NCVER

TRANSITION PATHWAYS

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Prepared by
National Centre for Vocational Education Research Ltd
for
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Editor's note

At the time of the study for this publication, the Department of Education, Training and Youth Affairs (DETYA) was the Department of Employment, Education, Training and Youth Affairs (DEETYA). The earlier title is maintained in this report for historical accuracy.

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Contents

Executive summary

This paper has reported on the major transition pathways which Australian young people take when they reach compulsory age.

The pathways have been presented as the:

- compulsory to post-compulsory school pathway
- school-to-university/higher-education pathway
- school-to-VET (vocational education and training) pathway
- apprenticeship/traineeship pathway
- school-to-work pathway

There are also pathways taken by young people, particularly early school leavers, that do not involve further training and have the unintended consequences of leading to prolonged bouts of unemployment or to withdrawal from the labour market altogether.

The compulsory to post-compulsory school pathway

When students reach compulsory age they are able to leave school. Students generally reach the legal age in Year 10. In 1997 apparent retentions to Year 10 were 97.2%. Apparent retention rates for Year 11 were 84.4%. Apparent retention rates for Year 12 in 1997 were 71.8%. In all three cases females had higher retention rates. These differences begin to become apparent from the mid-1970s onward.

Private school students have higher apparent retention rates for Year 12 than public school students. Those from managerial and professional family backgrounds have higher retention rates than those from unskilled or manual family backgrounds. Girls from urban areas stay on until Year 12 at a greater rate than girls from the country.

During the last few years the apparent retention rates for Year 12 have been declining. If continued, this decline in apparent Year 12 retention rates, coupled with declining participation and few people completing a Year 12 qualification or equivalent by the age of 19, may mean that the Finn targets for 19 year olds will be difficult to achieve.

The school-to-university/higher-education pathway

Well over a third of the students who completed Year 12 in 1996 were in university in May 1997, with many of them also being engaged in a part-time job. The proportion of students involved in full-time study has increased in the last few years. Socio-economic background factors operate in university entrance, with students from skilled manual and unskilled family backgrounds being less likely to gain entrance to university than those from professional and managerial family backgrounds. Students from private schools, as opposed to those from government schools, are also more likely to gain entrance to university and participate in university education.

The school-to-VET pathway

Almost a quarter of the students who completed Year 12 or Year 11 in 1996 and over a third of those who completed Year 10 in 1996 went on to TAFE in 1997. The most frequently enrolled in courses for males were engineering/surveying and for females it was business administration, and hospitality and transportation. Evidence from annual training statistics show that teenage participation in TAFE is at about the 20% mark. However, the participation rate of those in the 15–16 year age group stands at just over 10%. Information from enrolments and module completions shows that, on average, early school leavers do less well than those over 17 years of age.

Australian Youth Survey (AYS) figures show the rate for VET participation for students from clerical and skilled family backgrounds has increased while the participation of those from managerial and professional backgrounds has decreased. What we need to know is whether these students come from the lower quartiles of ability and achievement before we can decide that those from lower socio-economic backgrounds are more likely to go on to TAFE. Although the AYS data show this to some extent, studies based on larger and more representative samples are required.

The vet-in-schools experience

The vet-in-school pathway applies to students who participate in school–industry programs which are formally accredited and require them to spend structured time in the workplace that is assessed and recognised as part of their formal studies. So far, however, just over 10% of students participate in these programs with boys being more likely to be involved than girls and those from unskilled and skilled family backgrounds being more likely to be involved than those from professional/managerial or clerical family backgrounds.

The AYS findings show that students who did school–industry programs were more likely to go into VET courses, and much more likely to be in apprenticeships and traineeships than those who did not. They were also more likely not to continue in any further education or training. There are no indications of whether their employment prospects were any better. More destination studies of these school–industry program participants are needed before we can determine whether or not this pathway will help students make the transition from school to further training or work more easily.

The apprenticeship/traineeship pathway

The numbers of students entering apprenticeships in all age groups since 1989 have declined. The number of traineeships during that time has almost tripled. However, the greatest proportion of these commencements comprise trainees from older age groups. Although trainees were more likely to have completed Year 12 than were apprentices in the 1994–95 period, the gap has contracted substantially with trainee Year 12 completers being just slightly ahead of apprentice Year 12 completers. AYS figures show that trainees are more.likely to come from skilled and unskilled manual family backgrounds. They are less likely to come from managerial or professional family backgrounds. They are also less likely to come from rural areas.

During the 1996–97 year almost three-quarters of apprentices and trainees who commenced or recommenced their contracts of training commenced these contracts with private sector employers. Just over 10% commenced or recommenced contracts with group training companies. There are minimal numbers of apprentices and trainees working for the government sector. If one route to employment is to be in an apprenticeship or traineeship, then these opportunities need to be expanded. However, if the private sector is already carrying the major burden for the hiring of apprentices and trainees, there may be few extra training places that it can provide in a time when companies are looking to shed rather than increase the number of workers. An investigation of the best way to increase apprenticeship and traineeship places will need to be conducted. A survey of the capacity of private companies is required to examine what capacity they have for increasing apprenticeship and traineeship places.

Wastage rates from apprenticeships

The under-reporting of commencements and cancellations by clients to national training authorities may make it difficult to get an accurate picture of wastage rates. Keeping this in mind, recent calculations of apprenticeship commencements to completion ratios (based on a four-year time lag between commencements and completions) shows that wastage rates for those in traditional trade apprenticeships have increased considerably. Why apprentices do not complete their training is not clear. One reason may be that students make a hasty decision to enter an apprenticeship when they leave school because this guarantees them a job, then find out that it is not for them once they experience the job for a while. Another reason may have to do with the realisation that apprenticeships provide low levels of pay. However, we need more studies of why students leave apprenticeships before we can provide any considered answer to the question.

The school-to-work pathway

Just over a quarter of those students who completed Year 12 in 1996 did not go on to further education. About 10% were unemployed and a small percentage were not looking for work. The others were in full-time or part-time work. Almost three-quarters of those who completed Year 11 were not in further education. Of these, just over a third were in full-time or part-time work, over a quarter were unemployed with about 10% not looking for work. Just over two-thirds of Year 10 completers were not in further education. Of these over a third were in full-time or part-time work, almost a fifth were unemployed and over 10% were not looking for work. On average, young males were more likely to be unemployed than young females.

Australian Bureau of Statistics (ABS) figures also show that students have a larger share of part-time and casual work than workers who are not in education. This is especially so for non-student workers in the 15–19 year age group. In addition, part-time work is very common among Year 11 and 12 students with a third of Year 12 students working part time. AYS figures also show that these are more likely to be females from high-income families who are doing well at school. Workers who are not students had a lower share of the casual and part-time work available with females in the 15–19 year age group being more disadvantaged.

Teenage unemployment

In August 1997 the rate of teenage unemployment was three times that for prime-age adults (25–54 year olds) and twice that of 20–24 year olds. However, they were likely to spend shorter periods of time in unemployment. Unemployment for 15–19 year olds was also regionally based, with a number of groups being the most hard hit. These included those living in areas with increasing population bases, those in provincial areas affected by declining private investment and reduction in the quality of public infrastructure, and those rural areas suffering decreasing prosperity from the farm sector.

ABS figures also show that the likelihood of being unemployed increases if students leave school before Year 12 completion. AYS figures show that those from the lower quartiles of achievement are more likely to be unemployed and more likely to spend longer amounts of time being unemployed. Levels of achievement in numeracy and literacy are also strongly linked to family socio-economic backgrounds with those from managerial and professional family backgrounds doing better than those from lower-status backgrounds across and within different levels of achievement. If this is true for the total population, then we need to know why it is that substantial numbers of young people do not have these skills after spending the majority of their lives in school.

Young people not in training and not in the labour force

In May 1997 ABS estimates showed that, on average, young men who left school in 1996 at Year 10 were more likely not to be in the labour force than young women. The situation is reversed for young people who leave school at Year 11. Year 12 completers had a dramatically reduced incidence of not being attached to the labour force rates. Although small in comparison to non-completers, the rate for males in this position was almost twice that for females.

The importance of Year 12 completion and socio-economic background

Year 12 completers are less likely to be unemployed and more likely to spend lower periods of time in unemployment. However, their success in the training or labour market is also heavily influenced by socio-economic and achievement factors. The time that school leavers stay in unemployment decreases with the length of time they spend in the labour market. However, it tends to decrease more rapidly for Year 12 completers.

Year 12 completion also influences the types of occupations that are entered, with Year 12 completers more likely to enter clerical jobs and early school leavers more likely to enter apprenticeships. For males, Year 12 completers were less likely to be in labouring jobs and more likely to be in white-collar jobs. Non-completers were more likely to be in labouring or manual-related jobs.

The importance of literacy and numeracy achievement and socio-economic background

Information from longitudinal studies shows that literacy and numeracy achievement is also strongly linked to Year 12 completion. In addition, those

with high average literacy and numeracy skills perform better than those with low skills in terms of entrance to university and TAFE, obtaining employment, decreased length of time spent in unemployment, share of long-term unemployment, the types of occupations they enter and the wages they receive. However, this success is also mediated by socio-economic background factors and these need to be taken into account. That is, those from higher-status backgrounds of similar achievement perform better than those from lower-status backgrounds.

Why students leave school early

Although there is no one typical background for early school leaving, the risk factors associated with it have been identified with socio-economic family background, parental levels of education and English-speaking background. On average, early school leavers are more likely to come from government schools and suffer from a disability. A greater proportion of female than male non-completers comes from a two-parent family background. The situation is reversed for non-completers from a single-parent family background. Here, males are twice as likely as females not to complete school.

Studies of early school leavers also suggest that not completing Year 12 is often a matter of choice. Early school leavers opt out of school because they have found it increasingly irrelevant to their daily lives, do not get on with teachers, and want to get a job. In addition, they are likely to believe that leaving school was the right thing for them whether or not they are in employment a few months later.

Conclusions

Based on findings to date, it is difficult to assess the effectiveness of certain pathways in helping students to make the transition from school to work or further training. Although it is evident that Year 12 completion is associated with lower levels of unemployment, success in completing Year 12 is mediated by the characteristics and socio-economic family backgrounds of the individuals on the pathway to Year 12. Those with low levels of achievement in terms of literacy and numeracy are more likely not to complete Year 12. However, low levels of achievement in literacy and numeracy may also be an indication of innate individual ability or intelligence. At the lower levels, these may also be influenced by inadequate remediation during the early years of schooling.

Completing or not completing Year 12 may also be related to the aspirations of individuals which, in turn, can be influenced by the circumstances in which they are born, or to their self-concept of their own abilities. It would be a good idea to focus attention on how to develop the career or life aspirations of young people, rather than on what happens when we find that the development of these aspirations has been limited by insufficient training during the early years. In addition, we must also learn to accept the fact that some young people may genuinely not want to be in school at the age of adulthood. Focussing on the transition to work, rather than the availability of work to go to, may not be the best way to proceed.

Trends in advanced economies for increasing gross domestic product (GDP) with fewer labour resources means that for relative numbers of people, full-time employment has ceased to be the norm. It is also quite clear that there are young

people who leave school and are unable to find substantial work or any employment due to the collapse of the labour market for young people and do not avail themselves (either because they lack the skills or desire) of mainstream training opportunities. In this context the options are stark. One choice is to accept this and not do anything about it and leave these young people to drift perhaps into criminal activities and become social problems. The other is to generate new ways of engaging them in society. New pathways need to be considered that are available to all young people when they leave school and especially to those who may be at risk of opting out of the labour force and drifting into socially unacceptable and criminal activities.

Suggestions for improvement

These include:

- investigating new options for those people who are at risk of dropping out of the labour market and out of society in general
- widening the areas in which young people can do school-based apprenticeships or traineeships through the provision of incentives to employers to take on school-based apprentices or trainees. This will, of course, depend on the availability of appropriate work and training
- increasing the number of school-based apprentices and trainees in group training companies. However, it must be acknowledged that group training companies are dependent for their survival on their ability to access regular work for their apprentices and trainees. Their success in doing so is intrinsically linked to the availability of host employers and to their willingness and ability to provide work and training for apprentices to do
- further augmenting job and further training transition programs for youth by running post-school seminars for students who exit school at Year 12 or before Year 12. These workshops should be run by persons who have been responsible for the recruitment of personnel in industry and can draw on their experience of making selections either through short-listing or interviewing of applicants. Such personnel will be in the best position to provide advice to young people looking for jobs

Suggestions for further research and analysis

The following major areas for further research and analysis have been identified. These include:

- a systematic examination of how other advanced economies and cultures, which have faced increased unemployment brought about by decreasing requirements for full-time workers, have dealt with this issue. This would require an extensive and thorough international investigation of 'bright ideas' that have been implemented and proved to be successful
- a systematic examination of the major reasons that students and their parents provide for Year 12 non-completion, to be carried out both in city and regional and remote/rural areas. An examination of how inability to finance further education and training impacts on decisions for early school leaving

1 Introduction

This paper examines and reports on existing transition pathways for young people when they leave school. It will base its findings on relevant research on education and labour market outcomes and statistics collected by the Australian Bureau of Statistics (ABS), the National Centre for Vocational Education Research (NCVER), and what was the Department of Employment, Education, Training and Youth Affairs (DEETYA), now the Department of Education and Youth Affairs (DETYA) and their predecessors. It will also use internal papers from DEETYA and articles which present recent analyses from the Australian Longitudinal Youth Survey.

Tracking what happens to students when they leave school is not always straightforward. The process can, in part, be assisted through the analysis of cross-sectional data that are collected by organisations such as the ABS, NCVER, and DEETYA and its predecessors. It can also be informed by findings of longitudinal studies that follow a cohort of subjects over a period of years.

The analysis of cross-sectional data can help to give us a snapshot of what is happening to a large group of people at a specific point in time. The findings of longitudinal studies can give us a more in-depth picture of what happens to smaller numbers of people over time.

Transition pathways: What are they?

The concept of pathways helps to describe the 'various combinations of education, training and employment activities which individuals may undertake over time to reach a certain destination, for example a desired qualification or type of employment' (Australian Education Council Review Committee 1991, p.13). It implies that students move through a set of generally common experiences during their elementary and secondary schooling before they access multiple routes to further training, qualifications or employment. Further training may include university training and vocational and other training delivered in VET organisations. It may include full-time employment, part-time employment, and casual employment. It may also be accompanied by spells of unemployment. For a small group of school leavers, however, these transition pathways do not seem to be leading to work, unemployment or further education.

According to Lundberg (1995), the concept of pathways was first promoted by the Organisation for Economic Co-operation and Development (OECD). Here pathways, thought of as being flexible with articulation and credit transfer between them, became an integral part of an integrated training system. The concept of flexible pathways also became a focal point of the report of the Australian Education Council Review Committee report also known as the Finn report (1991). It was further developed by the Employment and Skills Formation Council (ESFC) review (1992) in its development of the new Australian Vocational Training System (AVTS). The ESFC review was to be more commonly known as the Carmichael report.

The Finn report established national targets for education and training. These Finn targets, as they are more commonly known, aimed at 95% of all students having achieved either a Year 12 or equivalent qualification by 2001. The ESFC established guidelines for a training system based on cross-sectoral co-operation and networking for the delivery of vocational training in schools, nationally consistent competency-based training, national recognition of competencies however achieved, an open national training market, fair participation in vocational education and training and an integrated entry-level system. Its success was dependent on the availability of credit transfer and articulation arrangements between the various pathways. The pathways promoted in the AVTS are provided in Lundberg (1995, p.136). In this study, we are interested in looking at existing pathways for young Australians when they leave school.

Longitudinal studies of youth

The Australian Youth Survey (AYS) is a longitudinal study of young Australians who are interviewed annually on their participation in school, post-school education and training and in employment. Although there are definite advantages in using AYS data, it must be acknowledged that because the success of the survey is dependent on the continued participation of students in the sample, the findings will be based on the special characteristics of those students who remain in the study.

According to Bell, Rimmer and Rimmer (1992), higher rates of responding in the AYS are obtained from younger people living with their parents, those who have not been unemployed, and those with higher levels of education. Lower rates of responding tend to be obtained from those with very low incomes. In addition, recent information shows that students from the lower achievement levels as measured by literacy and numeracy skills tests at the age of 14 also have higher rates of attrition from the study.

Bell, Rimmer and Rimmer were discussing the 1988 and 1989 surveys. However, conversations with Lamb (1997) indicate that the sample of 16 year olds who were first interviewed in 1991, 1992 and 1993 and last interviewed in 1997 show smaller and different rates of attrition. In addition, subjects were also first interviewed at the peak of school retention so the majority had completed school.

2 The compulsory to post-compulsory school pathway

Participation in full-time education for teenagers has been one of the major changes that has taken place in Australian education and training over the last three decades. Over this period the number of students of post-compulsory school age has more than doubled for Year 11 students and more than trebled for Year 12 students. Since the early 1980s sharp increases have also tended to coincide with economic recessions as students stay on at school longer because of the reduction in employment opportunities in the labour market. For Year 12 students these increases have been more dramatic at these points.

One way to look at the holding power of schools is to examine the apparent retention rates for Year 10, 11 and 12 students.

Apparent school retention rates

Apparent retention rates are described as the percentage of students in Years 10, 11 and 12 at school by comparison with the numbers of students in the same cohort at the beginning of secondary education (ABS 1996a).

Retention to Year 10

During the last two decades a picture has emerged of very high apparent retention rates (over 90%) for Year 10 during the last 16 years with almost complete retention (99.1%) being experienced during 1992 and slightly falling in the following five years. However, by 1997 the rate was still about five percentage points higher than it was in 1981.

The maximum was experienced in 1992 when only 0.9% of students did not continue to Year 10. One reason for this may be related to the 1990–91 recession and its effect on the take-up of apprentices.

Retention to Year 11

The situation for Year 11 over the same period is quite different. Here, the increase in retention rates over the same period is quite dramatic, climbing from 55.2% in 1981 to 84.4% in 1997. The maximum (87.8%) was experienced in 1992. Year 11 increases have also been experienced during the economic recessions 1982–83, and 1990–91.

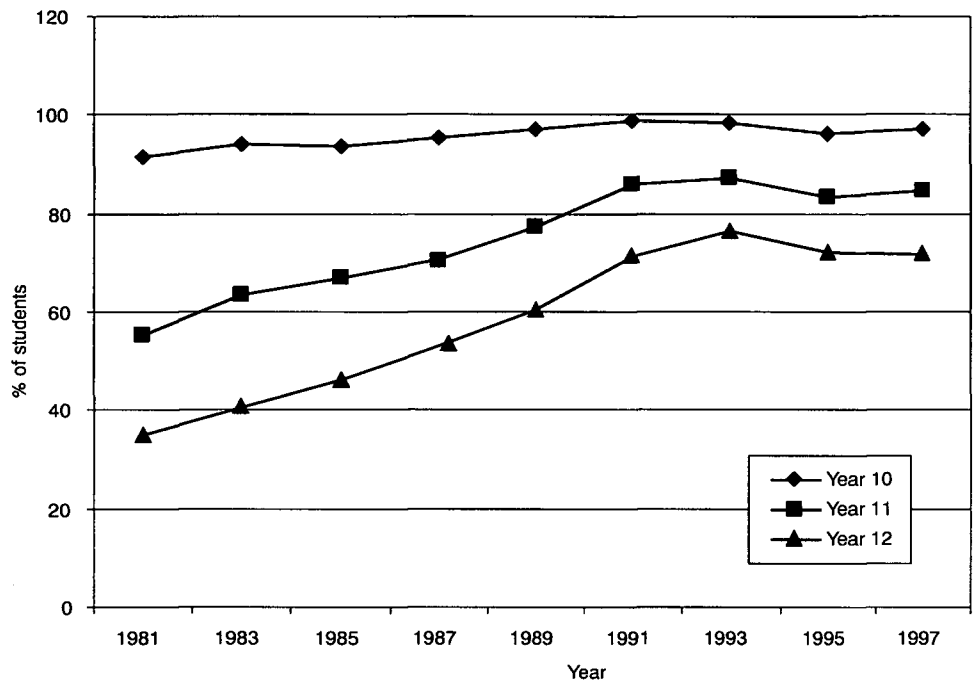
Retention to Year 12

The greatest increase in apparent retention rates has been for Year 12. Here, the rates increased from about a third (34.8%) of the cohort in 1981 to about three-quarters (71.8%) of the cohort in 1997. For Year 12 the steepest incline has also coincided with economic recessions. The maximum (77.1%) was experienced in 1993. However, there has been a gradual decline in Year 12 retention rates from 1992 onwards with the rate falling over six percentage points between 1992 and 1997.

Movements in apparent retention rates

A picture of the movement of retention rates for Years 10, 11 and 12 between 1981 and 1997 appears in figure 1.

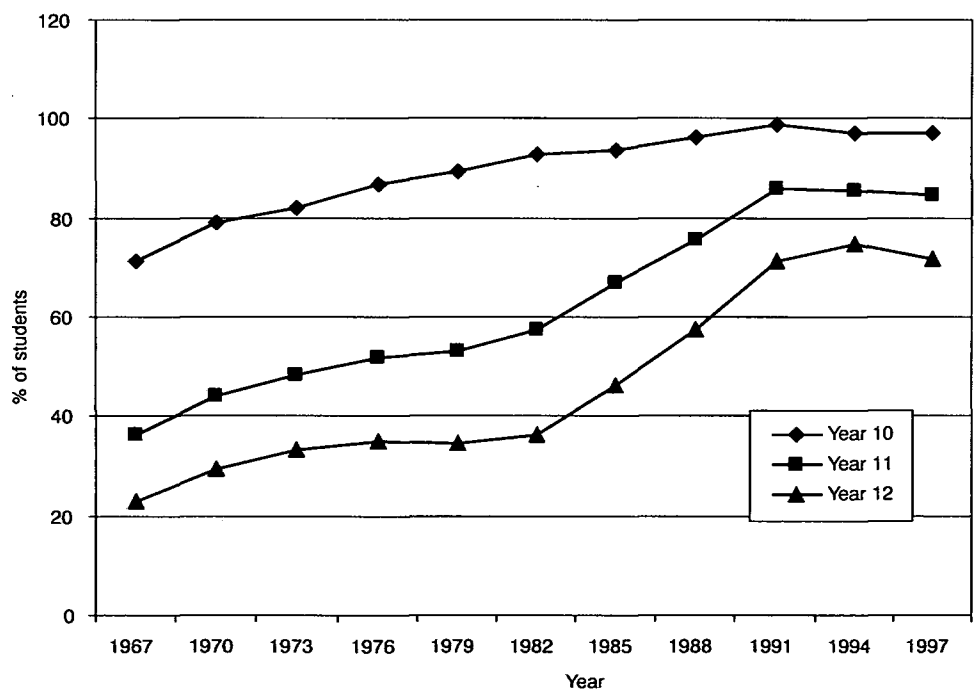
Figure 1: Apparent retention rates, 1981–97



Source: ABS (1994, 1997); DEET (1991)

A more comprehensive view of the movement in rates over a longer period is provided in figure 2.

Figure 2: Apparent retention rates to Years 10, 11 and 12, 1967–97



Source: ABS (1997d); ABS (1994); DEET (1991)

Recent declines in apparent retention rates

Although the school retention rates for Year 11 and 12 students are well over three times their 1967 rate and almost double what they were at the beginning of the 1980s, the rates have been slowly coming down for the last few years.

These developments, if continued, will mean that the Finn targets will not be attained. Furthermore, if we take the National Board of Employment, Education and Training (NBEET) projections for the Year 2001 (Lundberg 1995, p.107), and we acknowledge that apparent retention rates are not a true indication of successful completion of Year 12 (because they include students who were repeating Year 12 or who enrol in Year 12 but do not complete it), then the gap between the Finn targets and the current position is further widened. Year 12 apparent retention rates seem to be on the way down rather than on the way up as we approach the turn of the century. This will be discussed in greater detail later on in the report.

School sector comparisons

It is also evident that apparent retention rates are higher for non-government or Catholic schools. A comprehensive examination of how school retention rates across school sectors have altered over time is presented in table 1.

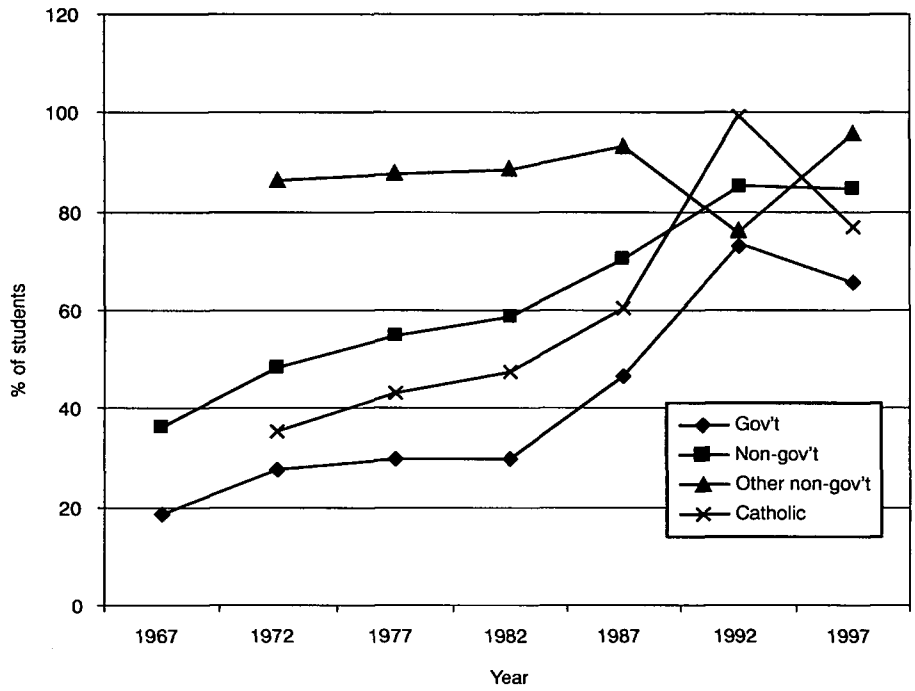
Table 1: Year 12 apparent retention rates—school sector comparisons (%)

Sector	**1967**	**1972**	**1977**	**1982**	**1987**	**1992**	**1997**
Government	18.4	27.6	29.7	29.6	46.8	73.8	65.7
Non-government (Anglican, Catholic, and other non-government)	36.3	48.5	54.9	58.5	70.4	84.7	84.8
Catholic		*35.2*	*43.2*	*47.5*	*60.3*	*76.0*	*76.8*
Other non-government (special religious affiliations, interdenominational, non-denominational and no religious affiliation)		*86.5*	*87.6*	*88.5*	*93.4*	*99.6*	*95.8*
All schools	**22.7**	**32.4**	**35.3**	**36.3**	**53.1**	**77.1**	**71.8**

Source: DEET (1991); ABS (1997d); ABS (1996a)

These data are also presented in figure 3.

Figure 3: Apparent retention rates to Year 12, 1967–97, by school type



Note: The 1992 figure for non-government schools shows an apparent retention rate in excess of 100%. This has been caused by transfer from other categories of schools into the cohort group after the base year, thus inflating the real retention.

Source: ABS (1992); ABS (1997d); DEET (1991)

Using AYS data Lamb (1997) came to the conclusion that if decreases in retention rates are taken as a measure of school holding power, then it is evident that Catholic schools experienced the smallest decline. The reasons for the strong holding power of private schools are uncertain. However, it must be acknowledged that their student populations are based on the self-selection of students into these schools. That is, they may have students from certain sectors of society who expect to complete Year 12. It is for this reason that it is difficult to draw any major comparisons of the quality of teaching between the various sectors based on differences in apparent retention rates. DEET (1991) also cautions against comparisons being made between apparent retention rates of different schools or school systems.

Lamb's (1996) analysis of AYS data from the Australian Youth Survey of 2128 16 year olds interviewed for the first time in 1991 and 1992 also showed that the likelihood of gaining entry into higher education was affected by students' school sector backgrounds. He reports that attendance at a non-government school increases the chances of going on to higher education by about 12% for males and females.

Gender comparisons

Apparent retention rates to Year 12 for females have outstripped those for males. These differences begin to become apparent from about the mid-1970s onwards. A decade before that, apparent Year 12 retention rates for females lagged about ten percentage points behind those of males (DEET 1991). These details appear in table 2.

Table 2: Apparent retention rates to Year 12 for males and females—1967–97 (%)

Gender	1967	1972	1977	1982	1987	1992	1997
Males	23.8	34.9	34.3	37.7	55.3	72.5	66.2
Females	13.8	24.3	37.0	46.6	65.4	82.0	77.0
All persons	**22.7**	**32.4**	**35.3**	**36.3**	**53.1**	**77.1**	**71.8**

Source: DEET (1991); ABS (1997d)

A major reason for increased apparent retention rates for girls during the mid-1970s lies, in part, in the decreased labour market opportunities available to young women brought about by reductions in the tariffs for female-dominated industries such as the textile, clothing and footwear industries. The reason for the dramatic increase in the early 1980s may also be related to their exclusion from most trade apprenticeships apart from hairdressing (Lamb 1996). Available evidence shows that girls do better at school than boys (Lamb 1997). This may also contribute to their higher retention rates. Another reason for increases in female retention until Year 12 from the mid-1970s onwards may also have to do with the impact of social movements which become more prominent in the mid-1970s. New ways of looking at career aspirations for women and, in particular the push for equal educational opportunity for girls, may also have helped to push up retention rates for girls in the subsequent years.

Lamb (1997) found that Year 12 completion rates for boys and girls were also related to school sector, location of residence and socio-economic backgrounds. Girls from non-government schools had a 90% completion rate compared to a 75% completion rate for girls from government schools. In addition, it was found that girls from city areas complete school at a greater rate than girls from rural areas.

Socio-economic background comparisons

Using figures derived from the AYS survey, Ainley (1998) and Lamb (1996) note that there have been greater declines in apparent retention rates for young males from unskilled family backgrounds. According to Lamb (1996) the period between 1987–90 was a period for increased school completions for students from all socio-economic backgrounds. However, the strongest increases occurred for both males and females from unskilled and manual family occupational backgrounds. For males the situation has changed. Since 1991 the AYS data show that the apparent retention rate for boys from unskilled backgrounds has fallen by about 13 percentage points. For girls from the same background the rate of decline has been about four percentage points. For boys from professional or managerial family backgrounds the fall was about three percentage points. However, females from skilled manual and clerical non-manual backgrounds suffered retention losses similar to those of their male counterparts (Ainley 1998; Lamb 1996).

According to Lamb (1996) the overwhelming majority (87%) of boys from managerial and professional backgrounds complete Year 12, whereas less than two-thirds (65%) of those from manual or unskilled backgrounds complete Year 12. One reason for boys from lower socio-economic backgrounds failing to complete Year 12 may be that they have not been made especially aware of the benefits of completing Year 12 by parents, peers or teachers. Another reason may have more to do with their scholastic ability than with socio-economic background. That is to say that if these students are also the lower-achieving students then they may have been counselled not to continue in an academic

setting and to opt for looking for a job instead. However, Lamb's (1997) findings show us that when all things are held constant, the socio-economic background effect endures. If it is true that young men from non-skilled or manual backgrounds and, to a lesser extent, their female peers are the most at risk of not completing Year 12, then this signals even further levels of disadvantage being suffered by this group.

Differences in the post-school destinations of young people from different socio-economic backgrounds were observed in the findings of a study carried out in the Mornington Peninsula Labour Force Region in Victoria in 1993 (Lamb, Polesel & Teese 1995). This study analysed the destinations of 3924 Year 11 students and 3394 Year 12 students who had attended school in the region in the previous year.

The study found that less than half of the students applying for entrance to university had been accepted, 16% entered vocational education and training and one-third entered the labour force. Students from non-English-speaking backgrounds were less likely to gain a university place, but were much more likely to enter two-year programs in technical and further education (TAFE). Young people from lower-status backgrounds were also much less likely than others to gain a place in university and twice as likely to be unemployed.

In addition, students from professional and managerial family backgrounds were also more likely to see school as preparing them for university, and students from lower-status backgrounds were ten times more likely to want schools to deliver vocational education and training. (This was the case especially for males.) Socio-economic differences were also manifested in the rates of university entrance, early school leaving and entrance into the labour force. Students from higher socio-economic backgrounds were more likely to get into university, while students from lower-status backgrounds were more likely to leave school early or search for work.

When students were asked whether they would leave school if they were to be offered a job, students from lower socio-economic backgrounds were twice as likely to say that they would leave school in such a situation than were students from higher socio-economic backgrounds. They also reacted in a similar way in answer to a question asking them whether they would prefer working or doing an apprenticeship to staying at school.

Meeting the Finn targets

In 1991 the Finn report set national targets for increasing the rate of participation in training and the attainment of educational qualifications by the Year 2001. Target one related to having 95% of all 19 year olds either participating in or having completed Year 12 or an equivalent qualification. Target one also aimed at having 95% of all 19 year olds having completed Years 10 or 11 and participating in formally recognised education and training courses, or having completed Years 10 or 11 and completed formally recognised education and training. Target two related to having 95% of 22 year olds participating in education and training which lead to level III awards, having attained qualifications at or above this level, or participating in or having completed a higher education qualification like a degree or a diploma.

Australia is currently behind achieving the Finn targets in terms of current apparent retention rates. In 1986 the Quality Education Review Committee set a

target for Year 12 completions at 65% of the beginning cohort. By 1991 the retention rates had surpassed the target and increased to 71.3% (Lundberg 1995). Following on from this the Australian Education Council Review Committee (1991) established a target for a 95% Year 12 completion rate or its equivalent by the Year 2001. The next year, 1992, the rates had climbed to 77%. Since that time the Year 12 apparent retention rates have been gradually declining. By 1997 they had fallen to 71.8% (ABS 1997d).

However, current retention rates do not tell the whole story because retention rates are not only based on successful completion of Year 12. They also include students repeating Year 12, and students who enrol in Year 12 but leave before the end of the year (Lundberg 1995). This means that the gap between the Finn targets and the current apparent retention rates is larger. Information from current NCVER statistics shows that increases in VET enrolments are not accounted for by early school leavers (NCVER 1997a; Ball & Robinson 1998).

Data derived by the Australian National Training Authority (ANTA) from ABS statistics (ANTA 1996) show that the Age 19 targets may not be met if the national trends of young people's participation in post-compulsory education continues. The report claims that the reasons for this include the fall in apparent completion rates and a decline in the number of persons who have attained qualifications but are not in further education or training. The report presents projections for the 22 year-old cohort to suggest that these may be well within reach (p.24).

The reasons for the fall in apparent retention rates to Year 12 are unclear. In searching for an answer to the question of why Year 12 retention rates are falling, Lamb (1996) suggests that the Year 12 qualification may be losing its value in the eyes of students and employers because more students are staying on to Year 12. Increasing dissatisfaction with remaining at school until Year 12 may also be due to students' perceptions that Year 12 completion does not guarantee a job.

Moreover, the often publicised youth unemployment rates may also lead students to believe that whether or not they complete Year 12, there are no jobs for them to go to. Another reason for students deciding not to complete Year 12 may lie in students' dissatisfaction with what happens in schools. A study of early school leavers found that these students found school to be irrelevant to their daily lives, and uninteresting and uninspiring (Ainley & Sheret, cited in Dwyer 1996).

3 Do perceived returns on investment affect student choices to continue with schooling?

Perceived returns on investments have often been quoted as underpinning the choices students make about which school, work or career pathways to follow. Ball and Robinson (1998) are of the opinion that perceived life-time earnings provide a strong motivation for career and educational choices for young people. Gregory (1995), on the other hand, believes that educational choices are more strongly based on the amount of investment required for individuals to buy an extra year of schooling rather than the additional income that will be derived from that additional training. He presents the following arguments for this belief.

Firstly, well over half (54%) of the jobs created in Australia over the last 25 years or so have been part-time jobs with teenage males accounting for 27% of all part-time jobs held by males and teenage women accounting for 12% of all part-time jobs held by females. Students (81% for males and 77% for females) hold almost all part-time jobs held by teenagers. About a quarter of all teenage males in school are in part-time jobs and about a third of all teenage women in school are in part-time jobs. For teenagers in university, participation in part-time jobs is even greater with over a third (36%) of all teenage males in part-time jobs and a slightly higher proportion (41%) of teenage women in part-time jobs. A similar pattern is repeated for 20–24 year-old university students. According to Gregory (1995) this growth in part-time work has meant that studying and working has become commonplace. This has meant that the investment required to stay at school or university has fallen and the choice of staying on at school and not earning money from employment has been made either irrelevant or not as important.

Secondly, the lack of full-time jobs for young people of 15–18 years old has also impacted on decisions for young people to stay on at school. Full-time employment declines have especially affected young women in the 15–19 year-old age group. Full-time employment changes for 15–19 year-old men and 20–24 year-old men have remained fairly similar. For women, full-time changes for these age groups are quite different.

Thirdly, increases in government funding for students from families with low family incomes have also increased their ability to stay on and complete additional years of schooling.

Another way of looking at whether or not perceived life-time earnings are motivating career aspirations and decisions to stay on longer at school or university is to examine the actual starting salaries of first-degree holders and compare these to the average weekly earnings of other workers. When Gregory (1995) does this he finds that over the last two decades up to 1995, the starting salaries for male and female graduates had decreased in 11 out of the 15 years he looked at.

When he compares the starting salaries of first-time graduates in their first full-time job to the average weekly earnings of workers near their age group—

20–24 year olds—however, he finds no change in decline in graduate starting salaries.

Major contributions to the decline in graduate starting salaries over the two decades have been provided by the real earnings of workers in the older 35–44 years age bracket.

Gregory also notes that although males with a university degree earn more than males of the same age group who left school at 17 years, there is no difference between males in the 35–44 year age group who left school at 16 years of age and those with technical or trade qualifications.

However, holding a university degree increases labour force participation rates across all age groups apart from those over 55. Among males with no qualifications there are very large changes. From 1978 to 1995, what Gregory calls labour force attachment decreased for 25–34 year-old men by 19%, while for those aged 35–44 years it decreased by 15%. For women it increased for all groups although increases have been largest for the less qualified. However, the labour force attachment of women with degrees now outstrips that of non-qualified men in every age group.

Gregory concludes that increased teenage school retention has not been a result of any perceived returns that would come from higher levels of schooling or skill. It has been the result of insufficient full-time job growth and increased government expenditure. It has been accompanied by a lack of demand for young people of all education levels. He also believes that the labour market will continue to evolve in this way with a strong bias towards part-time employment and experienced mature workers. He is convinced that more education will not reverse these patterns.

Dockery and Norris (1996), however, show that there were quite high rates of return for male-dominated trades but low or negative rates of return for female-dominated trades such as hairdressing. More recent findings (Steedman, Green & Beyer 1996) show that men with only vocational qualifications received higher rates of return than those with no qualifications. In addition, UK data showed that young people under 25 with no experience experienced a 30% unemployment rate.

4 The school-to-university or higher-education pathway

Another view of what happens to students when they leave school is to look at the transfer rates of Year 12 students to institutes of higher education. Transfer rates describe the percentage of students who commence higher education studies in the year following their Year 12 schooling. A breakdown of these rates for the period 1985–95 are reproduced in table 3.

Table 3: Transfer rates from Year 12 to higher education 1985–95

Year	Transfer rate %
1985	40.4
1986	41.4
1987	42.9
1988	42.1
1989	41.5
1990	42.7
1991	42.7
1992	35.8
1993	35.8
1994	38.0
1995	40.4

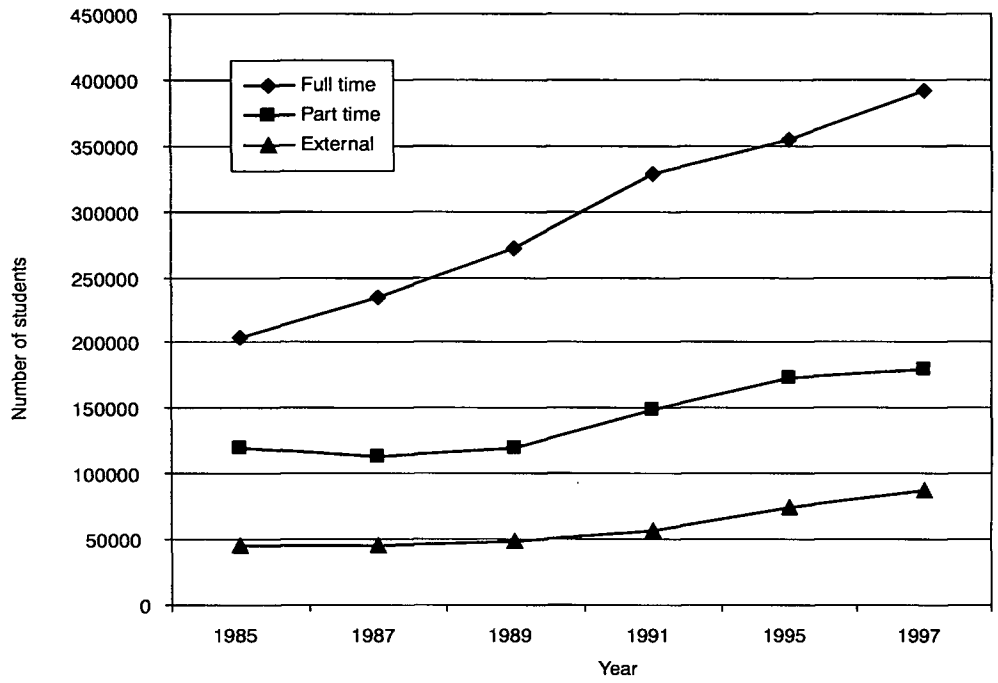
Source: ABS (1996a)

These figures show that over the ten-year period the transfer rates have remained well over the 30% mark. However, between 1991 and 1994 there is a dramatic drop in the transfer rates. We can't be absolutely sure of the reasons for this. It may be that students are staying on to repeat Year 12 to get better results for entrance into university.

Increasing rates of full-time education

In 1997 there were 658 827 students in higher education courses. The great majority of these students attended courses on a full-time basis. The figures for commencing students for 1996 and 1997 show this effect even more dramatically. In 1996 there were 158 465 commencing students in higher education studying on a full-time basis. By 1997 this figure had increased to 164 036. This represented a 3.5% shift. In contrast there was a slight decrease in the number of commencing students studying on a part-time basis. Here, numbers fell from 64 350 to 63 905. This represented a -0.7% shift. A better picture of these data is presented in figure 4.

Figure 4: Full-time and part-time attendance in higher education institutions



Source: DEETYA (1997d)

Broad fields of study

Marginson (1998) reports that the largest field of study destinations for students going on to higher education were arts, humanities and social sciences, business management and related fields and health sciences. The most rapid growth has been in law, agriculture, architecture and business. Absolute numbers in education courses have fallen since 1987. A breakdown of enrolments by broad field of study for 1996 appears in table 4.

Table 4: Students in higher education by broad field of study for 1996

	Number of students	Percentage of students
Non-award courses	6 281	1.0
Law and legal studies	24 995	3.9
Agriculture	12 059	1.9
Architecture and building	14 704	2.3
Business and related fields	143 583	22.6
Science	91 986	14.5
Engineering/surveying	48 733	7.7
Health (including medicine)	73 262	11.6
Humanities/social science	146 308	23.1
Veterinary science	1 658	0.2
Education	70 525	11.1
Total	**634 094**	**100.0**

Source: Marginson (1998)

5 The school-to-VET pathway

The vet-in-schools experience

The *vet*-in-schools experience applies to those students who remain in secondary school and participate in school–industry programs. These are formally accredited school-based vocational programs requiring students to spend structured time in the workplace that is assessed and recognised as part of their formal studies. In 1995 almost half (46%) of all Australian schools provided some type of school–industry program. A year later this had grown to 62%. However, just over 10% (12.1%) of students were involved in these programs with government schools having a greater percentage of students involved (14.5%). Non-government, non-Catholic schools had the lowest percentage of students involved (4.8%). Catholic schools had 10% of their students involved in these programs. However, only 2.3% of all students were involved in programs that required more than 20 days in the workplace (Ainley & Fleming 1996). Unpublished data from the 1997 Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA) Taskforce show that the number of programs and students in programs has increased substantially.

For the purposes of this report the lower case *vet* will be used to describe vocational education and training that is based in schools. The capitalised VET will be used to describe the vocational education and training that occurs outside school. This distinction first used by Lamb, Long and Malley (1998) helps to distinguish between the two areas.

Characteristics of students participating in vet in schools

Using information from the AYS longitudinal study, Lamb, Long and Malley (1998) found that participation in vet programs varied according to gender, socio-economic background, school type, rural or urban location and language spoken at home.

Slightly more boys (14.1%) than girls (12.1%) participated in vet programs and this was true for the great majority of socio-economic backgrounds as measured by parents' occupation. A snapshot of the characteristics of students participating in vet is supplied in table 5.

Table 5: Participation in vet in schools according to student characteristics (%)

	Participation in vet—all students*		Students not doing vet		Students doing vet	
	Males n=1651	Females n=1781	Males n=1419	Females n=1576	Males n=232	Females n=215
Parents' occupation						
Professional/managerial	9.6	8.9	12.5	15.7	8.6	11.3
Clerical	11.0	9.8	20.2	23.9	16.2	19.0
Skilled manual	14.1	14.7	39.8	35.9	42.6	45.1
Unskilled manual	15.4	12.1	27.5	24.5	32.6	24.6
			100.0	100.0	100.0	100.0
School type						
Government	15.5	13.7	79.1	73.0	88.8	84.2
Catholic	8.5	8.2	19.0	19.9	10.8	13.0
Non-Catholic	3.4	5.2	1.9	7.2	0.4	2.8
			100.0	100.0	100.0	100.0
Mothers' country of birth						
Australian	14.1	13.4	71.2	66.8	71.5	75.8
Other English	15.8	12.4	8.6	12.1	9.9	12.6
Non-English	13.1	7.2	20.2	20.4	18.6	11.6
			100.0	100.0	100.0	100.0
Rural or urban						
Rural	12.9	13.3	29.7	32.8	30.0	33.7
Urban	15.0	11.6	70.3	65.1	68.9	66.3
			100.0	100.0	100.0	100.0

Note: *This column represents participation in vet for the total mid-1990s sample. The column describing details on students not participating in vet has been provided by Stephen Lamb.

Source: Lamb, Long & Malley (1998)

Lamb, Long and Malley report findings by Ainley and Fleming (1996) showing that schools in lower socio-economic background districts were more likely to offer vet courses and students from these areas were also more likely to enrol in these courses.

Destinations for vet-in-schools participants

Next steps taken by participants in vet-in-schools programs were also investigated by these researchers. Destinations varied according to gender, with males being more likely to obtain an apprenticeship than females, and females being more likely to obtain a traineeship or be involved in other TAFE training. These differences are presented in table 6. The capitalised form of the acronym VET refers to further education and training institutions (e.g. TAFE, private providers).

Table 6: Destinations of AYS participants to age of 19 (%)

	Males		Females	
	Vet at school	No vet at school	Vet at school	No vet at school
Total VET	53.0	42.7	51.3	35.4
Apprenticeship	22.4	13.2	1.9	1.9
Traineeship	8.2	4.3	12.6	6.0
Other TAFE	22.4	25.2	36.8	27.5
Diploma	*6.5*	*8.5*	*12.1*	*9.0*
Certificate	*9.1*	*7.9*	*14.4*	*11.5*
Higher education	9.3	34.1	21.2	43.2
No further education or training	38.4	28.4	35.8	27.7

Source: Lamb, Long & Malley (1998)

From table 6 it is evident that among students who had participated in vet at school, girls were much more likely than boys to enrol in certificate and diploma courses. However, girls' participation in apprenticeships was very minimal with boys being 20 times more likely to be participating in an apprenticeship than girls. In addition, more girls than boys entered traineeships. They were over two times more likely to enter university.

In addition, boys who had participated in vet in schools were only a third as likely to enter university as boys who had not participated in the programs. The difference between the two groups for girls in their entrance to university is smaller. Girls who had participated in vet in schools were half as likely to have entered university as girls who had not participated in vet in schools.

Furthermore, boys who had participated in vet in schools were far more likely to be among those who were not involved in any formal further education or training than those who had not participated in vet in schools.

When the destinations of those who had participated in vet in schools were compared to students who had left school after completing Year 10, the findings showed that male vet participants were more likely than Year 10 leavers to be among those not continuing in further education and training.

Such findings do not shed much light on the effectiveness or otherwise of vet-in-schools programs. It is quite feasible that students who decide to participate in vet-in-schools programs, or are counselled to enter these programs by teachers, may also be those who are less academically motivated and may not wish to continue with formal education and training. There is a study in progress of the parent perceptions of school–industry programs which is beginning to show that many parents are not aware of their school having such programs.

The school-to-VET pathway

The school-to-VET pathway applies to students who go directly from school to vocational education and training. From the early 1990s the number of 15–19 year olds in VET has decreased although the proportion of 15–19 year olds in VET has remained stable. This has been due to demographic changes rather than changes in the VET aspirations of school leavers (Ball & Robinson 1998). In 1996 the 15–19 year-old cohort represented 20% of the clients in VET. In addition, there has been a decline in the participation rate of 15–16 year olds and an increase in the rate of 18–19 year olds within the age group. This may reflect the increasing levels of school retention rates to Years 11 and 12. A comprehensive view of the rates of teenage participation in TAFE appears in table 7.

Table 7: Teenage participation in vocational education

Age group	1990	1995	1996
15–16	13.3	11.1	11.8
17	20.4	21.4	21.7
18	26.3	29.5	29.4
19	23.2	27.5	27.2
15–19	**19.6**	**20.2**	**20.4**

Source: Ball & Robinson (1998)

In 1996 well over a third (41%) of the 15–19 year olds in VET had completed Year 12. This represented about a fifth (20.3%) of 17 year olds, well over half (58.3%) of the 18 year olds and almost two-thirds (65.8%) of the 19 year olds. These figures can also be broken up according to whether students lived in capital cities, metropolitan areas and rural or remote areas. These data are presented in table 8.

Figures from AYS data also show that completing Year 12 is often a precursor to entry into TAFE. The rates for TAFE participation of students involved in the AYS study have increased for early school leavers and Year 12 completers over the last ten years. However, fewer students have been entering TAFE from Year 10. Today, more than 80% of females and more than 75% of male participants in TAFE have completed Year 12.

AYS figures also show that while the number of teenagers from clerical and skilled manual backgrounds have increased, the number of students from managerial and professional backgrounds have decreased.

Broad fields of study

In 1996 a high percentage of commencing enrolments comprised shorter courses and multiple course enrolments during one year.

For males in the 15–19 year-old age group the most frequently taken courses were engineering/surveying. For females it was business administration and hospitality and transportation. For females over 17 years it was business administration and economics. A breakdown of field of study by age group appears in table 9.

Table 8: Enrolments in VET—stream of study by highest level of year attained

	Highest level of school attained															
	Year 7 or lower no.	%	Year 8 no.	%	Year 9 no.	%	Year 10 no.	%	Year 11 no.	%	Year 12 no.	%	Not known no.	%	Total no.	%
Postcode region																
Within State –capital city	11 252	67.3	5 617	52.9	28 419	46.8	118 895	49.6	76 839	57.8	264 703	68.6	271 692	53.5	777 417	57.4
Within State –other metro	678	4.1	410	3.9	5 778	9.5	23 640	9.9	8 144	6.1	24 432	6.3	27 821	5.5	90 903	6.7
Within State –rural	3 543	21.2	3 485	32.8	22 780	37.5	80 105	33.4	39 486	29.7	76 323	19.8	143 237	28.2	368 959	27.2
Within State –remote	877	5.2	789	7.4	2 235	3.7	9 442	3.9	4 585	3.4	9 156	2.4	18 779	3.7	45 863	3.4
Interstate –capital city	94	0.6	50	0.5	350	0.6	2 079	0.9	1 003	0.8	3 750	1.0	3 528	0.7	10 854	0.8
Interstate –other metro	28	0.2	22	0.2	123	0.2	750	0.3	215	0.2	646	0.2	824	0.2	2 608	0.2
Interstate –rural	155	0.9	159	1.5	764	1.3	3 410	1.4	1 556	1.2	3 558	0.9	7 605	1.5	17 207	1.3
Interstate –remote	24	0.1	51	0.5	134	0.2	518	0.2	303	0.2	518	0.1	874	0.2	2 422	0.2
Outside Aust.	17	0.1	6	0.1	10	0.0	474	0.2	576	0.4	1 659	0.4	1 561	0.3	4 303	0.3
Unknown	41	0.2	36	0.3	137	0.2	523	0.2	278	0.2	1 025	0.3	32 003	6.3	34 043	2.5
Total	**16 709**	**100.0**	**10 625**	**100.0**	**60 730**	**100.0**	**239 836**	**100.0**	**132 985**	**100.0**	**385 770**	**100.0**	**507 924**	**100.0**	**1 354 579**	**100.0**

Source: NCVER (1997b)

Table 9: Field of study by gender and age group

	Females					Males				
	Age in years					Age in years				
	15	16	17	18	19	15	16	17	18	19
	% of student enrolments					*% of student enrolments*				
Land and marine resources, animal husbandry	3.9	3.4	2.8	2.5	2.7	8.4	8.5	7.1	5.7	5.3
Architecture/building	1.0	0.5	0.7	1.0	1.3	7.2	11.3	12.8	13.7	14.5
Arts, humanities, social sciences	10.0	8.4	6.7	6.7	8.2	4.6	4.0	4.8	3.3	3.5
Business administration, economics	24.1	27.1	27.1	30.3	31.4	9.6	9.4	8.5	12.2	13.1
Education	0.3	0.2	0.3	0.3	0.6	0.4	0.3	0.3	0.3	0.3
Engineering/surveying	2.3	2.4	2.1	2.2	2.4	25.9	30.8	31.7	31.4	33.6
Health, community services	7.6	10.2	11.4	12.8	13.4	2.3	1.9	2.3	2.6	2.7
Law, legal studies	0.0	0.0	0.3	0.9	0.8	0.0	0.0	0.2	0.4	0.5
Science	2.3	2.3	0.3	3.1	3.2	2.4	2.2	3.0	3.6	3.3
Veterinary science, animal care	0.3	0.6	0.5	0.5	0.5	0.2	0.3	0.0	0.1	0.0
Services, transportation hospitality	25.8	27.3	25.6	22.7	19.9	11.7	11.3	11.6	11.3	10.1
TAFE multi-field education	22.5	17.7	19.5	16.9	15.4	27.4	20.3	19.0	15.3	13.1

Source: Ball & Robinson (1998)

Streams of study

According to Ball and Robinson (1998) the types of courses undertaken by the 15–19 year-old cohort reflect changes that have taken part in the labour market during the 1990s. The percentage of students enrolled in the various streams of study is presented in table 10.

Table 10: Stream of study, 15–19 year olds (%)

Stream	1990	1991	1994
Basic employment skills	10.3	11.2	10.4
Educational preparation	9.4	9.0	8.7
Operatives: initial	15.4	18.4	17.2
Recognised trades: part exempt	2.6	5.9	6.2
Recognised trades: complete	32.4	18.9	17.3
Other skills: part exempt	3.3	6.5	9.5
Other skills: part exempt	8.0	8.4	11.0
Trade/technician supervisory	6.6	6.1	4.6
Para-professional technician	1.6	1.9	1.8
Para-professional higher technician	6.4	10.1	9.6
Professional	0.5	0.6	1.1
Operatives: post-initial	1.0	1.1	1.1
Trades/other skills: post-initial	2.2	1.6	1.3
Trades tech/supervisory: post-initial	0.2	0.3	0.3
Para-professional technician: post-initial	0.0	0.0	0.1
Para-professional higher technician	0.1	0.0	0.0
Total	**100.0**	**100.0**	**100.0**

Source: Ball & Robinson (1998)

Table 11: Number of clients in each stream of study by highest school level by postcode region, 1996

Stream of study	Year 7 or below	%	Year 8	%	Year 9	%	Year 10	%	Year 11	%	Year 12	%	Unknown	%	All	%
Entry to employment or further education:																
2100 Basic employment skills	8 379	50.1	3 671	34.6	17 091	28.1	30 267	12.6	12 817	9.6	36 790	9.5	159 500	31.4	268 515	19.8
2200 Educational preparation	2 494	14.9	1 168	11.0	9 017	14.8	19 181	8.0	9 553	7.2	25 327	6.6	32 913	6.5	99 653	7.4
Initial vocational courses:																
3100 Operatives: initial	1 808	10.8	1 609	15.1	13 024	21.4	58 539	24.4	25 188	18.9	63 025	16.3	141 824	27.9	305 017	22.5
3211 Recognised trades: part exempt	290	1.7	328	3.1	2 682	4.4	11 588	4.8	5681	4.3	8 283	2.1	8 896	1.8	37 748	2.8
3212 Recognised trades: complete	260	1.6	497	4.7	4 654	7.7	33 911	14.1	20 607	15.5	41 024	10.6	18 653	3.7	119 606	8.8
3221 Other skills: part exempt	1 076	6.4	1 410	13.3	4006	6.6	18 980	7.9	12 380	9.3	24 671	6.4	34 459	6.8	96 982	7.2
3222 Other skills: complete	1 470	8.8	1 803	17.0	8 063	13.3	35 001	14.6	21 335	16.0	55 283	14.3	47 989	9.4	170 944	12.6
3300 Trade technician/ supervisory	889	5.3	680	6.4	3 913	6.4	25 205	10.5	17 322	13.0	57 530	14.9	23 073	4.5	128 612	9.5
3400 Para-professional technician	121	0.7	129	1.2	431	0.7	4 839	2.0	2 782	2.1	14 638	3.8	9 138	1.8	32 078	2.4
3500 Para-prof. higher technician	929	5.6	391	3.7	2 042	3.4	15 550	6.5	13 490	10.1	85 222	22.1	20 462	4.0	138 086	10.2
3600 Professional	54	0.3	55	0.5	261	0.4	2 381	1.0	1 218	0.9	11 629	3.0	4 362	0.9	19 960	1.5
Post-initial vocational courses:																
4100 Operatives	297	1.8	217	2.0	1 303	2.1	6 148	2.6	2 888	2.2	9 690	2.5	21 222	4.2	41 765	3.1
4200 Trades/other skills	551	3.3	708	6.7	3 074	5.1	14 493	6.0	9 114	6.9	16 647	4.3	30 820	6.1	75 407	5.6
4300 Trade technician/ supervisory	63	0.4	58	0.5	269	0.4	1 922	0.8	967	0.7	2 884	0.7	3 282	0.6	9 445	0.7
4400 Para-prof. technician	23	0.1	49	0.5	205	0.3	1 627	0.7	503	0.4	2 029	0.5	3 759	0.7	8 195	0.6
4500 Para-prof. technician	142	0.8	8	0.1	55	0.1	569	0.2	246	0.2	2 619	0.7	822	0.2	4 461	0.3
Total	**16 709**	**100.0**	**10 625**	**100.0**	**60 730**	**100.0**	**239 836**	**100.0**	**132 985**	**100.0**	**385 770**	**100.0**	**507 924**	**100.0**	**1 354 579**	**100.0**

Source: NCVER (1997b)

More information on the types of courses students are enrolled in according to highest level completed appear in table 11. Appendix A gives a breakdown of types of streams of study that students are involved in according to highest level of schooling attained and postcode region.

Findings from longitudinal studies

Another view of the field of study selections of students who enter VET post-compulsory education is provided by the AYS study. Lamb, Long and Malley (1998) give an overview of the selections made by students according to level of school completed, gender and socio-economic backgrounds and urban/rural location of residence.

Gender comparisons

For males, the most popular courses for students who completed Year 12 were in business administration and secretarial studies, science/computing, and services/hospitality. For females they were business administration/secretarial studies, services/hospitality and arts/humanities. These data are presented in table 12.

Table 12: VET field of study by Year 12 competition

	Male		Female	
	Year 12	Not Year 12	Year 12	Not Year 12
Agriculture and land management	3.5	12.5	0.3	0.0
Building/architecture	7.6	25.0	0.0	0.0
Arts, humanities	8.1	1.8	14.3	15.6
Business administration/secretarial studies	22.2	10.7	37.0	53.3
Education	0.0	1.8	1.0	0.0
Engineering/surveying	16.2	21.4	1.0	1.0
Health	2.0	0.0	12.3	4.4
Law/legal studies	0.5	0.0	0.7	0.0
Science computing	20.7	5.4	7.0	2.2
Animal care/vet. science	0.0	0.0	0.7	2.2
Services/hospitality	13.6	17.9	21.0	13.3
Other	5.6	3.6	4.3	8.9

Source: Lamb, Long & Malley (1998)

According to these figures, courses in business, administration and secretarial studies contain a larger proportion of females who have not completed Year 12 than males. However, this may be due to females being involved in secretarial studies and keyboarding skills rather than in business administration.

Socio-economic background comparisons

Lamb, Long and Malley found that field of study did not seem to be related to socio-economic background for males excepting for those undertaking engineering and surveying. Here, males from clerical and skilled manual backgrounds were more strongly represented than those from managerial and professional backgrounds. Females from unskilled manual backgrounds had a higher representation in business administration/secretarial studies than other groups. Females from higher socio-economic backgrounds were more strongly represented in the arts and humanities than other groups.

Regional comparisons

Males living in urban areas were twice as likely to be involved in engineering and surveying and business administration as those living in rural areas. The situation is reversed for arts/humanities and agriculture/land management. Here, a greater percentage of rural males than urban males were concentrated in agriculture/land management courses.

Module load pass rates and module load completion rates

Information on student educational outcomes from VET courses shows that younger school leavers—15–16 year olds—are slightly less likely to pass or complete modules than those of 17 years and over (Ball & Robinson 1998).

6 The apprenticeship and traineeship pathway

In 1996 the proportion of 15–19 year olds in the population was 9% less than it was in 1990. However, the number of 15–19 year olds commencing a contract of training decreased by 24%. Between 1989 and 1996 the number of apprenticeship commencements for all ages declined steadily. However, the number of traineeships across the period almost tripled. These changes were not even across age groups as the number of mature-age apprentices and trainees (20 years and over) increased. In 1996 the proportion of 15–19 year olds had declined to a level of 55% of all registered commencements of apprentices and trainees. Males accounted for 81% of 15–19 year olds commencing apprenticeships in 1990. In 1996 the proportion of females commencing an apprenticeship or traineeship in this age group rose to 30%.

A breakdown of the age characteristics of apprentices and trainees who commenced their contracts of training in 1996–97 appears in table 13. It shows that over a third of all traineeship commencements were for 24 year olds or over. The largest proportion of apprenticeship commencements is derived from the 17–19 year-old age group. Very few 15 year olds or those younger than 15 commenced an apprenticeship.

There have been significant increases in the number of older persons commencing a contract of training. However, students of 25 years of age or more represent 0.2% of the population in this age group (NCVER 1997a).

Table 13: Percentage of commencements by age for each contract type, 1996-97

	Apprentices	Trainees	All contracts	Total numbers of apprentices and trainees
15 or less	2.0	0.7	1.2	1 113
16	11.9	3.6	6.9	6 270
17	19.1	7.5	12.2	11 100
18	24.4	14.3	18.3	16 655
19	15.5	12.2	13.5	12 328
20	8.5	9.0	8.8	8 027
21	4.7	6.4	5.8	5 237
22	3.1	5.1	4.3	3 910
23	2.2	4.5	3.5	3 229
24 or more	8.6	36.6	25.4	23 149
Total	**100.0**	**100.0**	**100.0**	**91 018**

Source: NCVER (1997a)

According to the 1996–97 annual training statistics on contracts of training (NCVER 1997a), the percentage of trainees with a high school level of Year 12 continued to remain slightly higher than that for apprentices. The gap, however, has contracted since 1994–95. During this period there were 10% more Year 12 completers among trainees than there were apprentices. Three years later the

gap had closed by more than half. In the 1996–97 year there were 4% more Year 12 completers among trainees than there were among apprentices. These details are presented in table 14.

Table 14: Percentage of commencements for each contract type with a high school level of Year 12

	Apprentices	Trainees	All contracts
1994–95	39.5	55.1	43.2
1995–96	38.2	42.6	40.1
1996–97	39.2	43.2	41.5

Source: NCVER (1997a)

Table 15 presents data on level of schooling of apprentices and trainees and examines the extent of their participation.

Table 15: Highest level of school completed by 15–19 year olds in VET

Age	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
15	0.9	2.5	33.9	55.4	6.7	0.7
16	0.3	0.9	10.5	69.3	15.7	3.3
17	0.3	0.7	6.1	39.3	33.3	20.3
18	0.2	0.3	3.2	20.3	17.6	58.3
19	0.3	0.3	2.5	16.0	15.1	65.8
15–19	0.3	0.6	6.3	32.5	19.3	41.0

Source: NCVER (1997b)

The number of apprentices and trainees in training

In June 1997 there were 175 354 apprentices and trainees in training (NCVER 1997a) with apprentices making up the major part (70.1%) of this number. Three years before this, apprentices comprised 90.5% of all apprentices and trainees. However, there has been a dramatic increase in the number of trainees. Where the number of apprentices in training dropped by 1.1%, the number of trainees increased by 61%.

Where apprentices and trainees are employed

By far the greatest proportion of apprentices and trainees are employed by the private sector. The next largest group of employers of apprentices comprises group training schemes or companies. A breakdown of the commencements and re-commencements for the different sectors appears in table 16.

Table 16: Commencements and re-commencements by employer type

Commencements and re-commencements	No. of persons	% of total
Private sector	79 620	79.3
Group training scheme	14 316	14.3
Government business enterprise	212	0.2
Local government	1 485	1.5
State Government	3 943	3.5
Commonwealth Government	1 286	1.3
Not elsewhere classified	10	0.0
Total	**100 422**	**100.0**

Source: NCVER (1997a)

Group training schemes provide the second largest source of employment for apprentices and trainees. Misko (1996) found that the success of group training companies was very heavily dependent on their ability to attract enough host employers to keep their apprentices and trainees in regular work. This, in turn, was dependent on host employers having the work for the apprentices to do.

Changing demands for apprenticeships

Sweet (1998) informs us that the number of apprentices and trainees in training as a percentage of the total number of people employed has generally continued to fall from the 1980s. (There was, however, a substantial increase in the mid-1980s due to government policies on employer incentives.) By June 1995 the number of apprentices and trainees as a percentage of total employment was the lowest it had ever been despite government-based drives for improving the vocational training programs available to young people. Sweet places part of the blame for this on the inability of governments to come up with effective arrangements for training wages, national solutions to problems which have implications for State systems, the minor role played by employers in setting goals for the system, and bureaucratic attempts at training reform. He places the other part of the blame on the labour market itself and the changing nature of employment.

The labour market has shown a decrease in full-time employment and an increase in part-time employment. In addition, the majority of jobs accounted for by the retail, accommodation and hospitality sectors have been part time.

Characteristics of trainees

There have been successful outcomes for students in traineeship programs. In 1995–96 there were 34 000 traineeships under the National Training Wage with about one in five being taken up by the long-term unemployed. According to AYS data and the 1996–97 annual training statistics published by the NCVER (1997a), more young women than young men take up traineeships. Lamb, Long and Malley (1998) also report AYS data to show that girls from unskilled socio-economic backgrounds were three times more likely than girls from managerial and professional backgrounds to obtain a traineeship. These socio-economic differences were not evident for males.

A snapshot of the backgrounds of those taking up and participating in traineeships is provided by Lamb, Long and Malley. This information is reproduced in table 17.

Table 17: The background characteristics of trainees to age 19 (%)

	Sample of trainees	
	Males	Females
All	40.5	59.5
Schooling attained		
Year 12	68.7	78.7
Other	31.3	21.3
Parents' occupation		
Professional/managerial	11.0	5.1
Clerical	21.9	23.7
Skilled manual	39.7	39.8
Unskilled manual	27.4	31.4
School type		
Government	83.1	86.9
Catholic	16.9	12.3
Non-Catholic	0.0	0.8
Mothers' country of birth		
Australian	77.1	73.0
Other English	9.6	15.6
Non-English	13.3	11.5
Rural or urban		
Rural	34.2	39.0
Urban	65.8	61.0

Source: Lamb, Long & Malley (1998)

Wastage rates from apprenticeship and traineeship training

The concept of wastage rates is built on the premise that it is possible to work out the proportion of program completions in terms of program commencements at a particular point in time. The problem with using this concept based on annual national apprenticeship and traineeship statistics is that there may be considerable under-reporting of data by clients for any given year.

For example, apprenticeships or traineeships may have commenced long before the paperwork registering their commencement is lodged with State training authorities. They may also have been completed long before completion papers are signed off and registered. In addition, the situation is further complicated by non-notification of withdrawals, or contract cancellations for any given year.

The number of apprentices and trainees leaving contracts of training through cancellation or withdrawal before completion in 1995–96 was 32 787. This was a substantial increase from the year before when there were only 25 509 cancellations. However, these increases need to be seen in terms of the substantial increases in commencements. Movements in the nature of commencements (including re-commencements) and cancellations (including withdrawals) are presented for apprentices and trainees in table 18.

Table 18: Commencements and cancellations from 1994–1996—apprentices and trainees

	Commencements			Cancellations		
	Apprentices	Trainees	All contracts	Apprentices	Trainees	All contracts
Males						
1994–95	36 065	5 170	41 611	13 815	1 605	15 542
1995–96	31 346	17 201	49 443	14 003	3 483	17 906
1996–97	30 075	27 670	59 192	13 965	7 245	21 777
Females						
1994–95	5 505	8 309	13 837	3 861	3 012	6 883
1995–96	5 120	16 264	21 486	3 831	3 747	7 603
1996–97	5 226	26 359	31 826	3 956	6 964	11 010
Total						
1994–95	41 570	13 479	55 448	17 676	4 617	22 425
1995–96	36 466	33 465	70 929	17 834	7 230	25 509
1996–97	35 301	54 029	91 018	17 921	14 209	32 787

Source: NCVER (1997a)

Changes in commencements and cancellations from year to year are presented in table 19.

Table 19: Percentage of change from year to year for commencements and cancellations

	Commencements			Cancellations		
	Apprentices	Trainees	All contracts	Apprentices	Trainees	All contracts
Males						
1994–95 to 1995–96	–13.1	232.7	18.8	1.4	117.0	15.2
1995–96 to 1996–97	–4.1	60.9	55.3	–0.3	108.0	21.6
Females						
1994–95 to 1995–96	–7.0	95.7	55.3	–0.8	24.4	10.5
1995–96 to 1996–97	2.1	62.1	48.1	3.3	85.9	44.8
Total						
1994–95 to 1995–96	–12.3	148.3	27.9	0.9	56.6	13.8
1995–96 to 1996–97	–3.2	61.4	28.3	0.5	96.5	28.5

Source: NCVER (1997a)

Another indication of the proportion of students who complete a qualification they commenced is derived from longitudinal studies where clients are followed from commencement to completion of programs. Lamb, Long and Malley's (1998) examination of wastage rates of apprentices tracked in the AYS study found that over 75% of their sample had completed their apprenticeship training. The rate of completion was higher among early school leavers than Year 12 completers. It was higher for apprentices in rural areas than those in urban areas. In addition, electrical apprentices followed by metal and automotive apprentices had the highest completion rates. These results differ markedly from the DEETYA figures. One reason for this may be related to the specific characteristics of the AYS sample that would contribute to higher completion rates.

Projections of employment growth areas

Using employment share forecasts obtained using Murphy's MSS model software and August 1997 assumptions, Ball and Robinson (1998) assessed whether or not trainees and apprentices are training in those areas which are projected for employment growth in the economy. The forecasts they derived suggest that relative to other industry sectors there will be a decline in the manufacturing and retail trades, health and community services sector, and government defence and administration. Those sectors forecast for increases in employment are property and business services, construction, accommodation and cafés, restaurants and insurance. They note, however, that about 40% of apprentices and trainees are training within the retail and manufacturing sectors, which if the forecasts hold true are those sectors most likely to be in decline. This means that those sectors projected as most likely to expand are those which have the least numbers of the 15–19 year-old group. Whether the jobs in these sectors are also those that could be done without a Year 12 qualification needs to be examined.

7 The school-to-work pathway

Over the last two decades or so labour markets in OECD countries have not performed well (Gregory 1995, p.5) and both European and Australian economies have experienced declining growth in full-time employment and increasing unemployment. Gregory believes that countries have two directions to follow in trying to reverse these trends. One is to focus on improving the quality of labour force skills; the other is to grow jobs through labour market de-regulation. For countries like the United Kingdom and New Zealand, which have chosen the former route, the results have not been promising. There have continued to be high rates of unemployment, large income inequalities and widening gaps between wages. Countries like Australia have chosen to focus on improving education and training through government subsidies. They, too, have been unable to improve the level of job creation and decrease the level of unemployment. The proportion of workers in full-time employment is now 20% lower than it was in 1970. It is slightly less than this for women. As we have already seen from the data on apparent retention rates in figures 1 and 2, the levels of educational attainment in terms of Year 12 completions have improved over the last two decades.

The teenage labour market and full-time unemployment

There has been a general reduction of full-time work opportunities for those in the 15–19 year-old age group. At the same time there has been an increase in part-time jobs and in participation in education by young people.

Using August 1997 ABS Labour Force statistics, Wooden (1998) shows that only about a third of the teenage labour force is in full-time work with young men being more likely to be out of work than young women. Wooden believes that this may be due to the lower levels of young men staying on to Year 12 and involvement in part-time employment. The data in table 20 update Wooden's work with March 1998 figures. These provide a comprehensive view of what has happened to teenagers in the labour market during the last few months.

Table 20: The composition of the teenage labour market (15–19 year olds) for March 1998

	Employed			Unemployed		NLF		Total
	FTW	Student PTW	Non-student PTW	Student	Non-student	Student	Non-student	
Males								
Number ('000s)	149.1	125.2	30.0	37.6	48.9	262.0	14.6	667.5
% employment	49.0	41.1	9.9					
% labour force	53.9	45.3	10.8	13.6	17.7			
% population	22.3	18.8	4.5	5.6	7.3	39.3	2.2	100.0
Females								
Number ('000s)	76.0	168.2	45.8	43.3	39.6	233.5	27.2	633.7
% employment	26.2	58.0	15.8					
% labour force	29.2	64.5	17.6	16.6	15.2			
% population	12.0	26.5	7.2	6.8	6.2	36.8	4.3	100.0
Total								
Number ('000s)	225.1	293.4	75.9	80.9	88.4	495.6	41.9	1301.2
% employment	37.9	49.4	12.8					
% labour force	41.9	54.6	14.1	15.1	16.4	92.2	7.8	
% population	17.3	22.5	5.8	6.2	6.8	38.1	3.2	100.0

Note: FTW = full-time work; PTW = part-time work; NLF = not in labour force.

Source: ABS (1998b)

Work and further training destinations of students aged 15–19 years according to their level of school attainment

Data from the ABS population estimates of May 1997 can be used to find the destinations of school leavers six months after they have left school. These show that of the students estimated to have left school in 1996, just over half (58.6%) were in further education and training, over 40% (41.4%) were either employed, unemployed or not in the labour force.

A comprehensive view of what happened to students who left school in 1996 according to highest level of schooling attained appears in tables 21 and 22.

Table 21: May 1997 destinations of 1996 school leavers aged 15–19 years, by level of school attainment (number)

	Further education				Not in further education					Total pop.
Attainment	Univ.	TAFE	Other	All	FTW	PTW	Unempl.	NLF	All	
Year 12	69 955	40 501	8 561	119 017	19 754	13 221	10 565	3 409	46 948	165 965
Year 11	*118	6 478	*1 349	7 945	5 762	3 768	7 154	2 468	19 152	27 097
Year 10	*122	15 093	*888	16 102	9 871	6 227	7 553	5 069	28 721	44 823
Other	*219	*3 224	*903	4 345	*2 842	*2 094	*2 658	*1 668	9 262	13 607
Total	**70 414**	**65 296**	**11 701**	**147 409**	**38 229**	**25 310**	**27 930**	**12 614**	**104 083**	**251 492**

Note: FTW = full-time work; PTW = part-time work; NLF = not in labour force.
*Estimate has a relative standard error greater than 0.25, care must be taken in interpreting the data.

Source: ABS (1997e)

Table 22: May 1997 destinations of 1996 school leavers aged 15–19 years, by level of school attainment (%)

	Further education (%)				Not in further education (%)					Total pop.
Attainment	Univ.	TAFE	Other	All	FTW	PTW	Unempl.	NLF	All	
Year 12	42.2	24.4	5.2	71.7	11.9	8.0	6.4	*2.1	28.3	165 965.0
Year 11	*0.4	23.9	*5.0	29.3	21.3	*13.9	26.4	*9.1	70.7	27 097.0
Year 10	*0.3	33.7	2.0	35.9	22.0	13.9	16.9	*11.3	64.1	44 823.0
Other	*1.6	*23.7	*6.6	31.9	*20.9	*15.4	*19.5	*12.3	68.1	13 607.0
Total	**28.0**	**26.0**	**4.7**	**58.6**	**15.2**	**10.1**	**11.1**	**5.0**	**41.4**	**251 492.0**

Note: FTW = full-time work; PTW = part-time work; NLF = not in labour force.
*Denotes standard error greater than 0.25, care must be taken in interpreting the data.

Source: ABS (1997e)

These data show that more non-completers than completers were in full-time work, suggesting that a possible reason for early school leaving may have been to go into a job. In addition, these figures may also be made up of apprentices or trainees who may report as having a full-time job.

It is important to keep in mind that these figures are population estimates and based on the number of respondents in the actual survey. Where numbers in the survey were small, as they are bound to be when looking at Year 10 and Year 11 completers, then the estimates are less meaningful.

This information for 15–24 year olds is reported in appendix B.

Labour force participation

Wooden (1998) reports that over the last two decades full-time labour force participation for young males has fallen from 50% in 1978 to 26.8% in August 1997. For girls the declines have been more significant with a 44% participation rate in 1978 to a 16% participation rate in 1997.

Where the full-time labour force participation rate has decreased over the 20-year period, the part-time participation rate has more than doubled for males (10% in 1978 to 26% in 1997). It has almost tripled for females (13% in 1978 to 37% in 1997). The reasons for these changes are due to the large increases in part-time and casual work.

Increased part-time work

It is a fact that 20 years ago students left school and went to work or left school and went to full-time study. Many did not complete secondary schooling, nor had they any prior experience of what it was like to be in the workforce. Today, they are more likely to be involved in part-time work. In 1971 only 8% of teenage males were in part-time work. In 1997 this had risen to 52%. For females in the age group it had increased from 8% in 1971 to 73.6% in 1997.

Wooden observed that almost all (97.6%) of student workers were in part-time employment. This was not the case for workers who are not in education. These non-student workers have a lower share of both part-time and casual employment. This is especially so for non-student females in the 15–19 year age group. More studies about why these young females do not have a share of the casual, part-time or full-time labour market need to be conducted.

Part-time work is very common among Year 11 and 12 students. About a third of Year 12 students work part time. Usually they work in retail and basic manual occupations and especially in the retail industry. Working students are also more likely to come from those sectors of the community that are already advantaged. In his analysis of 400 students in the AYS survey McRae (1992 cited in DEETYA 1997c and Robinson 1996) found that these students were more likely to be female and come from high-income (excluding the highest income) and middle-income families. They were also more likely to be doing well at school (Robinson 1996).

As we have already noted, this reduction in full-time job opportunities and increase in part-time job opportunities has been accompanied by an expansion in Year 12 retention rates, and increasing enrolments in higher education.

Gregory (1995) believes that these changing patterns are directly attributed to increases in government subsidies to education and higher education. Wooden (1998), however, is of the opinion that falls in labour market opportunities occurred before the expansion of government assistance to school and higher education sectors.

Casual employment

Teenagers are also more likely to be in casual employment than older age groups. For example, during the year ending February 1996 the proportion of 15–19 year olds in casual jobs was more than double that for 20–24 year olds and mature-age adults and almost three times that of 25–54 year olds. These data are reported in table 23.

Table 23: Average duration of unemployment

Year	Teenagers (15–19 yrs)	Young adults (20–24 yrs)	Prime-age adults (25–54 yrs)
1981	25.4	32.4	38.0
1986	29.8	43.4	55.7
1991	25.1	36.8	46.6
1996	27.0	37.1	55.5
1997	25.6	43.4	64.2

Source: Wooden (1998)

Milling and churning

The term 'milling and churning' has been used by American researchers to describe the unstable labour market participation of young adults (Sweet 1998). It shows that the path to full-time employment for most school leavers is not always straightforward. There are those who will leave school because they have found a full-time job or set up a job during their school years (e.g. apprenticeships, traineeships) and thus do not experience any unemployment after they leave school. There are those for whom the post-school years are full of uncertainty. That is, they experience long periods of unemployment with intermittent casual or part-time jobs, and some training through labour market assistance. Some will find permanent jobs but it may take several years.

The number of jobs held by young people tells a story of considerable chopping and changing. Other research (DEETYA 1997c) shows that the median number of

jobs held by young people who left school at Year 10 and did not go on to further training was five jobs in the first seven years. This does not vary according to the year left school for males and varies only slightly for females. Female Year 10 leavers have the greatest difficulty in finding a stable job.

Landt and Scott (1998) compared the current labour force status of 15–19 year olds with what it was six months earlier and found significant movements between work, unemployment, and study. They also found that 30% of all 15–19 year olds changed their main activity at least once during the six-month period. In looking at the May 1996 destinations of 1995 school leavers, Ainley (1998) found that just under a tenth of Year 12 completers not in further education were either unemployed or not in the workforce. Almost four times this amount was noticed for those who did not complete Year 12 and did not go on to further education.

8 School to unemployment

Teenage unemployment

When Wooden (1998) compared the August 1997 teenage labour market with that of other groups, he found that the incidence of unemployment was much higher among 15–19 year olds than among older age groups. For example, the unemployment rate of 15–19 year olds was almost three times that of what he calls 'prime-age adults' (25–54 year olds) and those over 55 years, and almost twice that of 'young adults' (20–24 year olds). (Wooden believes that this unemployment rate would be even higher if the numbers of those who are at school but would rather be in work are accounted for.) However, they were also less likely to spend longer periods of time in unemployment than older groups. Wooden calculated that the duration of unemployment for teenagers was about 27 weeks (see table 23), and for prime-age adults was more than double this time. The average duration for mature-age adults (adults over 55 years) was over three times that for teenagers.

The likelihood of unemployment for teenagers is increased if they are from backgrounds where parents are also unemployed. The increasing incidence of this 'inter-generational disadvantage' is highlighted by Green and Probert (1996, p.19). They report that young people living at home with unemployed parents were more likely to be unemployed than those living at home with employed parents. Unemployment was increased further if young people were at home with a sole parent that was not in the labour force. For those at home with unemployed parents, the unemployment rate was 36%. For those at home with employed parents the unemployment rate was 22%.

Regional comparisons

Where teenagers live also has an impact on unemployment. Teenagers who live in large urban centres outside capital cities and those who live in country towns of 10 000 or more experienced the highest unemployment to population ratios.

A breakdown of unemployment rates between regions appears in table 24.

Table 24: Comparisons of regions of unemployment

Region	FTUE	% of total FTUE	% FTUE rate	% FTUE rate to population	% un-employed 6 months	% un-employed 12 months
Capital city	46 875	51.9	25.9	6.1	30.7	16.2
Balance of State	43 376	48.1	30.9	8.6	34.5	16.1

Note: FTUE = full-time unemployment.

Source: ABS (1996b)

ABS figures show that youth unemployment is highest outside the capital cities. It is more concentrated in regional and provincial centres, the western suburbs of Sydney and Melbourne, and in the northern and southern suburbs of Adelaide. A breakdown of the teenage unemployment figures for the most problematic areas in the country for August 1996 are reported in table 25.

Table 25: Areas of high youth unemployment—August 1996

	Unemployment number	% FTUE rate	% 15–19 FTUE civil population
Inner Melbourne	400	51.5	4.8
Western Adelaide	1300	49.5	10.4
Gippsland	1400	45.0	9.9
Richmond – Tweed	3600	42.5	11.7
Southern Adelaide	2200	41.5	9.9
ACT	1700	41.5	7.5
Barwon Western	3200	40.0	11.1
Wide Bay Burnett	1700	38.6	12.1
Northern Adelaide	2600	38.1	10.6
Illawarra	3200	34.5	10.6
Mornington Peninsular	1000	33.0	8.4
Newcastle	2700	31.7	9.1
Central Highlands	800	31.4	6.2
North West Melbourne	1700	31.2	8.7

Note: FTUE = full-time unemployment.

Source: ABS (1996c)

These figures confirm Green and Probert's (1996) findings that teenage unemployment was regionally based and concentrated in regions with:

- a growing population base in outer metropolitan or regional areas
- relatively stable populations but declining private and public sector investment patterns
- country towns with declining private investment and a breakdown of public infrastructure
- rural areas affected by declining prosperity for the farm sector

English language competence and success in the labour market

Having a working knowledge of the English language has an impact on an individual's success in the labour market. This is amply displayed in table 26. However, we must also look at these figures in the light of students of non-English-speaking background having higher apparent school retention and participation rates. It could be that those of non-English-speaking background who are in the labour market may also be the least able of their group and it is lack of ability rather than their background that is creating the differences (DEETYA 1997c).

Table 26: English language competence and unemployment

Language	% of total FTUE	% FTUE rate	% FTUE rate to population	% un-employed 6 months	% unemployed 12 months
Australia	89.4	27.2	7.5	32.6	16.4
ESB	4.9	32.7	7.1	32.2	9.0
NESB	5.6	43.6	4.4	32.3	19.0

Note: FTUE = full-time unemployment; ESB = English-speaking background; NESB = non-English-speaking background.

Source: DEETYA (1997c)

Involvement in labour market programs

A range of labour market assistance programs is available to unemployed people in Australia. During 1996–97 a total of 349 679 unemployed persons participated in labour market programs. These programs aimed to provide clients with access to further training, work experience and employment. Details of these programs, including type of assistance provided and the numbers of clients involved, are presented in table 27.

Table 27: Labour market programs for 1996–97, type of assistance provided and number of clients served

Labour market programs	Type of assistance	No. of clients assisted
JobStart	Wage subsidy to employers (up to 20 weeks)	92 414
Special Employer Support	Arrange work experience and training for severely disadvantaged and rural and remote clients	11 408
LEAP, JobSkills, New Work Opportunities	Work experience and training	10 674
Training for Employment	Specific job skills to long-term unemployed (includes Advanced English to migrants)	20 003
JobTrain	Formal training to 6 months unemployed or at risk of long-term unemployment	4 831
SkillShare	Community-based labour market programs—teaching of relevant and appropriate skills for jobs or further education	123 133
Job Seeker Preparation and Support	Integrated approach to help overcome barriers—subsumes special intervention programs, job clubs, mobility assistance support	87 216
Total number of clients		**349 679**

Source: DEETYA (1997b)

When we look at the proportion of clients accounted for by the different age groups we find that almost a quarter of the clients for each of the programs are from the 15–20 year-old age group. These details are provided in table 28.

Table 28: Participation in labour market programs by age groups (%)

Labour market programs	15–17 yrs	18–20 yrs	21–44 yrs	45+
JobStart	9.7	18.0	61.9	10.0
Special Employer Support	7.3	15.7	64.7	12.3
LEAP, JobSkills, New Work Opportunities	11.6	15.2	62.0	11.5
Training for Employment	6.0	17.1	65.9	11.0
JobTrain & ATY	7.5	17.2	64.0	11.0
SkillShare	10.8	17.1	54.9	15.4
Job Seeker Preparation and Support	7.0	13.9	62.6	16.6

Note: ATY = Accredited Training for Youth.

Source: DEETYA (1997b)

Labour market assistance programs: Positive program outcomes

A positive program outcome for participants in labour market assistance programs is identified as either unsubsidised employment or further training. These are measured three months after a client's admission to the labour market program. Table 29 lists the positive program outcomes for each of the programs.

Table 29: Labour market assistance programs: Positive program outcomes for different age groups (%)

Labour market programs	15–17 yrs	18–20 yrs	21–44 yrs	45+	Total
JobStart	57.5	62.5	63.1	68.3	63.5
Special Employer Support	N/a	N/a	N/a	N/a	N/a
New Work Opportunities	27.9	24.7	23.0	21.1	22.9
JobSkills	N/a	N/a	N/a	N/a	N/a
LEAP	31.9	34.6	N/a	0.0	33.2
Training for Employment	N/a	N/a	50.2	46.5	48.6
JobTrain & ATY	42.5	42.6	46.5	41.6	44.8
SkillShare	44.9	44.0	42.9	34.4	41.0
Job Seeker Preparation and Support	42.7	43.2	46.2	34.2	43.1

Note: ATY = Accredited Training for Youth.

Source: DEETYA (1997b)

These data show that there are no major age effects with respect to outcomes. Outcomes can also be viewed in terms of special groups. These outcomes are reported in table 30.

Table 30: Labour market assistance programs: Positive outcomes for special groups (%)

Labour market programs	Long-term unemployed	Indigenous people	People with a disability	Sole parents
JobStart	60.0	45.6	59.8	74.8
Special Employer Support	N/a	N/a	N/a	N/a
New Work Opportunities	22.5	21.0	19.1	N/a
JobSkills	35.2	23.0	29.6	47.3
LEAP	24.5	N/a	27.0	N/a
Training for Employment	46.3	N/a	43.0	N/a
JobTrain & ATY	40.2	33.5	40.8	56.4
SkillShare	36.0	31.2	33.0	49.6
Job Seeker Preparation and Support	52.3	47.3	43.2	32.3

Note: ATY = Accredited Training for Youth.

Source: DEETYA (1997b)

If we take the results in tables 29 and 30 we find that there are large numbers of clients for whom the labour market assistance program does not result in any positive outcome. That is, they do not find work, nor do they end up in further training.

This cannot be taken as a true indication of the program's worth. What is required is an in-depth analysis of the characteristics of those participants who do obtain jobs and the processes that helped them to find these jobs. Time should also be devoted to identifying new forms of exciting and useful things that need to be done, and could be done by young people who might otherwise leave the labour force altogether and slip into an economy based on criminal activities.

The Job Network

On May 1 1998 the Commonwealth Employment Service was replaced by the Job Network. This comprised a new national network of more than 300 private community and government organisations. These organisations are to specialise in, and be paid for, finding the right job for unemployed people and especially for the long-term unemployed. Centrelink will be the one-stop-shop where unemployed people will go to register for work, get unemployment benefits or other government assistance. It will also refer unemployed people to Job Network members in their area. Centrelink will also be the primary means of delivering assessment and referral services for young people. It has been set up to integrate the functions of previous youth and student services including the centres for student assistance, youth access, and career reference (from DEETYA) and youth service.

The Job Seeker Screening Instrument

The main factors found by DEETYA to influence significantly a person's ability to find a job were:

- age
- educational attainment
- Aboriginal and Torres Strait Islander status
- birth in a non-English-speaking country
- disability
- English-speaking ability
- geographic location (based on State/Territory of residence and whether residing in a metropolitan location)

These factors have been used to determine those individuals who are in need of specialist assistance in the form of case management. Those at 'high risk' of long-term unemployment because of poor motivation, low self-esteem, poor language, literacy and/or numeracy skills, and substantial time out of the workforce can also qualify for case management.

On May 1 1998 the Job Network subsumed the JobStart, Special Employer Support, Training for Employment, SkillShare, and the Job Seeker Preparation and Support programs. The LEAP, JobSkills, New Work Opportunities and JobTrain programs were wound down in 1996–97. Other DEETYA labour market assistance programs continued as before.

9 The importance of Year 12 completion and family background

Year 12 completion has a strong bearing on the destination choices of young people. It affects whether or not they go on to further education and whether or not they become unemployed. Unemployment is greater for students who leave before they complete Year 12, and is especially high for those leaving school before they complete Year 11. In addition, opting out of the labour force is also more prevalent in these groups. Year 12 completers are six times more likely to remain attached to the labour force than those who leave after or before they have completed Year 10, and almost five times more likely to do so than those who leave school at the end of Year 11. However, there is a strong link between educational achievement and socio-economic background which suggests that children from professional and managerial family backgrounds are almost assured of completing Year 12 while only about a half of those from skilled and manual socio-economic backgrounds are assured of doing so. This close interrelationship between socio-economic background and educational attainment must be carefully kept in mind when we make comments about the success of Year 12 completers in gaining access to further education or training and employment.

Labour market participation benefits

Educational attainment has a strong bearing on success in the labour market and leaving school early has definite problems for young people in the labour market. ABS 1996 data show that unemployment rates are higher for early school leavers than they are for Year 12 completers for the same amount of time out of school. However, these rates decline for both groups the longer they spend in the labour market. It declines more quickly in the second year out of school for Year 12 completers and less so for those who have not completed Year 12 (DEETYA 1997c).

Workings of ABS data show that in May 1996 just over half (54.9%) of teenagers who were unemployed and looking for full-time work had not completed Year 12 and had no post-school qualifications. A further 28.1% had completed Year 12 but had no further qualifications, 8.6% had post-school qualifications. A further 8.4% were males looking for full-time work while still at school (DEETYA 1997c).

These figures showed that a greater proportion of non-completers found themselves in full-time work than completers. A slightly greater proportion of non-completers also found themselves in part-time work than completers. However, non-completers were almost three times as likely to find themselves unemployed as completers and almost six times more likely to find themselves not attached to the labour force.

Further education and training benefits

Ainley (1998) examined the destinations of school leavers calculated in the May after they left school. These data show that in 1991 almost two-thirds (64.6%) of students who had completed Year 12 were in some form of further education. This was contrasted by about a third (31.4%) of students who had not completed Year 12. In 1996 these figures had slightly increased. More than twice as many Year 12 completers (44.2%) were in university as compared to TAFE (21.0%). This means that about 8% more non-completers than completers found themselves in TAFE. An examination of the May 1997 destinations of school leavers presented in table 23 shows that the most likely fate for school completers is to go to university directly after leaving school rather than go to TAFE.

Occupational choice benefits

The benefits of completing Year 12 are not only manifested in the likelihood of higher rates of employment or unemployment but in the types of jobs that young people obtain. Using data from the AYS, Lamb, Polesel and Teese (1995) found that girls who completed Year 12 without any further study were more likely than non-completers to obtain clerical jobs. Early school leavers were more likely to take up apprenticeships.

For males the major difference between completers and non-completers was in the proportion of white-collar jobs obtained. Year 12 completers were more likely to obtain jobs in sales and clerical work. They were also less likely to be in labouring or other manual jobs. Early school leavers here were also more likely to enter an apprenticeship than Year 12 completers.

For males the type and quality of jobs obtained vary according to the year at which they completed school (especially in early post-school years) rather than the incidence of unemployment. However, a large and increasing gap between the girls who left school at Year 10 and those who left school at Year 12 was also observed. This may reflect an increase in competition for jobs in the female-dominated areas of the labour market (DEETYA 1997c).

Obtaining an apprenticeship or traineeship

Completing Year 12 is also important for gaining an apprenticeship or traineeship. This is highlighted in the annual training statistics on apprenticeships and traineeships already discussed (NCVER 1997a).

10 The importance of literacy and numeracy achievement levels and family background

Levels of literacy and numeracy (along with socio-economic family background) in students have been found to have a strong effect on whether or not they complete school, go on to university, enter TAFE, get a job or enter specific occupations (see appendix C). The AYS data show that high achievers in terms of literacy and numeracy do well in education, training and the labour market. Students with low levels of numeracy and literacy are less likely to do so.

Year 12 completion

Using AYS longitudinal data Lamb (1997) examined the relationship between how well students do at school in terms of their literacy and numeracy achievement and what their training or labour market outcomes are at the age of 19. He found that for boys early school achievement had a significant impact on whether or not they completed school. That is, only half (50%) of the low-achieving boys completed high school as compared to almost all (90%) of the high-achieving boys. Lamb concluded that early school leavers tended to lack literacy and numeracy skills.

Although girls completed school in higher numbers than boys, retention rates based on achievement tell a different story. Almost half (43%) of the low numeracy achievers among girls left before they completed Year 12. In contrast, less than 5% of the highest achievers left school before they completed Year 12. Furthermore, girls who lacked reading skills also left school prior to Year 12 at a higher rate (18%) than average readers and at an ever higher rate (30%) than high achievers.

When compared to those of average literacy skill, boys with strong literacy skills were significantly more likely to complete Year 12. However, low literacy skills significantly reduced the likelihood of completing Year 12 for low achievers. Lamb concluded that regardless of socio-economic background, school attended or where students live, poor literacy and numeracy skills in boys increased the likelihood of non-completion of Year 12.

For girls, socio-economic background and non-government schooling was the main predictor. The strongest relationship for school achievement was with achievement in mathematics. Girls who have high achievement in numeracy skills are more likely to complete Year 12. This likelihood is increased by about ten percentage points. Low numeracy skills decrease the likelihood of girls completing Year 12. The relationship with literacy skills, however, is not as strong.

Lamb suggests that this may be due to skill in mathematics being a major influence on forming girls' perceptions about their own abilities to do well or do badly in school and consequently either to continue schooling or to leave school early. It may also be that girls use their ability to do well in maths to be an

indication of their general intelligence and therefore allow this perception to influence their career and educational aspirations and so stay on at school. Conversely, girls who do not have well-developed maths skills may use this as an indicator of their lower levels of intelligence and so decide not to go on with school.

Lamb believes that with completion rates of below 50% for low achievers, the quality of schooling received by students in their early years rather than the broadening of options available to them during post-compulsory years may have a stronger impact on school retention. It is these areas that need to be addressed.

Lamb also noticed that students with low numeracy and literacy skills at the age of 14 continued to demonstrate these as they progressed through school. It is this finding that is of most concern. Lamb believes that this could be because of inadequate support structures in schools for these students. Another explanation is that teacher preoccupation with preventing boredom in school for students may be equated with providing less formal structures for developing and reinforcing basic skills. However, if students come to high school without the grounding in basic skills in primary schools, then they are already targetted for pathways that are likely to lead to non-Year 12 completion or work.

Obtaining entrance to university

The results of Lamb's analysis of AYS data show that students who have low numeracy and literacy skills do not go on to university. Where only one in 50 of low achievers who are male take up a university position, the rate is one in every two for high achievers. For high achievers who are female, the rate is two in every three.

Obtaining entrance to TAFE

Young people with the poorest numeracy and literacy achievement levels measured at age 14 are not likely to take up TAFE training. Lamb, Long and Malley (1998) report that just over a quarter of the male participants in TAFE came from the top quartile of achievement and more than one in five came from the bottom quartile. However, there is a higher percentage of girls from the lowest quartile and a lower percentage from the top quartile. Based on a combination of reading and mathematics scores, they concluded that the growth in TAFE has not been through drawing from the lower quartiles of achievement. This information is presented in table 31.

Table 31: Participation in post-school education and training to age 19 by school achievement (%)

	Lowest quartile of achievement		Second quartile of achievement		Third quartile of achievement		Highest quartile of achievement	
	Male	Female	Male	Female	Male	Female	Male	Female
Apprenticeship	25.5	4.0	28.5	5.7	25.6	3.2	11.3	2.3
Other TAFE	19.8	27.6	16.8	24.6	19.5	20.7	12.2	9.5
Higher education	2.0	8.9	15.5	25.1	30.3	46.9	62.7	75.5
No further education or training (completed Year 12)	24.5	33.7	26.4	31.3	24.3	25.4	13.3	13.3
No further education or training (did not complete Year 12)	28.4	26.1	15.4	17.7	6.8	8.9	4.0	4.4

Source: Lamb, Long & Malley (1998)

Obtaining and maintaining employment

Young people lacking in numeracy and literacy skills also have more problems in finding a job. Because they are also less likely to complete Year 12, they are less likely to be competitive in a labour market that can now draw on increased levels of Year 12 graduates. By failing to gain employment they will not be able to build up levels of work experience and 'remain vulnerable in a labour market that increasingly favours more experienced workers' (Lamb 1997, p.19).

Lamb (1997) also tracked the amount of time students spent in unemployment from the time they left school until they were 19 years of age. He found that the average time spent in unemployment by males with low numeracy and literacy skills was almost twice that of average achievers and double that of high achievers. They were also more likely to be unemployed for 12 months or more.

Lamb's figures also suggest that those who made the smoothest transition into the labour market with no periods of unemployment were those who at age 14 had high average reading and numeracy skills.

Obtaining higher-status jobs

According to Lamb (1997), the greatest differences in the types of jobs people obtained were related to their literacy and numeracy skills. Teenage males who had very strong numeracy skills at age 14 were more likely to obtain jobs in clerical and managerial and professional occupations. Very low achievers did not get any clerical jobs. Those with low skills tended to be working in labouring or related work or in skilled manual jobs.

Males with strong reading skills were also more than three times as likely to gain employment in white-collar jobs as those with below-average skills and over six times as likely to do so as those with below-average reading skills.

A similar trend is evident for girls. Those with the lowest levels of reading skills at age 14 were also more likely to enter labouring and unskilled jobs and less likely to enter clerical and sales and personal service jobs (Lamb 1997).

Obtaining higher wages

Lamb (1997) reports that poor numeracy skills also impact on the earnings of AYS participants in full-time employment at the age of 19. The average weekly earnings of a male who at 14 was a high achiever in numeracy and literacy was $35 more than an average achiever. It was about $40 more than the low achiever, and $50 more than the very low achievers.

Those young people who had very high literacy skills at the age of 14 commanded the highest weekly earnings by the age of 19. Their wages were $53 more than those with average skills and well above those with below-average skills. For females, the gaps are less dramatic but the pattern remains—those with poor literacy and numeracy skills receive less than those with higher literacy skills.

Data from AYS studies to support these claims have been presented in appendix C.

11 Year 12 non-completers

Concern with the plight of early school leavers is based on the fact that they are increasingly more likely to experience disadvantage in gaining access to employment or further training than school leavers who remain to complete Year 12 (McLelland, MacDonald & MacDonald 1998). These disadvantages are exacerbated by a teenage labour market which is shrinking and becoming more competitive, and the enforcement of more stringent criteria for government assistance to young people.

Profiles of Year 12 non-completers

More information on the characteristics of early school leavers is provided by Lamb's (1997) analysis of 1980–81 and 1988–89 AYS data. This showed that socio-economic and parental levels of education tended to be major signals for early school leaving. Early school leavers were likely to have fathers who were born in an English-speaking-background country and working in a skilled or non-skilled manual occupation. Their mothers were also likely not to have post-secondary education. Considerably more males than females came from a two-parent family while females were twice as likely to come from a single-parent family. The overwhelming majority had attended a government school. Lamb's findings cited in Dwyer (1996) are reproduced in table 32.

Table 32: Profiles of Year 12 non-completers (%)

	Females	Males
Father born in an English-speaking family	87.4	82.5
Father working in a skilled or non-skilled manual occupation	76.7	79.1
A two-parent family	68.5	85.0
A single-parent family	31.5	15.0
Government school background	83.1	82.5
Disability	9.0	9.7

Source: Dwyer (1996)

Perhaps one of the reasons we see males from single-parent families figure more prominently than females amongst those children who do not complete Year 12 is the lack of a strong father figure in the family or significant male role model that they can identify with. In addition, mothers of headstrong children who would like to leave school may not be able to exert the type of discipline that they will take note of. If these children are also not finding school rewarding, then they may be more likely to leave school even if their mothers are against them doing so. We must also not disregard the possibility of low income being associated with single-parent families and thus contributing to children's reasons for dropping out of school.

The backgrounds of Year 12 non-completers

Evidence from studies on truancy, school retention, homelessness, recent immigrants, Aboriginal students, family expectations and low income suggests that in comparison with Year 12 completers, there are five risk factors for early school leaving (Dwyer 1996).

These are :

- homelessness or insecure housing
- involvement in early and chronic truanting
- low-income family background
- Aboriginality
- rural location

In addition, early school leavers are also more likely to have attended a government school and completed Year 10.

Studies on a larger scale need to be done of the backgrounds of those who do not complete Year 12 and their reasons for not doing so. It is evident that students who complete Year 12 seem to do better than non-completers in the labour market and in entry to further education. However, it seems that requiring all students to stay on at school, even though they are legally able to leave school, may be shortsighted. For this reason we need to implement transition programs for these students which deal with their aspirations for the next few years and the advantages and disadvantages that attach to early school leaving.

Why students opt out of school

In a study of 132 school leavers, Holden and Dwyer (1992) found that the most common reason for leaving school was dissatisfaction with school either in terms of getting on with teachers, or finding the activities interesting or motivational. In addition, for just over a third (34.1%) of the students in the study early school leaving was associated with early truancy, family troubles, lack of support, or heavy home or job workload. Holden and Dwyer's study also showed that a small group of students (n=19) had run away from home in the past and that another small group (n=48) were from families where one parent had left, died or was not identified. Holden and Dwyer concluded that although it was not possible to identify indicators of early school leaving dissatisfaction, early school leavers tended to be concerned with negative student–teacher relationships and boredom with school activities.

Holden and Dwyer's study provided information on a small number of early school leavers. Another picture of why students leave school is provided by findings of the ABS (1997a) survey of literacy which classified 9302 respondents according to their performance on three types of tests. The first test was used to measure how respondents processed information from simple and complex text. This was called the prose scale. The second test measured how they were able to take information provided on brochures and pamphlets. This was called the document scale. The third test measured their ability to use arithmetic to solve straightforward and more difficult problems. This was called the quantitative scale. In this survey, researchers also asked those people who did not complete the highest level of schooling available the reasons for their non-completion.

The researchers reported that there was a relationship between leaving school early and poor literacy skills. About two-thirds of the respondents who left early

because school was not available or not accessible were at level 1 on the prose scale. Well over half of those who left school because of personal disability or illness were also at level 1 on the prose scale. Just under half of those who left school early for financial reasons were at level 1 on the prose scale. About the same number who left school for family reasons were also at this level. In addition, just over a third of those who left school because they were bored with school, did not like school, or did not do well at school, had level 1 prose skills. Almost a quarter of those who left because they wanted to learn a trade were also at level 1. Information on the most prevalent of the reasons for leaving school is reported in table 33.

Table 33: Reasons for leaving school by skill level (%)

	School not available or accessible	Personal illness or disability	Had to work for financial reasons	Family reasons	Did not like school/did not do well in school/bored
Level 1					
Prose scale	63.5	58.2	48.2	49.0	34.7
Document scale	65.0	60.8	49.9	60.8	38.4
Quantitative scale	57.9	56.2	56.2	48.1	48.7
Level 2					
Prose scale	*17.9	*16.1	29.6	30.3	36.6
Document scale	*16.2	*20.1	31.8	32.2	34.4
Quantitative scale	2.4	*26.8	32.8	31.7	36.1
Level 3					
Prose scale	16.2	20.5	18.3	15.8	24.2
Document scale	11.3	*15.9	14.5	13.7	23.1
Quantitative scale	14.3	*13.8	13.8	14.8	21.2
Level 4–5					
Prose scale	*2.4	*5.2	*3.3	*5.5	*4.5
Document scale	*3.3	*3.4	4.8	*4.3	*3.7
Quantitative scale	–	3.3	6.8	*3.7	*4.7
Total prose	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total document	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total quantitative	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note: *Denotes a standard error of estimate of greater than 0.25, so care should be taken in interpreting the data.

Source: ABS (1997a)

The researchers do not report these findings for each of the age levels, so these findings will be heavily influenced by those in the older-age groups who come from countries where secondary schooling may not have been available or accessible during their schooling years. They would also have been going to school at times when the investment in extra years of schooling was much higher than it is now. A breakdown of these data for 15–19 year olds would help us to find out more reasons for why young people leave school before Year 12.

The ABS researchers (1997a) also found that there was a relationship between people's literacy skills and their parents' educational level. Regardless of their own educational attainment, a greater proportion of those whose mothers had no post-school qualifications also had level 1 and 2 document skills compared to people whose mothers held a qualification. This was also the case for

quantitative skills, prose skills, and father's educational attainment across the three scales. The differences were smaller where the individual's educational attainment level was high.

Aboriginal background

Dwyer (1996) reports that school participation rates for indigenous youth are lower than for all Australian young people. Just over half of indigenous 16 year olds attended school as compared to 80% of the total population of 16 year olds. For 17 year olds the figure was about a third (31%) as compared to 60%. Where almost one in four 15–24 year olds are in post-compulsory education, the figure for indigenous 15–24 year olds is one in ten. Indigenous youth are also more likely to be in receipt of some government support. Groome and Hamilton (1995, cited in Dwyer 1996) found that attendance rates for Aboriginal students are generally lower than those for other students and that these rates increasingly decline in the high school years.

Children from low-income families

Children from low-income families have always been faced with the prospect of having to leave school as soon as legally possible to assist in the earning capacity of the family. More recently, however, inadequate or low family income has meant that children from these families have been unable to participate fully in school activities which require additional fees (camping, excursions, special recreational activities), thus making it more difficult for them to join in activities with their peers. This has the effect of setting them apart and can make continued life at school difficult (Wilson & Wyn 1989).

Why students leave school: A matter of choice

Notwithstanding the circumstances that contribute to the incidence of early school leaving, Dwyer (1996) believes that it remains a matter of choice for many school leavers. That is, they see early leaving as a positive move. They see it as a chance of getting away from an obligation they increasingly find uninteresting or irrelevant to their life. They also experience deteriorating relationships with teachers.

Ainley and Sheret (1992) found almost all (91%) of early school leavers were happy to have left school. This included 58% who had not yet secured a job or further training. The main reasons they gave for leaving school were related to not liking school, achieving their independence and wanting to go to work.

Keeping these findings in mind, Dwyer cautions against efforts or policies aimed at re-engaging these early school leavers in school as a viable solution. Dwyer's findings are reinforced by findings from the DEETYA Youth Training Initiative (YTI) program. This initiative was aimed at young people who had left school and were seeking work. About 80% of people eligible for YTI had not completed compulsory schooling. The main aim of this program was to provide early access to case management to assist young people either to return to school or undertake further education and training and find jobs. Returning people to school was found to be quite difficult as many of these young school leavers were not interested in going back to school. However, the greatest impediments for success in the marketplace for these young people is their lack or low levels of literacy and numeracy skills, and their lack of relevant work experience or training and low levels of motivation.

12 Opting out of the labour force

According to the ABS Labour Force statistics of May 1997 (ABS 1997c), the group of school leavers who were not in training and not in the labour force included 11.3% of school leavers who in 1996 had attended Year 10, a further 9.1% who had attended Year 11, and 2.1% who had attended Year 12. This suggests that attachment to the labour force is much stronger for those who leave school after having completed Year 12.

ABS estimates of the May 1997 destinations of 1996 Year 10 school leavers show that a greater proportion of young men than young women were in this position. However, the situation is reversed for those who completed Year 11 in that year. Here, females were four times as likely not to be in the labour force as males. Males who completed Year 12 and were not in further training and not attached to the labour force were twice as likely as their female peers not to be in the labour force.

McLelland, MacDonald and MacDonald (1998) report data which show that young women aged 18–19 years are most likely not to be in the labour force and not in further education or training. They also report findings from focus group discussions with respondents from a variety of backgrounds held by Probert and MacDonald in 1996 that found that young mothers with low levels of education or labour force experience had no plans to enter the labour force. That young women caring for children were also less likely to be in the labour force was also discovered by Bell, Rimmer and Rimmer (1992) in their analysis of AYS data. Information from the May 1997 destinations already discussed also show that young women leaving Year 11 are more highly represented in the *not in the labour force* statistics than other school leavers.

Some school leavers who do not even figure in labour force statistics may be in correctional or other type of welfare institutions. McLelland, MacDonald and MacDonald (1998) also report that in 1995 there were 2584 young people between the ages of 15–19 who on census night identified themselves as guests, inmates or other residents of welfare, corrective services institutions or hostels for the disabled, and homeless refuges. Young males had a higher representation than young females in all institutions, with many more of them in child-care institutions, prisons and children's corrective services institutions. In addition, a greater proportion of 15–17 year-old males than 18–19 year-old males were in hostels for the homeless or refuges. However, the researchers found the reverse situation for young males in corrective institutions. Because guests are also included in these figures, it may be difficult to tease out the exact proportions of inmates or residents.

Data from the Australian Bureau of Statistics and the Australian Bureau of Criminology reported by McLelland, MacDonald and MacDonald showed that in 1995 there were 1724 young people aged 15–19 years who were in corrective institutions. Those aged 18 years or over made up the bulk of this number. In 1996 young people of Aboriginal and Torres Strait Islander (ATSI) descent were

over-represented in juvenile corrective institutions with ATSI 15–16 year olds being 26.7% more likely to be in these institutions than their non-indigenous peers. Although the figures for 17 year olds are much lower than for 15–16 year olds, they show that ATSI 17 year olds are still 13.9% more likely to find themselves in a juvenile corrective institution than their non-ATSI peers.

Creating a new pathway

A picture is emerging of a group of young people for whom mainstream education and training solutions are increasingly irrelevant, and for whom work has become difficult to attain. It seems that we have two options in dealing with these young people who are not taking up training and for whom there are no jobs. One is to do nothing and the other is come up with new ways of engaging them in meaningful and socially productive work. This is an issue that deserves more attention.

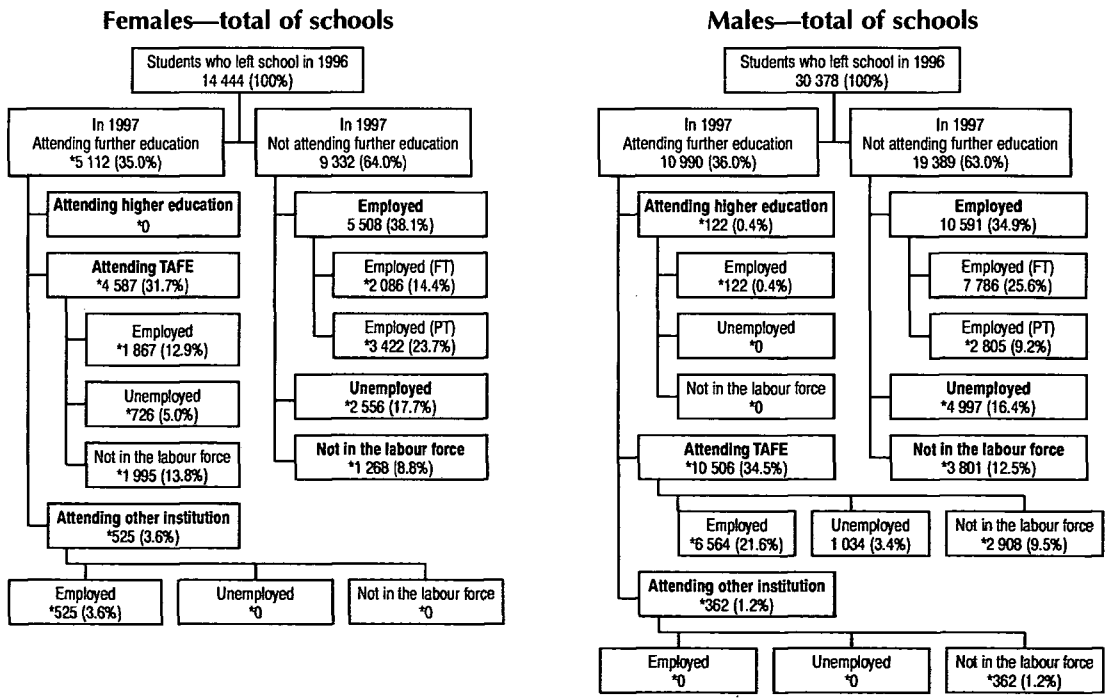
13 Mapping the pathways

Mapping the major pathways which exist for students when they leave school may help to give a pictorial representation of the numbers and proportions of students on the different pathways. However, the accuracy of these maps depends on the nature of the data that are used to create them.

The characteristics of students will determine, in large part, the paths they will follow in their transition to work. Labour force statistics gathered by the Australian Bureau of Statistics can, in part, inform the mapping of pathways. One limitation to using these data is that they are based on population estimates and therefore can be vulnerable to large sampling error rates if numbers in samples used are small for certain groups. AYS statistics can also be used to build up a picture of the movement of students from school to work. However, one cannot successfully build up maps which take data from each of the surveys. For this reason the maps based on the different surveys will be kept separate.

The following maps have been based on data collected by the Australian Bureau of Statistics *Transition from education to work* (1997b) surveys. Figure 5 presents a map of the labour market and further training destinations of all May 1997 school leavers in the 15–19 year-old age group who last attended Year 10 in 1996.

Figure 5: May 1997 labour market and further training destinations of 1996 school leavers 15–19 years old, last attending Year 10

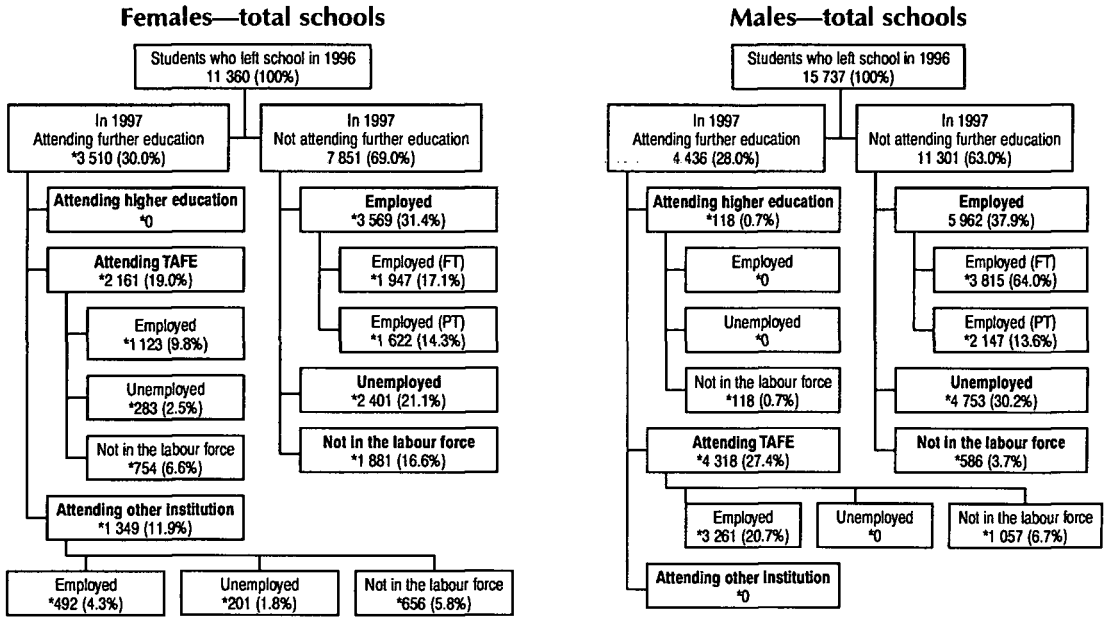


Note: *Denotes relative standard error of greater than 0.25, care must be taken in interpreting the data. FT = full time; PT = part time.

Source: ABS (1997e)

Figure 6 presents a map of the May 1997 labour market and further training destinations of school leavers who completed Year 11 in 1996.

Figure 6: May 1997 labour market and further training destinations of 1996 school leavers 15–19 years old, last attending Year 11

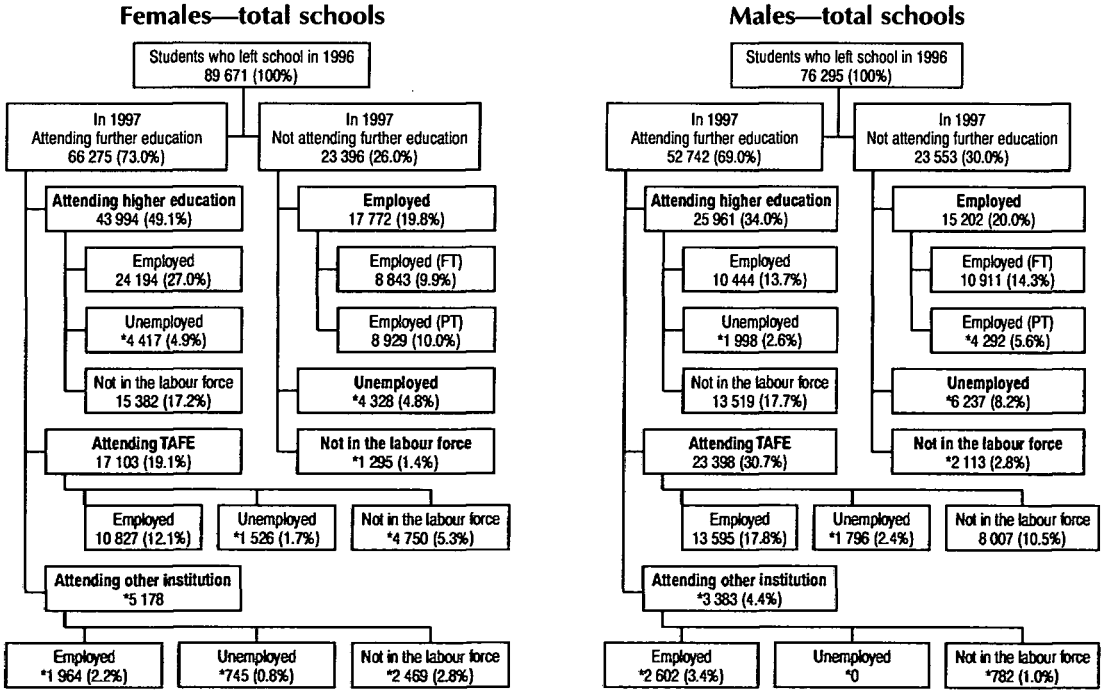


Note: *Denotes relative standard error of over 0.25, care must be taken in interpreting the data.
FT = full time; PT = part time.

Source: ABS (1997e)

A map of the May 1997 labour market and further training destinations of school leavers who completed Year 12 in 1996 is presented in figure 7.

Figure 7: May 1997 labour market and further training destinations of 1996 school leavers 15–19 years old, last attending Year 12



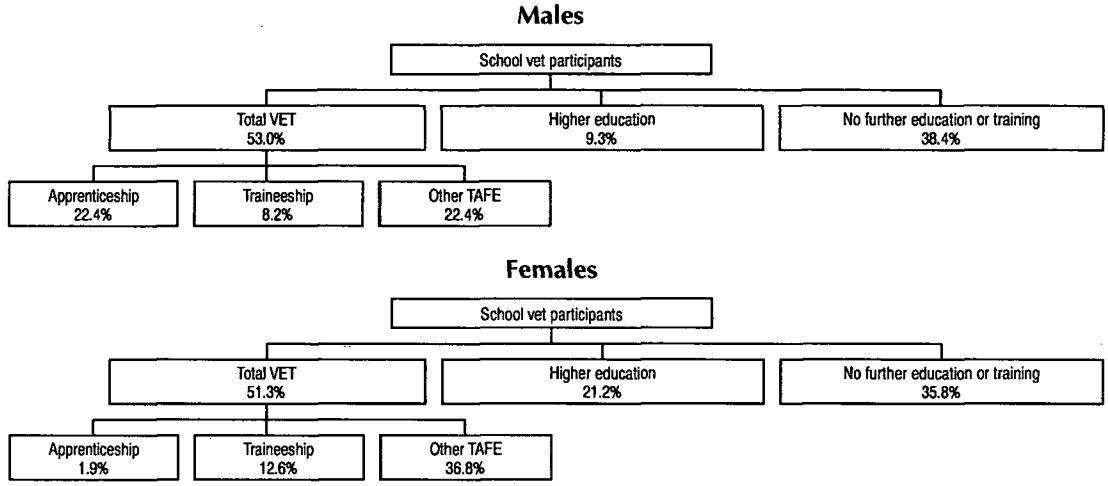
Note: *Denotes relative standard error of over 0.25, care must be taken in interpreting the data.
FT = full time; PT = part time.

Source: ABS (1997e)

Mapping labour market and further training destination school leavers using AYS data

Figure 8 maps further training and education destinations of students according to whether they have or have not participated in vet-in-schools programs. It is based on figures provided by Lamb, Long and Malley (1998).

Figure 8: Labour market and further training destinations of participants in vet programs



Note: The lower case 'vet' is used to describe school-based vocational programs so that they are distinct from post-school programs, which are described by the upper case 'VET'.

14 Summary, discussion and conclusions

The concept of pathways has provided a useful mechanism for examining what happens to students when they leave school. However, it must be acknowledged that it would be a mammoth task to describe the multiple routes individuals or groups of individuals take as they journey through life after school is over. Furthermore, it is evident that the success or otherwise of students to access further training has been shown to be more a function of their social and economic backgrounds and individual abilities than the nature of the pathways themselves. This report has reported on five major transition pathways which Australian young people take when they reach compulsory age.

The pathways that have been presented are the:

- compulsory to post-compulsory school pathway
- school-to-university/higher-education pathway
- school-to-VET pathway
- apprenticeship/traineeship pathway
- school-to-work pathway

There are also pathways taken by young people, particularly early school leavers, that do not involve further training and have the unintended consequences of leading to prolonged bouts of unemployment or to withdrawal from the labour force altogether. These are the young people who fall off the 'back' so to speak. In this section we give a brief overview of the major findings, provide comment and suggest options for the improvement of transition pathways.

Declining apparent retention rates for Year 12

When students reach compulsory age they are able to leave school. Students generally reach the legal age in Year 10. Apparent retentions to Year 10 are very high with well over 90% of students staying on until this time. Apparent retention rates for Year 11 are about 10% lower than for Year 10. Apparent retention rates for Year 12 are about 10% lower than those for Year 11.

Since the mid-1970s females have stayed on until Year 12 at a greater rate than males. Private school students have higher apparent retention rates for Year 12 than public school students. Those from managerial and professional family backgrounds have higher retention rates than those from unskilled or manual family backgrounds. Girls from urban areas stay on until Year 12 at a greater rate than those from the country.

Reasons for the decline in apparent retention rates to Year 12 are unclear. It could be that the Year 12 qualification is losing its value in the eyes of students and employers, or that students are increasingly finding school irrelevant to their daily lives. Apparent retention rates to Year 12 may be declining because of students' perceptions about the decreasing probability of their getting a job

regardless of research data showing increased rates of return. That is, students may believe that completing Year 12 will not guarantee a job, or a better job. Furthermore, the continued publicity of high youth unemployment rates in the media may also reinforce this view.

The added work and stress associated with completing Year 12 and getting a high university entrance score may also dominate the thinking of all students and their parents whether they are university bound or not. Getting a high or respectable score for many students requires them to be prepared to spend substantial amounts of time studying, preparing assignments and foregoing some social or recreational activities. Some students are prepared to do this; others are not. Those students who are not prepared to put in the time may opt to leave before they complete Year 12, even though the prospects of their getting a job are reduced.

Students of higher ability, in terms of their performance on numeracy and reading achievement tests at the age of 14, are also more likely to complete Year 12 than those of low ability. This has been shown by the AYS study. Non-completers may be leaving because they lack adequate skills to do well in the senior secondary years. That is, they are not able to read, write, and compute to the required level and so find the whole school experience increasingly more difficult. If this is the case, then questions should be asked about why students have been allowed to progress through school without the grounding in basic skills that is required.

Another reason students may opt to leave school early may have to do with their lack of study skills. Not all students are aware that putting in the time to learn or become acquainted with specific material which is relevant to the completion of assessments may help them to recall the information when it is required. Not all students are aware that the preparation of assignments requires time and effort.

Dwyer's (1996) report on early school leavers (generally those who leave after they have completed Year 10) suggests that the risk factors for early school leaving are homelessness or insecure housing, a history of early and chronic truanting, low-income family background, Aboriginality and rural location. Before these risk factors can be accepted as applying to all students who leave school before they complete Year 12, larger studies should be completed. One way to do this is to have an exit survey of young people at the end of each year of school and find out from students what their plans are for the following year.

Should all students stay on past the legal age?

At one time it was considered normal for students to leave school at 15 years of age or at the legal minimum. Today, staying on at school until 17 and 18 years of age (ages normally associated with Year 12) has become the norm for the great majority of students. If staying on at school is proving to be less rather than more meaningful to people's lives, then this is something that should be explored. More research needs to be done to find out whether or not students would rather be out of school at these ages.

The vet-in-schools experience

The vet-in-schools experience applies to students who participate in school–industry programs which are formally accredited and require students to spend structured time in the workplace that is assessed and recognised as part of

their formal studies. So far, however, just over 10% of students participate in these programs with boys being more likely to be involved than girls and those from unskilled and skilled family backgrounds being more likely to be involved than those from professional/managerial or clerical family backgrounds. Even though numbers are increasing year by year, and programs are being offered in the majority of schools, these programs are being accessed by a small group of students. One reason for the low uptake of programs may be related to the lack of information provided to parents about the programs at the school level. Another reason may be that students may not be fully aware of the entrée to work that such programs may be able to bring. Having past participants of programs who have been successful in obtaining some forms of work share their experiences through discussion with other students may be one way to increase promotion of these programs. However, the success of these programs is once again dependent on the ability of employers to provide work for students to do while they are in the workplace.

The AYS findings show that although students who did vet in schools were more likely to go into VET courses, and much more likely to be in apprenticeships and traineeships than those who did not, they were also more likely not to continue in any further education or training. There are no indications of whether their employment prospects were any better. There is evidence that for some students, participating in vet-in-schools programs gives them an entrée into future work. However, more destination studies of these vet-in-schools program participants are needed before we can determine whether or not this pathway will help students make the transition from school to further training or work more easily.

The school-to-university/higher-education pathway

Well over a third of the students who completed Year 12 in 1996 were in university in May 1997 with many of them also being engaged in a part-time job. The proportion of students involved in full-time study has increased in the last few years. The studies we have reviewed suggest that students from skilled manual and unskilled family backgrounds are less likely to gain entrance to university than are those from professional and managerial family backgrounds.

The school-to-VET pathway

Almost a quarter of the students who completed Year 12 or Year 11 in 1996, and over a third of those who completed Year 10 in 1996, went on to TAFE in 1997. The most frequently enrolled in courses for males were engineering/surveying and for females they were business administration, and hospitality and transportation. Evidence from annual training statistics shows that teenage participation in TAFE is at about the 20% mark. However, the participation rate of those in the 15–16 year age group stands at just over 10%.

AYS figures show the rate for TAFE participation for students from clerical and skilled family backgrounds has increased while the participation of those from managerial and professional backgrounds has decreased. What we need to know is whether these students come from the lower quartiles of ability and achievement before we can decide that those from lower socio-economic backgrounds are more likely to go on to TAFE. Although the AYS data show this to some extent, studies based on larger and more representative samples are required before we can make this conclusion.

The apprenticeship/traineeship pathway

The numbers of students entering apprenticeships in all age groups since 1989 have declined. The number of traineeships during that time has almost tripled. However, the greatest proportion of these commencements comprise trainees from older age groups. Although trainees were more likely to have completed Year 12 than apprentices in the 1994–95 period, the gap has contracted substantially with trainee Year 12 completers being just slightly ahead of apprentice Year 12 completers. AYS figures show that trainees are more likely to come from skilled and unskilled manual family backgrounds. They are less likely to come from managerial or professional family backgrounds. They are also less likely to come from rural areas.

The private sector still continues to carry the burden for the training of apprentices and trainees in 1996–97 with almost three-quarters of apprentices and trainees working for private companies. Group training companies make up the next largest group of employers of apprentices. There are minimal numbers of apprentices and trainees working for the government sector. If one route to employment is to be in an apprenticeship or traineeship, then these opportunities need to be expanded. However, if the private sector is already carrying the major burden for the hiring of apprentices and trainees, there may be few extra training or employment places that it can provide in a time when companies are looking to shed rather than increase the number of workers. An investigation of the best way to increase apprenticeship and traineeship places will need to be conducted. A survey of the capacity of private companies is required to examine what capacity they have for increasing apprenticeship and traineeship places.

Wastage rates from apprenticeships and traineeships

The concept of wastage rates is built on the premise that one is able to work out the proportion of program completions in terms of program commencements at a particular point in time. One problem with this is that there is under-reporting of commencements and cancellations. This means that actual commencements may not always coincide with the registering of commencements, and cancellations may not always be reported. Keeping this in mind, recent calculations of apprenticeship commencements to completion ratios (based on a four-year time lag between commencements and completions) show that wastage rates in traditional apprenticeships have increased considerably. Why apprentices do not complete their training is not clear. One reason may be that students make a hasty decision to enter an apprenticeship when they leave school because this guarantees them a job, then find out that it is not for them once they experience the job for a while. Another reason may have to do with the realisation that apprenticeships provide low levels of pay. However, we need more studies of why students leave apprenticeships before we can provide any considered answer to the question.

The school-to-work pathway

Just over a quarter of those students who completed Year 12 in 1996 did not go on to further education. The great majority were either in full-time or part-time work. About 10% were unemployed and a minority were not looking for work. Almost three-quarters of those who completed Year 11 were not in further

education. Of these, just over a third were in full-time or part-time work, over a quarter were unemployed with about 10% not looking for work. Just over two-thirds of Year 10 completers were not in further education. Of these, over a third were in full-time or part-time work, almost a fifth were unemployed and over 10% were not looking for work.

ABS figures also show that students have a larger share of part-time work and casual work than those workers not in education. This is especially so for non-student workers in the 15–19 year age group. Part-time work is very common among Year 11 and 12 students with a third of Year 12 students working part time. AYS figures show that these are more likely to be females from high-income families who are doing well at school. It may be that students from certain sections of society are also more likely to look for part-time jobs for increased pocket money. It may also be that they have the skills to impress employers at the interview stage. More information as to why it is that employers are choosing certain types of groups above others needs to collected. If employers are choosing certain groups because of their public relations skills, then programs should be implemented to impress upon young people in general the importance of using these skills when looking for a job.

ABS figures also show that the likelihood of being unemployed increases if students leave school before Year 12 completion. However, Year 12 completion is also mediated by socio-economic background factors. More studies will need to be done to find out whether those students who are unemployed are also those students who have less well-developed basic skills. AYS figures show that those from the lower quartiles of achievement are more likely to be unemployed and more likely to spend longer amounts of time being unemployed. If this is true for the total population, then we need to know why it is that substantial numbers of young people do not have these skills after spending the majority of their lives in school.

15 Improving the transition from school to work

Coming up with more innovative measures to help young people make the transition to work will not mask the reality of decreased opportunities in the labour market and increased employer preferences for more experienced workers. Nor will it mask the reality that many of the jobs that are available for young people are routine, mundane types of jobs that do not require a Year 12 qualification to perform but seem to require such a credential to obtain.

It is also quite clear that there is a group of young people who are 'voting with their feet'. They leave school and are unable to find any substantial employment because of the collapse of full-time opportunities for young people, and do not avail themselves (either because of lack of skill, or desire) of mainstream training opportunities. We can also not escape from the fact that there is a change in the relative numbers of people for whom full-time employment is not the norm.

In this context the options are stark. One choice is to accept this and not do anything about it and leave these young people to drift and eventually fall into criminal activities or create other social problems. The other is to generate new ways of engaging them productively in society by doing paid work which needs to be done.

In the past some government programs have implemented such schemes on a small scale. What is required now is an attempt to do this on a bigger scale and build on all the strategies that have been successful in the past so that new forms of engaging young people in work becomes the norm.

Part-time school-based apprenticeships and traineeships

Widening the areas in which young persons can do an apprenticeship or traineeship may be one method of helping students make the transition to work. Providing employers with incentives to take on part-time school-based apprentices and trainees may be the way to fund such a program. However, the provision of incentives to employers may not on its own necessarily increase the uptake of part-time apprentices and trainees. Employers must also be able to provide appropriate work and enough work for the apprentice or trainee to do, otherwise they are not in a position to take on apprentices or trainees of any sort. Keeping in mind that the private sector already carries much of the burden for apprenticeship and traineeship training, it may not be able to deal with the increase in demand.

Increasing the role of group training companies

Another measure for increasing employment opportunities for young people might be to increase the number of apprentices or trainees employed by group training companies. This measure is also dependent on the ability of group training companies to recruit enough host employers to hire apprentices or

trainees from the group training company on a regular basis. When continued work for group training company apprentices is not available, they too find themselves faced with the prospect of being stood down or having their contracts terminated. More research needs to be done to find out the extent to which group training companies are able to keep all their apprentices in regular work. Whether or not apprentices are able to secure employment once they have completed their contracts of training would also be another area to be investigated.

Increasing the responsibility for training by government agencies or contractors

At one time government departments were responsible for the training of large numbers of apprentices. With the restructuring of departments, the outsourcing of functions, and the privatisation of work formerly done by government agencies, this training and employment of apprentices has overwhelmingly decreased. When governments increase expenditure on public works and hospitals, this could be a major way of providing jobs for young people and adults alike. Alternatively, contracts for outsourcing could include conditions making it a requirement for all contractors to take on apprentices and trainees. Although this could be an attractive proposition for policy-makers, the reality of the situation is that contracts go out for tender and governments must accept the most competitive bids. If bids have also to include within their budgets a cost for the training of apprentices, it could result in an over-estimation of the costs of certain projects and result in the government subsidising contractors for the training. As the whole purpose of outsourcing is to cut down on government costs, this may not be a very attractive option for government agencies. Training levies have been implemented by the building and construction industry. The extent to which these have been successful in increasing the update of apprentices and trainees needs to be further researched.

Job transition and further training transition programs for school leavers

A job and further training transition program could be set up for students who want to go on to work or further education and training. This program, however, should not be run in the school and should be run in much the same way that industry training seminars and workshops are run. One reason that such a program should not be run in the school is to allow students to have a fresh start and not be tainted by their past reputations. Another reason is that it signals to school leavers that they are entering a new stage in their lives.

Programs for students who want to get a job could be devoted to helping students come to terms with:

- what they want in life
- how to go about finding a job
- how to prepare a résumé that will win them an interview
- how to dress appropriately for the interview
- what to say and what not to say in an interview
- how to get on with bosses and other workers if they secure a job

The people who run these programs should have had extensive experience in either getting jobs (and being successful in these jobs) or have been responsible in recruiting and interviewing applicants for employment. For example, personnel officers with current experience in recruiting would have the requisite skills for providing such advice to young people. In addition, school leavers should also be prepared for the likelihood that they may spend some time in unemployment before finding a job. Skills for dealing with these times should also be provided in these programs.

For students who want to go on to further training, the transition program can help them by discussing career or work aspirations, matching these to the training that is appropriate, and providing advice on study skills and time management and organisational skills. Advice would also be given on the preparation of assignments, the amount of time they should expect to devote to their studies, studying for exams and working with other students. Teachers from universities and VET providers would be involved in providing this training.

16 Suggestions for further research and analysis

The Dusseldorp Skills Forum plans to come out with an annual publication which tracks the experiences of young people in the workplace and in school and further education. The information provided by researchers in this publication should continue to provide relevant and valuable analysis of labour force information, census data, VET training statistics, higher education statistics and data on income. Specially prepared tables by the Australian Bureau of Statistics can provide a cross-sectional picture of the labour market and training movements of young people, especially those from rural and remote regions. The benchmarking reports produced for the Australian National Training Authority can also provide relevant data and analysis for the VET sector.

The reports produced by the Australian Council for Educational Research which analyse findings from the AYS can continue to be very effective in providing information on what happens to students over time. Because of the attrition of certain groups within the study, it may not give us a comprehensive or accurate picture of what is really going on. However, some of the findings can provide direction for further research.

Further studies

1 The need to provide effective transition to work or further education pathways for school leavers is increasingly being experienced in advanced economies where increased technology has eroded the need for many of the jobs formerly performed by young people. Because increasing numbers of school leavers (particularly those with poor learning skills and from socio-economically disadvantaged backgrounds) will be unable to avail themselves of mainstream training, it is important to investigate the ways of engaging these school leavers in meaningful and productive work.

2 Following on from this, there is a need to survey successful 'bright ideas' for improving the transition to work or further education or training. This requires a systematic and thorough investigation of how other advanced societies have dealt with the problem.

3 The reasons given for why students choose not to complete Year 12 have been based on samples of small numbers of young people. Research which collects information from larger groups of students and parents from both city, regional and remote and rural areas and areas of high unemployment will help to improve our understanding of the personal and educational reasons for why students do not complete Year 12.

4 The risk factors associated with early school leaving include low-income and single-parent family background for boys and two-parent family background for girls. A more in-depth study of the relationship these factors have with early school leaving is required.

5 Group training companies are also taking up a larger part of the training function for young people. An examination of the success and difficulties they experience in recruiting adequate numbers of willing host employers is also required.

6 The vet-in-schools pathway has provided an entrée into the workplace for students participating in school–industry programs. The programs have also been widely enjoyed by participants. However, there are substantial numbers of parents who are still unaware of the existence of these programs. If these programs provide useful networks for further education or work, then such programs should also be set up for those students who are also on the school-to-university pathway. A study which looks at the feasibility of structured school–industry programs for these students is also required.

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18 Appendices

Appendix A

Table A1: Number of clients in each stream of study by highest school level by postcode region, by female, Australia 1996

Highest school level	Year 7 or lower	%	Year 8	%	Year 9	%	Year 10	%	Year 11	%	Year 12	%	Not known	%	Total	%
Postcode region																
01 Within State –capital city	6 240	72.7	2 351	57.2	12 590	47.9	50 270	49.4	29 838	56.7	123 719	68.0	147 268	57.8	372 276	59.1
02 Within State –other metro	343	4.0	169	4.1	2 751	10.5	10 002	9.8	3 224	6.1	11 711	6.4	14 794	5.8	42 994	6.8
03 Within State –rural	1 478	17.2	1 165	28.4	9 410	35.8	34 941	34.4	16 105	30.6	37 357	20.5	74 523	29.2	174 979	27.8
04 Within State –remote	400	4.7	339	8.3	973	3.7	4 127	4.1	1 998	3.8	4 536	2.5	8 127	3.2	20 500	3.3
05 Interstate –capital city	39	0.5	10	0.2	117	0.4	499	0.5	264	0.5	1 294	0.7	1 189	0.5	3 412	0.5
06 Interstate –other metro	8	0.1	6	0.1	62	0.2	332	0.3	97	0.2	309	0.2	378	0.1	1 192	0.2
07 Interstate –rural	47	0.5	40	1.0	283	1.1	1 084	1.1	608	1.2	1 596	0.9	3 816	1.5	7 474	1.2
08 Interstate –remote	6	0.1	17	0.4	39	0.1	162	0.2	117	0.2	216	0.1	418	0.2	975	0.2
09 Outside Aust.	7	0.1	1	0.0	3	0.0	55	0.1	216	0.4	704	0.4	497	0.2	1 483	0.2
10 Unknown	10	0.1	10	0.2	55	0.2	211	0.2	123	0.2	491	0.3	3 804	1.5	4 704	0.7
Total	**8 578**	**100.0**	**4 108**	**100.0**	**26 283**	**100.0**	**101 683**	**100.0**	**52 590**	**100.0**	**181 933**	**100.0**	**254 814**	**100.0**	**629 989**	**100.0**

Source: NCVER (1997b)

Table A2: Number of clients in each stream of study by highest school level by postcode region, by male, Australia 1996

Highest school level	Year 7 or lower	%	Year 8	%	Year 9	%	Year 10	%	Year 11	%	Year 12	%	Not known	%	Total	%
Postcode region																
01 Within State																
–capital city	5 011	61.7	3 264	50.1	15 820	45.9	68 592	49.7	46 992	58.5	140 948	69.2	122 483	54.3	403 110	57.8
02 Within State																
–other metro	335	4.1	241	3.7	3 026	8.8	13 632	9.9	4 919	6.1	12 717	6.2	12 706	5.6	47 576	6.8
03 Within State																
–rural	2 063	25.4	2 320	35.6	13 366	38.8	45158	32.7	23 376	29.1	38 954	19.1	68 406	30.3	193 643	27.8
04 Within State																
–remote	477	5.9	449	6.9	1 262	3.7	5 310	3.8	2 583	3.2	4 612	2.3	10 579	4.7	25 272	3.6
05 Interstate																
–capital city	55	0.7	40	0.6	233	0.7	1 580	1.1	739	0.9	2 456	1.2	2 334	1.0	7 437	1.1
06 Interstate																
–other metro	20	0.2	16	0.2	61	0.2	418	0.3	118	0.1	337	0.2	444	0.2	1 414	0.2
07 Interstate																
–rural	108	1.3	119	1.8	481	1.4	2 326	1.7	948	1.2	1 961	1.0	3 772	1.7	9 715	1.4
08 Interstate																
–remote	18	0.2	34	0.5	95	0.3	356	0.3	186	0.2	302	0.1	456	0.2	1 447	0.2
09 Outside Aust.	10	0.1	5	0.1	7	0.0	419	0.3	360	0.4	955	0.5	1 064	0.5	2 820	0.4
10 Unknown	31	0.4	24	0.4	81	0.2	308	0.2	155	0.2	531	0.3	3 457	1.5	4 587	0.7
Total	**8 128**	**100.0**	**6 512**	**100.0**	**34 432**	**100.0**	**138 099**	**100.0**	**80 376**	**100.0**	**203 773**	**100.0**	**225 701**	**100.0**	**697 021**	**100.0**

Source: NCVER (1997b)

Appendix B

Table B1: May 1997 further education and labour market destinations of 1996 school leavers aged 15–24 years, by level of school attainment (Numbers in '000s)

	Further education ('000)				Not in further education ('000)					Total population
Attainment	Univ.	TAFE	Other	All	FTW	PTW	Unemployed	NLF	All	
Year 12	70.9	40.5	9.1	120.5	19.8	13.6	11.7	3.4	48.5	169.0
Year 11	0.1	6.5	1.3	7.9	5.8	4.2	7.2	2.5	19.7	27.6
Year 10	0.1	15.3	0.9	16.3	10.0	6.2	7.6	5.5	29.3	45.6
Other	0.5	3.2	0.9	4.6	2.8	2.5	2.7	1.7	9.7	14.3
Total	**71.6**	**65.5**	**12.2**	**149.3**	**38.4**	**26.5**	**29.2**	**13.1**	**107.2**	**256.5**

Note: FTW = full-time work; PTW = part-time work; NLF = not in labour force.

Source: NCVER (1997b)

Table B2: May 1997 destinations of 1996 school leavers aged 15–24 years by level of school attainment (%)

	Further education (%)				Not in further education (%)					Total population
Attainment	Univ.	TAFE	Other	All	FTW	PTW	Unemployed	NLF	All	('000)
Year 12	42.0	24.0	5.4	71.3	11.7	8.0	6.9	2.0	28.7	169.0
Year 11	0.4	23.6	4.7	28.6	21.0	15.2	26.1	9.1	71.4	27.6
Year 10	0.2	33.6	2.0	35.7	21.9	13.6	16.7	12.1	64.3	45.6
Other	3.5	22.4	6.3	32.2	19.6	17.5	18.9	11.9	67.8	14.3
Total	**27.9**	**25.5**	**4.8**	**58.2**	**15.0**	**10.3**	**11.4**	**5.1**	**41.8**	**256.5**

Note: FTW = full-time work; PTW = part-time work; NLF = not in labour force.

Source: ABS (1997b)

Appendix C

The following table contains information provided by Stephen Lamb from ACER. This table provides a breakdown of the numbers of AYS participants who completed Year 12, according to their literacy and numeracy achievement at 14 years of age. These data also relate to participants who were first interviewed at 16 years of age in 1991 and 1992. It reports on their labour market and further training at the age of 19.

Table C1: The Year 12 completion and labour market outcomes of AYS 19 year olds according to their levels of literacy and numeracy measured at 14 years of age

	Literacy achievement					Numeracy achievement				
	Very low	Low	Av.	High	V.high	Very low	Low	Av.	High	V.high
Outcomes at 19 yrs	*% of students achieving outcomes*					*% of students achieving outcomes*				
Males										
Year 12 completion	48	68	73	85	91	44	63	78	84	89
Entrance to university	2	14	21	32	52	4	10	22	33	48
Entrance to TAFE	15	19	22	18	16	19	17	21	20	13
Apprenticeships	24	19	26	14	7	21	25	19	12	14
Full-time work (no unemployment)	24	26	34	34	37	24	27	29	33	42
Higher-status jobs (sales & service)	18	17	20	26	16	19	20	16	24	18
Clerical	0	8	6	4	11	2	7	3	6	18
Labouring and related work	38	31	31	21	25	33	31	29	28	23
Long-term unemployment	28	28	15	15	14	34	23	17	18	10
Females										
Year 12 completion	64	74	82	84	92	57	76	83	89	97
Entrance to university	14	18	34	39	61	10	20	36	47	71
Entrance to TAFE	12	17	23	19	20	20	24	21	14	7
Apprenticeships	3	4	2	2	2	3	2	4	3	2
Full-time work (no unemployment)	23	23	27	21	30	24	18	30	30	33
Long-term unemployment*	28	26	19	19	8	33	24	16	10	14
Sales and service jobs	40	52	42	51	62	44	46	47	52	51
Clerical	30	27	27	22	21	22	30	27	26	24
Labouring and related work	18	11	12	15	3	25	12	12	8	8

Note: *More than 12 months unemployed.

Source: Lamb (1997); figures provided by Stephen Lamb.

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