is the most important”.

With such a high level of confidence in her abilities, Lisa had not really considered the prospect that she may not get into university. There was “nothing I can think of” that might make it difficult for her to reach her goal. Like other participants, her image of university came largely from American movies, which had given her the impression that it “would be massive and scary”. Her visits had subsequently shown her that there is “nothing really freaky about it, just classrooms and stuff like that”. She expressed no concerns over the cost of going to university, saying that “Dad said not to worry about the financial aspect… and it’s all about learning”. She was aware of “HECS, I think it’s called, where you pay it off later”. She had also found a local council Leadership scholarship which she believed she could be eligible for.

After the Intervention

It is difficult to envisage someone with Lisa’s background and attributes might need intervention to encourage her to consider university. It had been a part of her thinking as long as she remembered, she was well-informed and confident that she would ultimately get there. Nonetheless, she recalled the Year 8 Goal-Setting session and said that she enjoyed having an opportunity to reflect on and discuss career and study options at school. She was able to relate her results from the attributes survey, which indicated to her that she might be suited to a career in hospitality or counseling. When asked if this had an influence on her thinking at all, she replied with a definite “No. I just thought it was very odd”.
16.2 Amanda

Context

Amanda was a Year 9 student who attends the same Catholic Years 7 to 10 school as Lisa. Year 9 classes are also broad-banded academically and Amanda was in one of the top classes. Two interviews were conducted at her school, the first shortly before and the second some months after she had participated in the ACULink Pathways Awareness strategy. She also took part in the Year 8 Goal-Setting strategy in the previous year.

Amanda’s Background

Amanda’s parents were both from the Philippines. She has no siblings and, in terms of extended family, only mentioned one older cousin. Amanda’s father works as a courier. To her knowledge he did not undertake any post-secondary study. Her mother went to university in the Philippines, where she began an Accounting degree before changing to Management. She now works in a TAB outlet near their home. Amanda did not know why her mother was not working in the field for which she was qualified. Apart from her mother and her school teachers, she did not know anyone who either went to or was currently at university.

When she was in primary school, Amanda’s goal was to become a veterinarian “because I liked animals”. However, after “I realised all the other stuff, like having to operate and stuff”, she changed her mind and was aspiring to become a journalist. She cites her mother as the main person she discussed her future plans with and as her primary source of support. While her mother had not been able to provide her with any specific information about career or study alternatives, “she always encourages me… and she says ‘Yeah, I can do that, as long as I’m happy with it’.” She also helped with homework and “if I ask my Mum to proofread an assignment or something, she’ll do that”. The two had also had some brief conversations about the mother’s experiences of university, and she had told Amanda that “she stopped trying to be an accountant because it was too hard and so she went for Managing because it was easier and she knew it better”. Amanda had “not really” talked to her father about her plans for post-
secondary study, but he had commented that he is “working so I can have a good future”.

Aside from her mother, Amanda had had limited conversations with her friends about their career plans. In the first interview, she was aware that “one of my friends wants to be a doctor… another one wants to be a food critic” and another “wants to do something with computers or become an actress”. She also mentioned a cousin in Year 10 who wanted to become a hairdresser. Amanda thought that “my friend who wants to be a doctor probably wants to go to university” but could not recall ever having a conversation with her, or any of her friends, about post-secondary requirements for their chosen careers.

While she acknowledged that her school teachers would probably be helpful and a useful source of information, Amanda didn’t “really talk to any of them about my career”. However, it was her English teacher who initially got her thinking about journalism, as “we had to write a newspaper report for it… and the teacher said it was pretty good”.

*Personal Characteristics*

Amanda was a quiet person, and it was difficult to get her to talk beyond one or two word answers. Nevertheless, she came across as intelligent and able to laugh at herself. In both interviews she spoke about wanting to become a journalist and she was aware that this would involve going to university. Though she could not recall how she knew this, she said that “I always thought I’d go to university… to get a better job”. Amanda had not given much thought to any particular area of journalism, beyond “for like a newspaper probably”. She had chosen this field “I guess because I’m good at English… and writing…English is my best subject and I always got good marks for that”.

Beyond knowing that she would need to go to university, Amanda did not have much idea what her study options were or what the entry requirements might be, nor had she taken any steps to find out more information. She was aware that she could “go on the internet, or ask a teacher or something” but had not yet done either. She was,
however, reasonably confident that she would get the marks she needed, saying that “maybe” she had a good chance, and “I guess” she would get the marks. When asked how well she thought she would go, she would only say “I hope to do good (sic)”. With regard to her schoolwork, she said “I work hard”.

Initially, Amanda said that she had never been to a university and that she had gotten her image of what it would be like “from TV … and movies”. In addition, she had been exposed to her mother’s memories of studying accounting as “too hard”. In the second interview she recalled that she had been to ACU’s Strathfield campus once when she was in Year 6 for “this day about computers”. She had found it to be “really big” and found the experience “sort of overwhelming”. She believed that university work would be “kind of hard and there’d have to be more concentration”. It would therefore be “more stressful than now … and they wouldn’t be as lenient with you if you didn’t do it”.

Amanda appeared to have considered the cost of going to university, and thought “it would probably be kind of expensive” but did not have a clear idea what the actual costs would be. She did, however, have a vague notion that the government can “loan you money and then you pay them back”. Consequently, the cost did not seem to be a concern to her.

After the Intervention

In the first interview, Amanda had quite clear recollections of the Year 8 Goal Setting strategy the previous year. She remembered being asked “what we wanted to do in the future” and “whether or not we knew how to get there”. The session taught her that “most jobs need to go to university, to like get a degree or something… there were only on or two jobs that didn’t require going to university”. While she had already guessed that she would need to go to university to become a journalist, the session served to confirm that for her. She could also remember the lead-in lessons which were delivered by her PD/H/PE teacher, and described the worksheet where they wrote “what we thought our lives would be like in the future” and the board game they played. She found all of these lessons helpful as “it helped to clear my mind I guess, to figure out what I wanted to do”.

Amanda also remembered the Year 9 *Pathways Awareness* strategy where “we were showed different levels of training, what sort of jobs you can get, and what training you might need”. However, she did not rate this information as particularly helpful as it was “just the same” as what she already knew.

Interestingly, however, it appears that the Year 9 session may have had an impact on Amanda’s friends’ aspirations, or at least on her knowledge of their intentions. In the first interview she was vague about their plans – she thought they were going to be a doctor, a food critic and an actress but did not know if any of them were considering university. After the intervention, however, not only had their goals changed such that they now were going to be a nurse, a physiotherapist and a pilot, but she also thought that “probably most of them” were considering going to university. This suggest that participating in the sessions prompted further conversations among Amanda and her peers about their post-secondary plans.
16.3 Deborah

**Context**

Deborah is a Year 10 student at one of the ACULink partner schools, a Catholic Years 7 to 10 school in the Mt Druitt area of outer-western Sydney. The school is relatively large (approximately 180 students in each year group) and highly multicultural, comprising over 50 nationalities such that English is not the main language spoken in a large proportion of families.

The school had been highly involved in the ACULink project since its inception, so Deborah had experienced the Year 8, Year 9 and Year 10 strategies. She was in Year 10 at the time of the interviews. The interviews were conducted in a quiet room at her school shortly after she had been to visit the university campus with 50 other year 10 students. The follow-up interview was conducted towards the end of the school year.

**Deborah’s Background**

Deborah is from a Middle Eastern background. Her father is Lebanese, her mother from Syria. She was born in Lebanon but came to Australia when she was about one year old. Deborah said she spoke four languages but did not seem to think much of this ability. (Note: two of the languages she cited are Syrian and Lebanese, which are both Arabic, so it may in fact be only three languages).

Deborah reported having no significant role models in her life who had been to, or were currently studying at, university. To her knowledge, her parents did not finish school and had not been to university. Her mother had never had a job outside the home. Her father was retired and formerly ran his own business in cleaning and also “where he sewed for a company… safety gears (sic) and things like that”. She had three older brothers who all studied at TAFE and were currently employed as an electrician, a mechanic and a security guard. Deborah had one older sister who was married and the mother of twins so not currently working outside the home. This sister had studied accounting at TAFE. Her husband was a doctor with a practice close to Deborah’s home. If Deborah made the transition to university she would be the first in her family to do so and would have to, in her words, “carry the path”.
In her extended family, Deborah’s godfather had gone to university and was currently working as a lawyer. However, as he lived in Syria, opportunities for Deborah to converse with him were limited – she had seen him perhaps twice in the last ten years. She had visited his law practice and said “it was awesome”. It gave her insight into what he has achieved and “the stuff you have to go through to become one”. In the second interview, Deborah talked a lot about her brother-in-law and said he was “helping me with the words, to understand some things better”. Seeing him make a difference in the lives of others had inspired her: “just to see them smile when they walk out, they know that they have been helped, so I want to do that too”.

At school, only one of Deborah’s friends was considering going to university. Others were planning to “drop out” at the end of Year 10 and told Deborah that university is “a waste of money”. Most of her friends “just want to do things like beautician, hair-dressing, mechanic”. One was getting an apprenticeship to become a beautician and, by the second interview, had a job lined up to go to after completing Year 10. Deborah described feeling that most of her friends were “not really” supportive of her aspirations. She had one friend who wanted to be a lawyer. With this friend she was able to “just talk about what she wants to do and what I want to do”. They had also done some research together: “My best friend and me go on the sites”.

Deborah named the support of her parents as foremost in supporting her and encouraging her to go to university and become a lawyer. Given their own lack of experience of university, and the absence of university-educated people in their social circle, they were unable to provide specific details, but provided important moral support and encouragement, saying such things as “As long as you’re happy doing what you’re doing”.

Deborah also mentioned a couple of her teachers as being supportive. While there was no allocated careers subject or teacher, there were some teachers who were approachable and who answered her questions. She felt that her homeroom teacher was “always there for me” and said that the Year Coordinator was “a really good help as well. She provided me with information”. Summing up, she said “there’s teachers who make a difference”.

Personal Characteristics

Deborah came across as lacking in confidence. She spoke softly and many of her answers were one or two words – she did not seem to be comfortable being interviewed, particularly in the first interview. With regard to her career aspirations, Deborah initially described herself as “confused”. Where she had once been set on becoming a lawyer, she now had difficulty picturing herself in that role as she felt she could never “learn those terms they use”. Her low self-efficacy was also evident when she expressed doubts at her ability to get the marks needed to get into a Law degree. She had limited knowledge about entry requirements for university Law degrees (and, later, medical and nursing degrees), and also appeared to lack the necessary skills to research these requirements, admitting that her research to date had consisted solely of “talking to people”. Deborah did not rate her academic ability highly, saying she was “about average”. This is of some concern given the demanding entry requirements for a Law degree.

By the second interview Deborah’s aspiration had changed significantly such that she now had her heart set on becoming a doctor. She now said she was “very clear” she wanted to be a doctor – “100%”. She was not able to explain her change of mind, simply that she was “moving on to something different… something a bit better”. She had recently been working as receptionist in her brother-in-law’s medical practice and this had had a profound impact on her goals. Given her current school performance, however, Deborah’s chances of getting into a medical degree were not good and with regard to exploring other alternatives she had only “thought about it a little bit”.

Deborah had little knowledge about entry to university beyond a vague notion that you need “very high” marks to get into medicine. Despite this, she had opted to take six units of Science in Year 11 so in that sense was on the right track. More significantly, she had been accepted into a Nursing program, which entailed spending an afternoon a week at Nepean Hospital, as part of her Higher School Certificate. Participation was competitive and she was one of only two students from her year to be accepted, which she spoke of with pride. She was not able to tell who was offering this program, or what qualifications it would provide her with, though she believed she would be able to gain employment in a hospital on completing the course. She had no
idea of what qualifications are required to become a nurse, what the entry requirements are for these courses, or what alternative pathways exist in the field.

Deborah’s beliefs about university were initially based on what she had seen on (primarily American) television. She described her image of university as “huge”, “scary” and “boring”. She envisaged students with bags, “sitting in an auditorium” and lecturers “talking and pointing to the board. Stuff like that”. University work would be “lots” and “it would be challenging”.

Deborah held many misconceptions about what university involves, particularly around the costs of tuition fees. It was clear she and her parents believed that they would have to pay tuition fees, though she had no much idea how much. Her parents had said “It doesn’t matter how much it costs, you’re gonna go” and that “I don’t have to worry about it, it’s all covered”. In her mind, this meant “I guess they’ve saved up for it”. While these perceptions had not yet prevented Deborah’s entry to university they nonetheless acted as perceived difficulties. From Deborah’s anxious manner when we discussed money I sensed that she felt some anxiety over these concerns and was possibly reluctant to be a financial burden to her parents.

After the Intervention

After her parents and brother-in-law, Deborah made frequent reference to the ACUlink strategies as helpful in her decision-making. She vaguely recalled the Year 8 session and said that it was helpful as it was when she first realised she would need to go to university to follow her chosen career path. She remembered that “we started to learn more about uni and TAFE and other places you can get to” and remembered talking about “getting ready for them”.

Deborah also recalled being provided with “more information” at the Year 9 session, although what stuck in her mind the most was meeting the university student, Elie. From him she learned that “uni is fun” – it was the first time she had considered that university may not all be “boring” and “not like what you think it is”. She was impressed by “the way he talked to us – like he was talking to teenagers… and just the communication between, the bonding and that”, and felt that he was “someone like
me… he was from the Middle East”. His visit had an impact on her self-efficacy because “It just meant something to all of us. You know, if this guy can do it, everyone else can. Even if his parents don’t want him to go to university. We can do it too”.

Deborah’s strongest recollections were of the recent visit to ACU’s Strathfield campus, her first experience of a “real” university. It had introduced her to university entry requirements and corrected her misconceptions about costs. She reported that finding out about the HECS repayment system had been a “great relief”. By the second interview, Deborah had a better understanding (though still vague) of the HECS system and that “you can pay it bit by bit”. She also showed some awareness of how to use the UAC on-line Course Search to obtain information about course alternatives and entry requirements. She also recalled the “little red book” (parent information booklet) that she had been provided with, and said that she read it to her parents.

In addition to providing accurate information, the experience had materially altered Deborah’s perceptions of what university life is like. She reported that she had found it to be “fun” rather than “scary”. She emphasised the impact of meeting the university students and finding out that they were “just nice people”, that “we’re all exactly the same” and “you make friends easily”. Particularly motivating was the revelation that the university role models all communicated that they “loved uni”, which came as a surprise. Deborah recognised that the visit had changed her beliefs about university, saying “It made a difference to what my opinions were about it”. She also reported that the experience “made me feel like I do want to go now”. Most importantly, it enhanced her self-efficacy with regard to how she believed she could handle university life and work, as “It just made me feel comfortable and that what I want to do is out there and I can do it”.
16.4 Elijah

Context

Elijah was a Year 11 student at a Catholic Senior College in outer Western Sydney. He had attended a Year 7 to 10 school which was not involved in ACULink, so he had not participated in the Year 8, 9 and 10 strategies. At the time of the interview he had recently taken part in the Year 11 Role Modelling and Shadowing activities.

Elijah's Background

Elijah’s father was from Fiji but his mother was Australian and Elijah was born in Australia. His mother worked as a packer and his father was a carpenter. Both of Elijah’s parents left school early, because they had had “hard” lives. His father had talked to him about his school days, saying he “used to row to school and bush walk (to school) every day”. Elijah was the oldest of four siblings and had no other relatives who went to university. In fact, before the intervention Elijah had “just heard of people who went to uni but never actually spoke to them”. His only potential role models were his school teachers and sports coaches.

Elijah’s parents were an important influence on his decision to stay on at school. He said “My parents kinda influenced me to keep going” and they were “encouraging me and pushing me as well”. They “explained to me how hard the work would be if I did drop out. And they didn’t want me to end up like them, hard labour working”. He believed that “my Mum just does it to earn the money and I know my Dad likes it but he would rather not work”. His parents’ use of prison terminology when describing their work lives appears to have had a profound effect on him such that he doesn’t want to end up “going down their path” and doing work “I have to do because I have dropped out”.

Elijah had spoken to his school PD/H/PE teachers and his sports trainers about his career goals. After his parents, he rated his teachers as an important source of advice and support. His school teachers confirmed for him that he would have to go to university to become a PE teacher or a physiotherapist. They also encouraged him to work hard at school and “when you get off task they help”.
Elijah described his peers as “all the same so we all want the same goal”. They had discussed their career aspirations a little but the notion of post-secondary training did not feature in their conversations: they were “not really talking about it much”. He did not rate his friends as an important influence on his goals, saying that “if I want that, I’m not going to copy what they’re doing or anything”. He believed that his own motivation and efforts were more significant factors.

**Personal Characteristics**

Elijah had wanted a career in sport since he was in around Year 7. He had initially thought he would finish school after Year 10 as “I just didn’t like school”. However, a significant turning point occurred while in Year 10 when he saw a *Job Guide* book and decided that he wanted a career as a PE teacher, personal trainer or physiotherapist. He displayed a positive attitude towards his education, saying it “comes first” and “if ever there comes a toss-up between sport and education, I’d have to choose education”.

Elijah expressed a “love of physical education” and appeared to be talented in that area – he played Division 1 Rugby League and competed in athletics at state level. He was also quite dedicated and participated in competition and/or training with his father six days a week. Consequently he demonstrated strong self-efficacy with regard to his sporting ability. This same sense of efficacy did not, however, apply to his academic abilities. He said that with “schoolwork I’m not so good” though he believed that “when it comes to tests and stuff I can study pretty good (sic)”. He rated his chances of getting into a Sports Science degree as “out of 10… maybe a six”. On hearing that he would need a UAI of over 90 into get into Physiotherapy, however, he felt “that would be really hard”.

Prior to the intervention, Elijah’s research into his post-secondary options had almost entirely comprised talking to people, his school teachers in particular. From them, he had developed a basic understanding of the entry requirements for a Sports Science or similar degree. However, he had not done any exploration into alternative courses and universities and was relying primarily on word-of-mouth. He was informed enough, from the careers booklet he referred to, to select Higher School Certificate
subjects which would be appropriate to his chosen career (including Biology, Physics and Mathematics), but had not explored any particular pre-requisite subject requirements.

Before the intervention, Elijah had little notion of what being at university might be like. Any ideas he had mostly came “from movies and stuff”. When he did think of university, he “thought it was all hard work and every day hard at work” and had a vague image of “people sitting down at tables writing and listening to teachers and that was about it”. Socially, he expected it would be much like school, with students forming groups according to “the full smart ones, and dumb ones and like not really dumb but don’t know what they want to do”.

Initially, Elijah had not given much consideration to the costs involved in going on to university. When Elijah first considered university he says he “knew it cost a lot of money but knew nothing about the prices”. He was also not aware “how you can pay it off and about HECS”. He says that this may have prevented him from going on “if it was too high”. He had not discussed the issue with his parents at any length, but he believed “if I do make it I know they will support me one hundred per cent…they just said they will pay for everything if I do get there”. He was already saving up for it, through his weekend employment as a football referee.

After the Intervention

Elijah described the intervention as “heaps helpful” and said it “changed (his) image of how university was”. The visit to his school by the university students provided much needed information about the UAC Guide, entry requirements, costs and the HECS system. His first introduction to the HECS system came from the Role Modelling strategy. Afterwards, Elijah had a much clearer idea of what going to university would cost, saying “I think it is $8000 or something, $6000 for the course I want” and “You can just go to school and pay off later when you have a job”. Knowing that he would not have the “struggle and not having to work at the same time and paying it at the same time” had made a big difference to him.
In addition, the experience of visiting a university campus in the Shadowing activity materially altered Elijah’s perceptions of what university work would be like. He found out that “it wasn’t as hard as you think it is. We went there expecting to do heaps of work and stuff. But they do practicals and experiments and all that. It’s not really just lectures and tutoring”. He also gained a clearer picture of what university students and social life might be like, and found to his surprise that “they were all nice people, and they all like mix in…everybody talks to everybody else… it was a surprise, ‘cause I thought they would be like here (school)’.

When asked what were the key influences in his decision-making, apart from his parents and teachers, Elijah named the ACULink project, saying “just what you’re doing… thanks for all you have done”. In summing up the impact of the program, Elijah said:

I’d say it was helpful’ cause I wasn’t really thinking about going to uni. I thought it would be too hard and too full on. But they came and said it and stuff, like not that hard. That was the main thing that worried me about uni, being hard, and all that talking and no one making new friends. But the way they said it was completely the opposite. It really did help me. If they didn’t come I wouldn’t have thought about going to uni.
16.5 Lucy

Context

When we first met, Lucy was Year 11 student attending a Catholic Senior College (Year 11 and 12) in the Mt Druitt area. The interview took place in a quiet room in the school library. She had not participated in the two Year 11 strategies of the ACULink project but had been involved in the campus visit while in Year 10. At the time of our first interview, Lucy was enrolled in the Step-Up-Into-Teaching (SUIT) program and was studying the first of the two university units as part of her Higher School Certificate.

Lucy’s Background

Lucy’s father worked in office administration. Neither parent went to university after leaving school, however her mother went as a mature age student and was currently working as a registered nurse. Her mother appeared to act as a positive role model of someone who had made it to university, and was also able to relate some of her experiences. The mother’s experience of university was a part of Lucy’s life as she was growing up. She observed her mother working on assignments and studying and had had conversations with her about how hard the work was. Her mother described it as “stressful” and said that she “didn’t really fit in, especially married with kids”. She emphasised how much easier it would be for Lucy if she went to university straight from school rather than waiting and struggling to do it when she has a family of her own.

Lucy had one older sister who studied at TAFE. Lucy believed this was due to her not really planning for what she wanted to do and leaving it too late to apply for university. Lucy believed her sister regretted the decision to not apply to for university. She advised Lucy to “think early about what you want to do”. This sister had friends who were currently at university. These friends provided a link to that world and, on a couple of occasions, Lucy had conversations with them about university life and work.

Lucy believed that few of her own friends expected to go to university and said that university rarely featured in their conversations about their post-secondary plans.
She cited only two with whom she had had conversations about going on to university. Both of these friends were also taking part in the ACULink and SUIT programs.

Lucy saw herself as strongly goal-oriented. Her aspiration to be a teacher had been formed in her primary school years: “I’ve been interested in teaching, it’s a career that I have been looking into for a while now”. She believed she was suited to teaching as she “really likes kids” and was “good with them”. However, she had done no real research into what a teaching career involves, and had not talked to her own teachers. Aside from her own school teachers, Lucy at first reported that she did not know anyone working in the field. Later she recalled that she did in fact have an aunt and uncle who are teachers. However, she said they were not close and she did not see them often. She had not discussed her plans with them and could not recall them talking about their work.

**Personal Characteristics**

Lucy had also considered other careers in the past (in the fields of Drama or Music) but had been quite pragmatic in recognising that it is hard to gain secure employment in these areas. She described herself as “realistic” in this regard, saying “You have to be very determined and I don’t know if I have that”. Lucy did, however, express confidence in her ability to get the necessary marks to get into a Primary Education degree, saying she was “doing well” at school at the moment.

Lucy had a very basic understanding of the entry requirements for primary teaching in as much as she realised she would have to go to university. She therefore perceived university as relevant as a university degree is necessary for entry into her chosen career. However her knowledge of university and course options was limited, with her research mostly limited to word-of-mouth from those of her sister’s friends who were at university. In addition to talking to these people, Lucy had taken the initiative to attend an Open Day at the University of Western Sydney.

Prior to the campus visit, Lucy reported getting most of her ideas about university from American movies. Her image of university was that it is “really big” and that the work is “mainly essays, not very practical”. She reported that these
impressions came “only from movies”, but her mother’s experience is likely to have also helped shape her impressions of university work.

While Lucy had no difficulty picturing herself as a teacher she nevertheless perceived many barriers to her getting to university. These barriers included concerns around getting the necessary marks, financial issues and the absence of a successful role model in her social circle. She had a vague notion of how HECS operates but still felt that going to university “is pretty expensive”. She said that her parents had said they will support her and she is saving money herself. Therefore, while these issues appeared to be of some concern to Lucy, they did not appear to present a real barrier. She still spoke of going to university with a good degree of hope and confidence.

After the intervention

The second interview took place eight months later, towards the end of the Year 12 school year and after the HSC trial exams. Since the first interview, Lucy had completed (and passed) both university units in the SUIT program. She had also visited the University of Sydney for a debating competition (which she described as “huge!” and “a bit confusing”).

Lucy reported that the intervention made a significant difference in confirming her goals and helping her to believe that it was possible to achieve them. Recalling the ACULink visit to campus in Year 10, she reported that the day had given her a more realistic idea of what university is like. Lucy found the university “a nice environment, not too many people” and said the day had provided her with more clarity about requirements and introduced her to the notion of HECS. She particularly noted the motivating impact of meeting university students and being reassured that university work is “a lot of hard work”. This had enhanced her self-efficacy, as she felt “if they can do it I can”.

Lucy made frequent reference to the SUIT program and the impact it had had on her perceptions and expectations. Participating in the two university units while at school materially altered her perceptions of the university environment and work. She mentioned the “closer relationship between the teacher and the students”, that “it’s more
interesting than I expected” and that “it’s like an adult environment a bit more”. Going to the campus with her peers reduced her anxiety about the prospect of going to university, and she said “I know the school and my way around (so) I don’t have to be anxious about that”. In addition, the experience she gained of doing real university work had “just sort of shown me what it’s like, so it’s not a shock”.

Participating in the SUIT program also significantly enhanced Lucy’s self-efficacy, having shown her that she had a good chance of getting into university, “especially with… already starting the university course” and as “I’ve done well in those subjects”. Lucy also mentioned, several times, the helpfulness of the 5-mark leeway in gaining access to ACU, saying “with the course I’ve done that takes 5 UAIs off, so even if I don’t quite make it there I’ve still got a chance of getting in”.

Since the first interview, Lucy was still “pretty sure” she wanted to become a teacher but had changed from Primary to Secondary (English/History/RE). She said this was because she felt she was more suited to the older age group. Lucy had also done some research into alternative universities and courses for teaching and had a fairly clear idea what the entry cut-offs were likely to be at both ACU and UWS. She cited her current teachers as positive role models, saying “I’ve liked the teachers I’ve had”.
16.6 Carly

Context

At the time of our interview, Carly was in the third year of her Bachelor of Education (Primary) at Australian Catholic University. She attended a large Catholic secondary school in Sydney’s outer western suburbs.

Carly was in the first cohort to be involved in the ACULink program. As she was in Year 11 at the time, she did not participate in the Year 8, 9 or Year 10 strategies and only experienced the Role Model strategy. She was also in one of the first groups to participate in the “Step Up Into Teaching” program (SUIT), within which she completed two university Education units as part of her Higher School Certificate. Her success in these two units had played a major role in facilitating her access to university. Both the Role Modelling and the SUIT proved to be instrumental in encouraging her and enabling her transition.

Carly’s Background

Carly is the eldest of four children. Her parents were from Chile but she was born and grew up in Australia. English is her main language but both English and Spanish were spoken at home. Carly’s mother was predominantly a housewife but had recently taken an office job – her first in twenty years. Her father was a payroll officer with the Sydney Catholic Education Office, a job which she described as “like right at the bottom of the accounting field”. Neither parent went to university. Carly spoke in vague terms about her father receiving his “qualifications” overseas but was not able to explain what these qualifications are. She believed he went to TAFE for a year or two when he came to Australia but said he had “no other formal training…not university”.

There appears to have been a complete absence of role models who had been to university in Carly’s social circle. Being the eldest in her family, and also the oldest among her many cousins, there was no-one for Carly to look up to or to model herself upon. She said “I didn’t actually see anybody who was close to me you know go to university…I was the only one from my area”. Similarly, none of her close peers were considering university as an option and only one friend was now at university. She said
“none of my friends were going to go to university either… Out of the whole group I was the only one that did go to university. I know a few people from other groups within the grade that did go but most of my friends, they went to TAFE or they went straight into the workforce or got an apprenticeship”. Consequently, higher education was rarely the subject of her conversations with friends, although: “there was a market day. I think it was in Year 10 and we had conversations then. Even in Year 12 we did, but it wasn’t anything over-the-top though”. She did feel, however, that “my friends were all supporting me”. Carly made no mention of her teachers as playing a role in supporting her.

Carly rated the support of her parents as the most important factor in helping her to make decisions and to make it to university. Despite their apparent lack of higher education they clearly believed it would be appropriate for Carly. She said that her father “watched me with my brothers” and in particular “influenced me…to go for this goal”. He was also someone who she could talk to about her plans. He had offered specific advice on choosing a university, suggesting ACU as he believed “if I want to teach in a Catholic school ACU’s right at the top of the list” and “he’s heard lots of good things about it as well”.

Personal Characteristics

Carly is warm and vivacious. She smiled throughout the interview and laughed often. She talked freely and at length about her background and her personal story of how she came to be at university. She came across as highly positive when she talked about her background, and optimistic when she looked to her future. She articulated that she had worked hard to achieve her goals and talked about her achievements with pride. Being the first in her extended family to go to university, and one of only two of her school friends, Carly saw herself as something of a pioneer and said her decision to go to uni was “very daunting”.

Carly described herself as strongly goal-oriented. She had wanted to be a primary school teacher since she was “about nine or ten” and laughingly described how she used to “be teaching my brothers with paper on the door”. She readily identified with the role of the teacher and believed she was well suited to the job, saying “I can
interact really well with younger children”. At the time of the interview she had just successfully completed her final practicum placement and said that all of her pracs “went really, really well”. However, while she had known for a long time that becoming a teacher would involve going to university, she had not always felt confident that she would get the marks she needed to get in. She did not paint herself as an academic high flyer, but rather “to tell you the truth, academically I don’t think I was going all that well”. She described her anxiety over the increasingly high entry cut-off marks for primary teaching, saying, “during the middle years of school I thought… with the marks it might be impossible for me to get in…. So I was a bit nervous about that”. As well as her own low self-efficacy with regard to her academic ability, Carly expressed the sense among her peers that “people at my school felt that not everybody will go to uni… everybody thought they might not be able to make it in”.

In addition to worrying that she might not get enough marks, Carly talked a lot about the concerns she had about the costs of a higher education, saying “from what I had heard I didn’t think I would be able to afford university at all”. With her father the sole income earner, she said that things were financially “quite hard” in her family. She was not aware of the HECS system of payment, instead holding the inaccurate belief that “I’d have to pay fees…I just thought the books, the fees are very high”. Before finding out about HECS, the perceived cost of university presented as a very real barrier to Carly’s going to university. As well as these beliefs, Carly held strong conceptions of what she believed university would be like, describing it as “this big image in my mind”. She had imagined it would be a large, unfriendly place and expresses feeling “nervous” at the prospect of going there, and described the time of making her decision to go as “a big scary time”.

**After the Intervention**

Carly clearly recalled the visit by university students to her school when she was in Year 11. For her, the visit was a turning point in terms of her motivation and her self-efficacy: “I’d have to say mainly towards the end which really determined the goal, that was the university program and the students coming out to the school… that really did help”. She talked about how the students were able to provide her with accurate information, saying “they explained about HECS and I was given a booklet that
explained a few facts as well... they were able to help me”. This made a real difference to her, as “it was really good to know about HECS though, so much easier”.

For Carly, the visit from the ACU students was her first opportunity to meet and talk to university students. As she said, “No-one at all that I saw, other than the students who came from ACU, that was in the Year 11”. The fact that she “knew their faces, they were very familiar” and that they “actually came from my school” had a strong impact on Carly. They provided her with “a support that I didn’t have at all” and helped to foster the belief that “if they can do it, you know, I can do it as well”. She described the session as “encouraging”, that it “motivated” her and reassured her that “it’s not quite daunting after all... it’s a good experience, you’ll meet new people”. In fact, Carly was so motivated by the experience that she willingly volunteered to act as a role model to subsequent cohorts.

Carly’s acceptance into the SUIT program was also helpful in many ways. First, it gave her a more “realistic view” of what university work would be like and passing the two units crystallized her belief that she could do it. It also eased her transition by reducing her workload in her first year, as “coming to uni, I didn’t have to do that. I had a bit more spare time to just, you know, adapt to university life, to spend more time concentrating on the subjects as well”.

Most significant for Carly was that passing the two units provided assisted access to an Education degree at ACU. The “ten-mark leeway” featured strongly in her narrative, and went a long way towards allaying her concerns that she might not meet the entry requirements and gave her “much more hope” that she could achieve her goal. In the end, this leeway was the difference between Carly gaining admission or not. She sums up the impact of this assisted access in saying:

With the ACU program, I wouldn’t be here right now if it wasn’t for them. I didn’t actually get, um, I think it must have been 82 back in 2000 I think it was. I didn’t actually get the mark I needed to, I actually got 70 and therefore this really did help me get in, it was really, really worthwhile.