The Early Employment and Further Education Experiences of High School Dropouts: A Comparative Study of the United States and Australia

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Abstract

It is widely recognized that high school dropouts, or early school leavers, experience the most difficulty in making the transition from school to productive activities in adulthood, particularly post-school education, training, and employment. This study examines the experiences of high school dropouts from the United States and Australia in the first two years beyond high school. Unlike most studies of school dropouts, we define a school dropout as any student who ever quit high school. By defining school dropouts in this way, we are able to examine not only which students quit high school, but which ones ultimately return and complete high school through various alternative means. In the United States, at least, a high proportion of high school dropouts ultimately complete secondary school. We go on to compare the post-school education, training and employment experiences of school dropouts who complete high school with those who do not complete high school as well as with high school graduates who never quit school. Our analysis reveals substantial differences in the post-school education and employment experiences of these three groups, with school dropouts experiencing much longer periods where they are neither employed nor in post-school education or training.

Introduction

There is widespread interest among all industrialized countries in improving the transition from school to working life for young people (OECD, 1996). Because the majority of young people in most industrialized countries now complete secondary school, this interest has focused particularly on the transition from secondary school to post-high school work and education. And as the rate of secondary school completion has grown, so too has concern over that group of young people who fail to complete high school. It is widely recognized that high school dropouts, or early school leavers, experience the most difficulty in making the transition from school to productive activities in adulthood—post-school education, training, and employment.

This study examines the experiences of high school dropouts from the United States and Australia in the first two years beyond high school. We begin the study by examining who drops out of high school. Unlike most studies of school dropouts, we define a school dropout as any student who ever quit high school. By defining school dropouts in this way, we are able to examine not only which students quit high school, but which ones ultimately return and complete high school through various alternative means. In the United States, at least, a high proportion of high school dropouts ultimately complete secondary school. We go on to compare the post-school education, training and employment experiences of school dropouts who complete high school with those who do not complete high school as well as with high school graduates who never quit school. Our analysis reveals substantial differences in the post-school education and employment experiences of these three groups, with school dropouts experiencing much longer periods where they are neither employed nor in post-school education or training.

Data and Methods

The analysis is based on comparable longitudinal surveys in both countries. The US data were drawn from the National Educational Longitudinal Survey of 1988 (NELS:88), a longitudinal survey of 25,000 grade 8 students in the United States begun in 1988 that was also designed to provide policy-relevant information on young people's education, training, and transition to adulthood (Carroll, 1996). NELS base year data were collected in 1988 and follow-up data were collected on a subset of base-year respondents in 1990, 1992, and 1994 (2 years after normal high school completion). Follow-up students were tracked whether they remained in school or dropped out, as long as they continued to reside in the United States. A total of 13,120 students were interviewed in all four survey years. Sample weights were imputed for members of this panel in order to provide an accurate population estimate of the population of the approximately 3 million 8th graders in 1988.

Australian data used in the study were from the 1975 cohort of the *Youth in Transition* surveys, which are national longitudinal surveys of 10– and 14–year-olds conducted by the Australian Council for Educational Research. *Youth in Transition* includes four nationally representative cohorts of young people. Each cohort had an initial sample size of over 5,500 respondents. The cohorts were born in 1961, 1965, 1970 and 1975. The *Youth in Transition* (YIT) project studies the transitions between school, post-school education and training, and work. Information on the 1975 cohort was collected in annual surveys commencing in 1989. The original sample was selected using a stratified cluster sample design. Sample weights have been calculated to adjust for sampling design and for sample attrition.

The longitudinal surveys are comparable in terms of respondents' level of schooling and their major points of transition from school. While the sample for the Australian data is an age-based cohort rather than a grade-based cohort, as in the US case, approximately 70 per cent of the Australian students were in the same year-level as their US counterparts at commencement of NELS—Year 8 in 1988. The modal year of graduation from Year 12 for both samples was 1992.

Two major types of variables were used in this study. First, both surveys identified students who had ever dropped out of high school. In NELS, students were identified as ever dropped out both from survey responses (1990 and 1992) and from school records during the non-survey years (1989 and 1991) as students were tracked by survey administrators. Because this tracking was done only at certain intervals, however, it probably understates the number of students who actually quit school sometime between the 8^{th} and 12^{th} grades. In YIT, dropouts were identified from survey responses (1989 – 1994).

The second type of variables used in this study was related to education and labor market experiences between the end of high school and the 1994 survey interview. In the case of NELS, the final interview took place between February and August. Because most students completed high school in June, 1992, this represents about a two year interval since high school completion. And because most students in the US complete high school when they are 18 years old, the average age of respondents at the time of the interview was 20.3 years. In the case of YIT, the 1994 survey took place in December, but the information collected on current activities was referenced to October of that year. Most students in the YIT sample completed high school in November 1992, representing roughly a two year period to the survey period in 1994.

High school completion status and post-secondary enrollment status were taken as of the 1994 interview date for NELS and as of October 1994 for YIT. But in order to examine the same period of post-high school activity, we examined post-secondary education and employment activities as of February 1994—18 months after the modal high school completion—for the US data, and as of October 1994—20 months after the modal high school completion—for the Australian data. We also examined post-secondary education and employment activities for the entire 18 month period from July, 1992 to

February, 1994 in NELS and for the entire twenty month period from January, 1993 to October, 1994 in YIT.

Pathways to High School Completion

Focus on the transition from high school to work and further education takes as the starting point the time when students leave secondary school either as graduates or dropouts. This focus assumes that once a student drops out of high school, they remain a dropout or early school leaver. Alternatively, studies of labor market outcomes of high school dropouts often differentiate between students who have completed high school or dropped out at the time labor market outcomes are measured. Both of these approaches fail to differentiate between high school dropouts who may eventually complete high school and those who do not.

The reason for making this distinction is that, in the United States at least, there is a growing body of research evidence that shows (1) a much larger percentage of students have dropped out of high school than is reveled by measures of educational status reported in official government statistics, and (2) a substantial proportion of high school dropouts eventually complete high school, either by earning a regular high school diploma or by earning a high school equivalency certificate that is recognized as the equivalent to a regular diploma by employers and post-secondary institutions. For example, a study of a national cohort of young men who were 14 to 21 years of age, in 1979, found that 37 percent had quit high school for at least a 3 month period although by 1990, when the young men were 25 to 32 years old, only 14 percent were classified as high school dropouts (Klerman & Karoly, 1994). In other words, more than 60 percent of the high school dropouts eventually completed high school. Other studies, too, have shown that a substantial proportion of high school dropouts eventually complete high school (Kolstad & Kaufman, 1989).

Data from the present study support these earlier studies. In the United States, 21 percent of young adults dropped out of high school some time after the 8th grade (Table 1). This rate is twice as large as the government-reported dropout rate of 11.5 percent among 16 to 24 year olds in the United States in 1994 (McMillen & Kaufman, 1997, Table 4), although it is smaller than the rate reported above for an earlier cohort of young men.

The 21 percent rate for the United States is remarkably similar to the rate of 22 percent for Australia (Table 2), though this has not always been so. While dropout rates in the US have fluctuated over time, they have been relatively stable over the last two decades (McMillen & Kaufman, 1997). In Australia, however, the rates have fallen sharply since the early 1980s (Lamb, 1994). In 1982, over 60 percent of young people left school before Year 12. The rates of dropping out fell sharply during the 1980s reaching a low of 22 percent in 1992.

Dropout rates in both countries vary widely among social groups. In Australia, males had substantially higher dropout rates than females, while in the US dropout rates were very similar between males and females. In Australia the gap between males and females reflects, in part, differences in labor market opportunities available to teenage males and females. Teenage girls have been more severely affected by the long term changes in Australian industry structure which have reduced work opportunities in areas traditionally pursued by school dropouts (such as in manufacturing). Largely excluded from the main single source of full-time employment for young people—apprenticeships—and more at risk of unemployment, girls have been completing Year 12 in greater numbers.

Table 1 Percentage of students who had ever dropped out of high school by gender and selected background characteristics, 1994: United States 1988 grade 8 students

Characteristic	Males	Females	Total	Maximum Margin of Error*
Overall	22	20	21	± 2
Family Socioeconomic quartile				
Highest	8	6	7	± 2
Upper middle	17	15	16	± 3
Lower middle	23	21	22	± 4
Lowest	40	38	39	± 4
Parents education				
High school or less	34	31	32	± 4
Some postsecondary	21	21	21	± 4
Four years of college or more	9	6	8	± 2
Ethnicity				
Asian	10	11	10	± 4
Black	29	30	32	± 6
Hispanic	34	29	30	± 5
Non-Hispanic White	18	17	18	± 2
Native American	50	36	43	± 19
School location in grade 8				
Urban	28	21	25	± 4
Suburban	18	19	19	± 3
Rural	21	21	21	± 3
School type in grade 8				
Government	23	22	23	± 2
Catholic	7	11	9	± 3
Non-Catholic private	11	4	8	± 3
School achievement quartiles in grade 8*				
Highest	7	4	5	± 2
Upper middle	15	13	14	± 3
Lower middle	22	24	23	± 3
Lowest	40	45	42	± 4

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 2 Percentage of 19 year-olds who had ever dropped out of high school, by gender and selected background characteristics, 1994: Australia

Characteristic	Males	Females	Total	Margin of error*
Overall	27	18	22	±2
Family socioeconomic status				
Highest	15	10	12	±4
Upper middle	22	12	16	±3
Lower middle	32	20	25	±5
Lowest	39	28	32	±5
Parents education				
Postsecondary	9	6	8	±4
Secondary or below	31	20	25	±3
Ethnicity				
Australian-born	27	19	22	±2
Other-English-speaking	32	12	21	±8
Non-English-speaking	11	9	10	±5
Residential location				
Urban	22	14	17	±3
Rural	37	24	29	±4
School type				
Government	34	23	28	±3
Catholic	13	11	12	±4
Non-Catholic private	7	5	6	±4
Early school achievement				
Highest	10	5	8	±4
Upper middle	19	14	16	±5
Average	33	19	24	±5
Lower middle	39	28	32	±5
Lowest	59	31	44	±6

*The range above and below the reported figure representing the 90 percent confidence interval adjusting for design effects of the *Youth in Transition* data due to cluster sampling.
SOURCE: Tabulations from *Youth in Transition* based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

Social class has a strong influence on dropout rates in the US and Australia. In both countries dropout rates were lowest for students from higher status families (as measured by family SES and parental education) and highest for students from lower status families. Dropout rates also varied widely by ethnicity. In the United States, dropout rates were lowest for Asian and non-Hispanic Whites and highest for Black, Hispanics, and Native Americans. In Australia the dropout rates were lowest for young people from non-English speaking backgrounds and highest for those whose parents were born in Australia. Similarly, having parents born in Canada, USA, England or another English-speaking nation was associated with a higher rate of dropping out than if parents were born in a non-English speaking country. These findings for Australia are in line with research which has shown that even though the average educational attainment of parents in non-English speaking families is lower than for parents from English-speaking backgrounds, they have higher educational aspirations for their children and place a premium on completing high school as a form of enhancing their children's future education and work prospects (Miller & Volker, 1987).

The dropout rates also varied according to where young people live — urban, suburban or rural areas — but more so in Australia than in the United States. In the United States, female dropout rates did not vary greatly by these areas, but male dropout rates were notably higher in urban areas than in suburban or rural areas. In Australia, males and females living in rural areas had much higher dropout rates than their counterparts in urban areas. Other work shows that some of this gap is due to SES differences in the populations living in rural and urban areas, so, when other background characteristics are held constant, the gap in dropout rates between rural and urban areas narrows (Lamb, 1994; Miller & Volker, 1987). However, rural place of residence is still associated with higher dropout rates.

In both the US and Australia, dropout rates were higher for students attending public or government schools than for students attending Catholic or other private schools. But it should be pointed out that the social class composition of private schools is generally higher than that of public schools, so differences among schools partly reflect differences in the characteristics of students (Witte, 1992; Anderson, 1990). It should also be noted in comparing dropout rates that the proportions of young people in private and government schools vary considerably between the two countries. In the Australian sample, 67 percent of students attended government schools, 21 percent attended Catholic schools and 12 percent attended non-Catholic private schools. In total in the US private schools account for only about 10 percent of students. The gaps in dropout rates between government and private schools are larger in Australia than in the US, at least for males. This may in part reflect a greater social division between the populations using government and private schools in Australia, particularly between government and non-Catholic private schools.

Finally, dropout rates vary by early school achievement. In both countries, low-achieving students dropout out at much higher rates than high-achieving students. The trends between the two countries are very similar, with rates of dropout rates increasing as achievement decreases.

Overall, these findings on the background characteristics of school dropouts are consistent with a variety of research on causes or predictors of school dropout (Rumberger, 1987; Lamb, 1994; Anderson, 1990).

There are other features of dropping out which are worth examining. One is how much schooling dropouts completed before they left school. In the United States, 10 percent of dropouts left during 9th grade, 24 percent left during 10th grade, 26 percent left during 11th grade, and 35 percent left during 12th grade (Table 3). There were not substantial differences between males and females. By comparison with the US, Australian dropouts are likely to quit school in 10th grade (Year 10, Table 4). Over half of Australian school dropouts left at this year-level. Relatively few left during 12th grade (Year 12), with roughly 40 percent dropping out in 11th grade (Year 11). Therefore, even though the broad

dropout rate is roughly the same in the US and Australia, dropouts in Australia are likely to complete less schooling.

Another important issue is how many dropouts eventually complete high school. In the United States, 44 percent of all dropouts had completed high school by 1994, two years after normal high school graduation (Table 5). The majority of those had obtained a high school equivalency certificate rather than a regular high school diploma. The most common form of high school equivalency is obtained by receiving a passing score on the Test of General Educational Development (GED), which is a national examination developed and administered by the GED Testing Service, a program of the American Council on Education's Center for Adult Learning and Educational Credentials (GED Testing Service, 1997). Another 24 percent said they were enrolled in school or an alternative program that would prepare them to obtain a diploma or equivalent certificate. For the overall cohort, 88 percent had completed high school by 1994. Thus by 1994, only 12 percent of the cohort had not completed high school even though 21 percent of the cohort had dropped out of high school at some point in their secondary career. The difference in these two figures reveals how measures of educational status are unable to identify students who have ever quit or dropped out of high school. The analysis below illustrates why this distinction is important.

Table 3 Last grade attended of students who ever dropped out of high school by gender, 1994: United States 1988 grade 8 students

(percent distribution)

	Males	Females	Total
Grade 9	10	10	10
Grade 10	23	24	24
Grade 11	26	26	26
Grade 12	35	36	35
No grading system in school	6	4	5
Total	100	100	100
Maximum margin of error*	± 5	± 5	± 3
Unweighted sample size	1,076	1,089	2,165

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 4 Highest year-level attended of 19 year-olds who ever dropped out of high school, by gender, 1994: Australia

(percent distribution)

Year-level	Males	Females	Total
Year 8	1	0	1
Year 9	5	7	6
Year 10	46	51	48
Year 11	45	37	41
Year 12	3	6	4
Total	100	100	100
Maximum margin of error*	±8	±8	±5
Unweighted sample size	362	337	699

*The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from *Youth in Transition* based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

Table 5 High school completion status by dropout status and gender, 1994: United States 1988 grade 8 students

(percent distribution)

	Ever dropped out			Overall		
	Males	Females	Total	Males	Females	Total
Completed high school	**45**	**43**	**44**	**88**	**88**	**88**
Received high school diploma	13	18	16	81	83	82
Received GED or certificate	32	25	28	7	5	6
Currently enrolled in school	**23**	**25**	**24**	**5**	**5**	**5**
Enrolled in high school	1	1	1	0	0	0
Enrolled in alternative program	22	24	23	5	5	5
Did not complete, not currently enrolled	**33**	**32**	**32**	**7**	**7**	**7**
Total	**100**	**100**	**100**	**100**	**100**	**100**
Maximum margin of error*	± 7	± 7	± 5	± 2	± 2	± 1
Unweighted sample size	479	481	960	6,365	6,755	13,120

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 6 High school completion status of 19 year-olds, by dropout status and gender: Australia

(percent distribution)

	Ever dropped out			All		
	Males	Females	Total	Males	Females	Total
Completed high school	7	10	8	75	84	80
Did not complete high school	93	90	92	25	16	20
Total	100	100	100	100	100	100
Maximum margin of error*	±8	±8	±5	±4	±4	±3
Unweighted sample size	362	337	699	1,324	1,889	3,213

*The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

By US standards, the rate of high school completion among school dropouts in Australia is very small (Table 6). Less than two percent of the Australian sample completed high school after dropping out, representing only eight percent of all dropouts. For those who do complete a Year 12 high school certificate, about 40 percent did so by returning to school while the remaining group completed their Year 12 schooling at a Technical and Further Education (TAFE) college. However, the low rate of high school completion for dropouts in Australia in part reflects a different range of post-school opportunities, which we will examine in the next section. Many dropouts in Australia enter TAFE courses (including apprenticeships, traineeships, and other certificate courses) which do not require a Year 12 certificate for entry. These forms of training and further education could well be viewed as providing a senior school certificate equivalent. Therefore, the difference between the US and Australia in the rate of high school completion among dropouts may not represent as large a gap as it at first appears.

Opportunities for Post-School Education and Training

Because high school completion is required for entrance to some colleges and most universities, high school dropouts have more limited opportunities to further their education and training beyond high school. That puts them at a competitive disadvantage in the labor market, especially as the skill and educational requirements of many jobs increase over time.

In the United States, young people in the 1994 NELS survey were asked whether they were currently working on any post-secondary certificates or degrees or, if they were not, whether they had already completed any degrees or certificates. The extent of participation in post-secondary education and training varied widely between high school graduates and dropouts. More than three-quarters of students who never dropped out of high school were either working toward or had already completed some form of postsecondary education and training by 1994 (Table 7). In contrast, less than 10 percent of high school dropouts who never completed high school had participated in postsecondary education and training. School dropouts who completed high school were more likely than dropouts who did not complete high school to participate in postsecondary education and training, although they were much

less likely to do so than those who never dropped out. These patterns did not vary widely between males and females, although female dropouts who never completed high school were less likely than male dropouts who never completed high school to participate in post-secondary education.

The Australian data also reveal differences in patterns of transition to post-school education and training. Young people in the *YIT* survey were asked about their current education and training activities and about qualifications they had completed (Table 8). The figures cover participation in education and training at any time to age 19. This means that the figures can add to greater than 100 as young people have participated in more than one program. The results in Table 8 show that roughly a half of the males who never dropped out had participated in university by the age of 19. The rate was even higher for girls who never dropped out — 54 percent — a rate which in view of higher completion rates among females reveals a substantial gender gap in rates of entry to higher education. None of the dropouts who did not complete high school had entered university by age 19.

Table 7 Participation in postsecondary education and training, by high school dropout and completion status and gender, 1994: United States 1988 grade 8 students

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed	Dropped out, did not complete	
Both sexes				
No postsecondary education or training	**24**	**65**	**91**	**36**
Currently working toward:	**61**	**21**	**5**	**51**
License or certificate	3	4	3	3
Associate's degree	18	13	1	16
Bachelor's degree	40	4	1	32
Completed:	**15**	**14**	**4**	**13**
License or certificate	6	7	1	5
Associate's degree	0	0	0	0
Some postsecondary education	9	7	3	8
Males				
No postsecondary education or training	**27**	**66**	**88**	**38**
Currently working toward:	**56**	**21**	**7**	**47**
License or certificate	2	3	5	3
Associate's degree	17	13	1	14
Bachelor's degree	37	5	1	30
Completed:	**16**	**13**	**5**	**15**
License or certificate	9	6	3	8
Associate's degree	6	7	2	6
Some postsecondary education	1	0	0	1
Females				
No postsecondary education or training	**21**	**63**	**94**	**33**
Currently working toward:	**65**	**22**	**2**	**54**
License or certificate	3	5	2	3
Associate's degree	19	12	0	16
Bachelor's degree	43	5	0	35
Completed:	**15**	**15**	**4**	**13**
License or certificate	9	7	2	8
Associate's degree	5	8	2	5
Some postsecondary education	1	0	0.0	0
Total	**100**	**100**	**100**	**100**
Maximum margin of error*	± 2	± 7	± 6	± 2
Unweighted sample size	10,955	960	1,205	13,120

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.

SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 8 Participation in post-school education and training to October 1994, by high school dropout and completion status and gender: Australia*

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed**	Dropped out, did not complete	
All persons				
No further education or training	**28**		**53**	**29**
Further education and training				
University	**51**		**0**	**41**
TAFE	**26**		**48**	**30**
Apprenticeship	5		28	10
Traineeship	3		4	3
Other TAFE course	19		20	19
Males				
No further education or training	**27**		**36**	**29**
Further education and training				
University	**47**			**35**
TAFE	**29**		**66**	**36**
Apprenticeship	11		43	19
Traineeship	2		4	3
Other TAFE course	17		20	18
Females				
No further education or training	**28**		**64**	**30**
Further education and training				
University	**54**			**45**
TAFE	**23**		**36**	**25**
Apprenticeship	2		13	3
Traineeship	3		4	3
Other TAFE course	19		19	19
Total	**100**	**100**	**100**	**100**
Maximum margin of error***	±3		±6	±3
Unweighted sample size	2,514	59	640	3213

* Activities are not mutually exclusive, therefore, figures may add to greater than 100.

** Sample too small to derive meaningful estimates.

***The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.

SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

However, while dropouts do not enter university they do gain access to other forms of post-school education and training. A relatively large proportion of male dropouts (43 percent) obtained an apprenticeship. In Australia, entry to apprenticeships has increasingly shifted from Year 10 and Year 11 to Year 12 as school dropout rates have fallen. Despite this, apprenticeships remain a very important source of employment and training for the smaller pool of male dropouts. As a source of training they have remained male dominated, so, relatively few female dropouts obtained an apprenticeship (13 percent).

Male dropouts also entered other forms of vocational education and training. One in five had participated in a TAFE course other than apprenticeship training. Taken together, this meant that about two-thirds of male dropouts had undertaken some form of post-school education and training by the age of 19. As a result, the percentage of male dropouts who had relied on making a direct entry to the workforce without participating in any post-school education and training was only 9 percentage points more than that of teenage males who completed Year 12. This suggests that while university plays an important role for males who complete Year 12, vocational education and training in Australia is playing a major role in the transitions from school into work of teenage males who do not complete high school.

The role of further education and training is less prominent for female dropouts. Only about one-third (36 percent) of female dropouts participated in some form of vocational education and training by age 19. For most this was in a vocational certificate or diploma course in TAFE (19 percent). The lower rate of participation in further education meant that the majority of female dropouts (64percent) had not participated in any post-school education and training by age 19. This left most exposed to making a direct entry to the workforce without a senior school certificate or post-school certificate. For females who never dropped out of high school, less than 30 percent had not undertaken some form of further education and training by the age of 19.

The rates of participation in post-school education and training among dropouts in Australia display some sharp contrasts with the US. In the NELS data, only about 12 percent of male dropouts who never completed high school, and 8 percent of female dropouts, had entered some form of post-school education and training by 1994. In Australia, however, with a comparable sample covering roughly the same period, two-thirds of the male dropouts and over one third of the female dropouts participated in vocational education and training. This supports the view that while more dropouts in the US complete high school or an equivalent certificate, more dropouts in Australia take advantage of post-school vocational education and training opportunities which serve a similar function.

The Transition to Productive Employment

One of the main concerns about high school dropouts is their ability to settle into productive employment. In general, high school dropouts have more difficulty finding stable, productive employment. This can be due to their lack of skills and training, which puts them at a relative disadvantage compared to high school graduates. It can also be due to other attributes and characteristics that may have caused them to quit school in the first place and hinder their employment prospects, attributes that may be formed through their experiences of school itself. These other attributes may include such things as punctuality, perseverance, and the ability to get along with others, all qualities that employers may look for in their employees (Secretary's Commission on Achieving Necessary Skills, 1991). Longitudinal studies in the US have also noted that while high school graduates also have some difficulty in securing stable jobs initially after completing school, by their early- and mid-twenties most are working in stable jobs (Klerman & Karoly, 1994). In contrast, high school dropouts continue to experience long spells of non-employment.

In the current study we were only able to examine initial work status for high school dropouts, about two years after normal high school graduation, when most respondents were 19 or 20 years of age. This early transitional period may not be indicative of the long-term prospects for productive employment among youth. Research suggests that the youth labor market is characterized by considerable instability and change as young workers try to find suitable jobs (Rosenbaum, et al., 1990; Nolfi, et al., 1986; Osterman, 1980; Johnson, 1978; McCall, 1990). Yet the extent to which young people begin to engage in productive activities at an early age, especially school dropouts, may be indicative of their long-term prospects for meaningful employment.

In this study, we classified young people into four groups based on the primary activity they were engaged in 18 months (US) or 20 months (Australia) after the date of modal high school graduation: (1) those who were working full-time, whether or not they were going to school, (2) those who were going to school, whether or not they were working part-time, (3) those who were working part-time and not going to school, and (4) those who were not employed, either looking for work or out of the labor force. Both of the first two groups can be considered as engaged in productive activities, either working full-time or going to school. Those in the third category are working, but they either cannot find or are not interested in working full-time. Those in the final category are clearly not engaged in any productive activity.

Our data reveal major differences in the initial work status of high school dropouts between the United States and Australia. In the United States, 43 percent of high school dropouts who never completed school were working full-time two years after high school, 1 percent were enrolled in school, 11 percent were working part-time, and almost fifty percent were not-employed (Table 9). In Australia, dropouts were more successful in obtaining full- time jobs. Nearly two-thirds of the dropouts who never completed high school had full-time jobs at age 19 (Table 10). Males were more successful in gaining full-time jobs than were females (72 percent as against 56 percent). At this point in time, 7 percent of males were enrolled in post-school education and training and working either part-time or not at all. The rate was almost double for females. About one-quarter of the female dropouts and 12 percent of the male dropouts were not employed. For males most of this group were looking for work (11 percent unemployed), while for females more than half (12 percent) were not in the labor force at all. The rates suggest that in this initial post-school period dropouts in Australia are faring better in the pursuit of employment. This applies to both males and females, though, the contrasting experiences of males and females in Australia highlights some of the reasons why female rates of school completion are higher.

Table 9 Work and Enrollment Status, by high school dropout and completion status and gender, February 1994: United States 1988 grade 8 students

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed	Dropped out, did not complete	
Both sexes				
Working full-time	**33**	**45**	**43**	**35**
Enrolled in postsecondary education	9	4	1	7
Not enrolled in school	24	41	42	28
Enrolled in postsecondary education	**51**	**12**	**1**	**41**
Working part-time	27	6	0	22
Not working	24	6	1	19
Working part-time, not enrolled	**8**	**11**	**11**	**9**
Not working, not enrolled	**8**	**32**	**45**	**15**
Unemployed	3	14	19	6
Out of the labor force	5	18	26	9
Males				
Working full-time	**39**	**51**	**57**	**42**
Enrolled in postsecondary education	9	4	1	7
Not enrolled in school	30	47	56	35
Enrolled in postsecondary education	**48**	**11**	**1**	**29**
Working part-time	23	6	1	19
Not working	25	5	0	20
Working part-time, not enrolled	**6**	**11**	**9**	**7**
Not working, not enrolled	**7**	**27**	**33**	**12**
Unemployed	3	14	17	6
Out of the labor force	4	13	16	6
Females				
Working full-time	**28**	**67**	**29**	**29**
Enrolled in postsecondary education	9	3	1	8
Not enrolled in school	19	34	28	21
Enrolled in postsecondary education	**53**	**12**	**1**	**44**
Working part-time	30	6	0	25
Not working	23	6	1	19
Working part-time, not enrolled	**9**	**11**	**13**	**10**
Not working, not enrolled	**10**	**40**	**57**	**17**
Unemployed	3	16	21	6
Out of the labor force	7	24	36	11
Total	**100**	**100**	**100**	**100**
Maximum margin of error*	± 1	± 5	± 4	± 1
Unweighted sample size	10,955	960	1,205	13,120

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.

SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 10 Work and education status of 19 year-olds, by high school dropout and completion status and gender, October 1994: Australia

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed**	Dropped out, did not complete	
All persons				
Working full-time:	**31**		**64**	**38**
Enrolled in postsecondary education or training	10		25	13
Not enrolled in school	21		39	25
Enrolled in postsecondary education or training	**57**		**9**	**48**
Working part-time	31		5	25
Not working	26		4	23
Working part-time, not enrolled	**7**		**10**	**7**
Not working, not enrolled	**5**		**17**	**7**
Unemployed	4		11	5
Out of the labor force	1		6	2
Males				
Working full-time:	**37**		**72**	**46**
Enrolled in postsecondary education or training	16		34	21
Not enrolled in school	21		38	25
Enrolled in postsecondary education or training	**52**		**7**	**40**
Working part-time	23		2	18
Not working	29		5	22
Working part-time, not enrolled	**6**		**7**	**7**
Not working, not enrolled	**5**		**12**	**7**
Unemployed	4		11	6
Out of the labor force	1		1	1
Females				
Working full-time:	**27**		**56**	**32**
Enrolled in postsecondary education	7		14	8
Not enrolled in school	20		42	24
Enrolled in postsecondary education	**61**		**8**	**52**
Working part-time	35		4	30
Not working	26		4	22
Working part-time, not enrolled	**7**		**13**	**8**
Not working, not enrolled	**5**		**23**	**8**
Unemployed	3		11	4
Out of the labor force	2		12	4
Total	**100**		**100**	**100**
Maximum margin of error*	±3		±6	±3
Unweighted sample size	2,514	59	640	3213

*The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.

** Sample too small to derive meaningful estimates.

SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

The difficulty of high school dropouts securing productive employment is further revealed by examining their activities over time. As mentioned above, both the US and Australian data provided information on employment and enrollment status each month following the typical month for high school graduation, which was June 1992 for US students and December 1992 for Australian students. In the case of the US, we examined employment and enrollment status for each of the 18 months between July 1992 and February 1994. In the Australian case, we examined employment and enrollment status for each of the 20 months from January 1983 to October 1994. The main interest is with the amount of time young people spend in a marginal work and education status, i.e. in "marginalized" or "unproductive" activities. We counted months of "unproductive activities" in two ways.

In the first case, we counted the total number of months that respondents were not employed and not enrolled in post-school education or training. This provides a very conservative definition of unproductive or marginalized activities because respondents who were working part-time only were still considered engaged in productive activities. Based on this definition, 61 percent of US students who never dropped out were engaged in productive activities the entire 18 month period, compared to 39 percent for dropouts who completed high school and 34 percent for dropouts who did not complete high school (Table 11). The data also reveal that, 33 percent of the dropouts who completed and 43 percent of the dropouts who did not complete high school spent 10 months or more—more than half of this period—in "nonproductive" activities, compared to only 8 percent for students who never dropped out of high school. These patterns are similar for males and females, although the disparities between dropouts and high school graduates are much greater for females than for males.

For Australia the data show that dropouts who did not complete school were more likely to be marginalized in the pursuit of work than high school graduates. For example, 64 percent of dropouts spent all of the twenty month period to 1994 in work or in education and training, compared to 76 percent of graduates (Table 12). Dropouts were four times more likely to have spent 10 months or more of the time without work and not in further education or training (13 percent as against 3 percent). The gaps, however, varied greatly depending on gender. For males, the gaps between dropouts and graduates were relatively small. While 89 percent of graduates spent less than three months unemployed or not in post-school education, 80 percent of dropouts also did. Male dropouts were more likely to spend long periods without work or training, though (10 percent against 3 percent for graduates). Compare this to the situation for girls, however. Three-quarters of female high school completers avoided any period of unemployment, compared to 57 percent of dropouts. More strikingly, 17 percent of dropouts spent 10 or more months unemployed and out of education and training compared to only 2 percent of high school completers. Again, it underlines the disadvantage female dropouts in Australia have in making the transition from school to work, and why more females than males continue at school.

Table 11 Number of months not employed and not enrolled in postsecondary education and training, by high school dropout and completion status and gender, July 1992-February 1994: United States 1988 grade 8 students

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed	Dropped out, did not complete	
Both sexes				
0 months	61	39	34	56
1-3 months	22	11	7	19
4-6 months	6	10	7	6
7-9 months	3	7	9	4
10 or more months	8	33	43	15
Males				
0 months	64	45	46	60
1-3 months	21	13	8	19
4-6 months	5	10	9	6
7-9 months	3	6	10	4
10 or more months	7	26	27	11
Females				
0 months	59	33	21	52
1-3 months	23	8	5	20
4-6 months	6	10	6	6
7-9 months	3	8	9	5
10 or more months	9	41	59	17
Total	100	100	100	100
Maximum margin of error*	± 1	± 5	± 4	± 1
Unweighted sample size	10,955	960	1,205	13,120

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 12 Number of months not employed and not enrolled in post-school education and training, by high school dropout and completion status and gender, January 1993-October 1994: 19 year-olds, Australia

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed**	Dropped out, did not complete	
All persons				
0	76		64	73
1-3	13		11	13
4-6	6		6	6
7-9	2		6	3
10 or more	3		13	5
Males				
0	76		71	74
1-3	13		9	12
4-6	6		6	6
7-9	2		5	3
10 or more	3		10	5
Females				
0	74		57	72
1-3	14		12	13
4-6	8		7	7
7-9	2		7	3
10 or more	2		17	5
Total	100		100	100
Maximum margin of error*	±3		±6	±3
Unweighted sample size	2,514	59	640	3213

*The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.

** Sample too small to derive meaningful estimates.

SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

Table 13 Number of months not employed full-time and not enrolled in postsecondary education and training, by high school dropout and completion status and gender, July 1992-February 1994: United States 1988 grade 8 students

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed	Dropped out, did not complete	
Both sexes				
0 months	29	28	24	28
1-3 months	40	10	6	34
4-6 months	9	9	8	9
7-9 months	5	7	9	5
10 or more months	17	46	53	24
Males				
0 months	35	34	36	35
1-3 months	37	11	9	31
4-6 months	9	9	8	9
7-9 months	4	8	11	5
10 or more months	15	38	36	20
Females				
0 months	23	21	11	21
1-3 months	44	8	4	36
4-6 months	9	10	7	9
7-9 months	5	6	8	6
10 or more months	19	55	70	28
Total	100	100	100	100
Maximum margin of error*	± 1	± 5	± 4	± 1
Unweighted sample size	10,955	960	1,205	13,120

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 14 Number of months not in full-time work and not enrolled in post-school education and training, by high school dropout and completion status and gender, January 1993-October 1994: 19 year-olds, Australia

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed**	Dropped out, did not complete	
All persons				
0	55		49	53
1-3	18		11	17
4-6	13		8	12
7-9	5		8	6
10 or more	9		24	12
Males				
0	57		60	57
1-3	18		11	16
4-6	12		6	11
7-9	5		7	5
10 or more	8		16	11
Females				
0	53		37	50
1-3	19		12	18
4-6	13		9	12
7-9	5		10	6
10 or more	10		33	14
Total	100		100	100
Maximum margin of error*	±3		±6	±3
Unweighted sample size	2,514	59	640	3213

*The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.

** Sample too small to derive meaningful estimates.

SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

In the second case we counted the total number of months that respondents were not employed full-time and not enrolled in school. This provides a less conservative definition of productive activities because it considers working part-time as not productive (at least for those who were not enrolled in school). While it is a less conservative definition it reflects concern, at least in Australia, about the numbers of young people who are not able to secure stable full-time jobs and move in and out of periods of part-time work and unemployment without participation in further education or training (Dusseldorp Skills Forum, 1997). Based on this definition, there are even greater differences in the US in the amount of time that school completers are in productive activities. Although in the US the same proportion of dropouts as never-dropouts spent every month working full-time or enrolled in school, another 40 percent of persons who never dropped out spent only 1 to 3 months "not being productive" (Table 13). This probably reflects the pattern of high school graduates who spend one or two months in the summer before college either not working or not working full-time. Based on this less restrictive definition, fully half of all high school dropouts, both those who completed and those who did not, spent more than half of this 18 month period not working full-time or enrolled in post-secondary education and training.[1] As with the previous case, these disparities were more pronounced among females than among males.

The data for Australia show that while the gaps between dropouts and graduates have not increased from the previous table, indeed in some instances even fallen, dropouts spend longer periods without full-time work or without participating in further education and training. Almost one-quarter of the dropouts spent 10 or more months this way compared to about one-tenth of the graduates (Table 14). The gaps are much more pronounced among females than males, as in the previous table.

In summary, the transition from school to productive activities varied greatly by high school completion status in the US and Australia. In the US, a high percentage of both dropouts who completed high school and dropouts who did not complete high school had difficulty engaging in productive activities. The fact that dropouts who completed high school had almost as much difficulty as dropouts who never completed raises questions about the utility of returning to complete high school. In Australia, the figures suggest that in this early transition period some young people spend considerable amounts of their time as marginalized workers, unable to find secure full-time work and this is more true of dropouts than high school graduates.

The Quality of Jobs

It is important to not only consider the amount of time that young people spend in productive activities, but the quality of those activities. The quality of employment can be gauged in a number of ways. Distinguishing between part-time and full-time work is important, as we were able to show above. Other studies of the transition from school to work have also considered the number of jobs held over time (Veum & Weiss, 1993) and the duration of jobs held (Klerman & Karoly, 1994). In this study, we examined the types of occupations and the wages for those working full-time. Of course, the comparisons of wages are presented here tentatively. At this age, earnings are affected by youth-wage awards and, in Australia at least, by the effects of youth training allowances. These may work to suppress or distort differences.

The types of occupations held by full-time workers not only varied by high school completion status, but also by gender. In the US, male school dropouts held similar jobs to those who never dropped

[1] About one-third of the students who dropped out and eventually completed, finished their high school education after August of 1992. These students could be considered as "productive" at least during those months they may have been working toward high school completion.

out. About a third of each group—non-dropouts, dropout-completers, and dropout non-completers—held jobs in the skilled trades and another 17 percent of each group held sales and service jobs (Table 15). But dropouts who never completed were more likely than those from the other two groups to hold jobs as laborers (which generally pay lower wages) and less likely to hold jobs in the managerial, professional, and technical areas (which generally pay higher wages) or in the military. Among females in the US, differences by school completion status were somewhat more pronounced, although two-thirds of all females were employed in only two occupational groups—clerical and sales/service. Females who never dropped out were more likely to be employed in clerical jobs, while female dropouts who never completed were most likely to be employed in sales and service jobs. Female dropouts who never completed were more likely to secure jobs in the skilled trades and less likely to be employed in managerial, professional, and technical jobs than females who never dropped out, although the proportions were quite small.

At this early stage in their careers, with many high school graduates still in university, the types of full-time jobs offered to teenagers is likely not to vary greatly among high school graduates and dropouts. Yet, even at this stage there are some differences in the Australian data that are important to note. Table 16 shows that the majority of male dropouts in full-time work were in skilled trades at age 19, involving almost 60 percent of this group. Skilled trades were also important to male high school graduates, but nowhere near to the same extent, accounting for about one third of the male full-time workers who had completed Year 12. Male high school graduates were more often in white collar occupations such as clerical work (13 percent as against 3 percent), sales and related jobs (15 percent compared to 7 percent), and managerial and para-professional occupations (11 percent compared to 4 percent). Female high school graduates were also more often than female dropouts employed in white collar occupations, with female dropouts more likely to secure work in skilled trades or as laborers. As in the US, there are large differences between males and females in the sorts of jobs teenagers are able to secure. At this stage females are heavily concentrated in clerical and sales and related occupations, whereas males more often enter skilled trades and laboring work.

Table 15 Occupation of persons working full-time, by high school dropout and completion status and gender, February 1994: United States 1988 grade 8 students

(percent distribution)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed	Dropped out, did not complete	
Both sexes				
Managerial/professional/technical	16	15	7	14
Skilled trades	20	22	28	22
Clerical	23	20	12	21
Sales/service	22	21	24	22
Laborers	14	18	29	17
Military	5	4	0	4
Males				
Managerial/professional/technical	14	13	7	13
Skilled trades	29	30	33	30
Clerical	12	8	5	10
Sales/service	17	17	17	17
Laborers	21	26	38	25
Military	7	6	0	6
Females				
Managerial/professional/technical	18	18	7	17
Skilled trades	7	10	15	8
Clerical	41	38	27	39
Sales/service	29	26	41	30
Laborers	4	8	10	5
Military	1	0	0	1
Total	100	100	100	100
Maximum margin of error*	± 5	± 12	± 12	± 4
Unweighted sample size	2794	412	489	3695

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval for percentage equal to 50 and adjusts for design effects of the NELS data due to nonrandom sampling. The margin of error is smaller for percentages less than 50.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 16 Occupations of 19 year-olds in full-time work, by high school dropout and completion status and gender, October 1994: Australia

(percent distribution)

	Dropout and completion status			Total
	Never dropped out	Dropped out, completed**	Dropped out, did not complete	
All persons				
Managerial/professional/technical	10		4	9
Skilled trades	21		43	28
Clerical	29		16	25
Sales/service	24		16	21
Process workers and operators	3		5	4
Laborers	13		16	13
Males				
Managerial/professional/technical	11		4	8
Skilled trades	35		59	45
Clerical	13		3	9
Sales/service	15		7	12
Process workers and operators	6		7	6
Laborers	20		20	20
Females				
Managerial/professional/technical	10		5	8
Skilled trades	8		21	11
Clerical	44		33	41
Sales/service	32		30	31
Process workers and operators	1		2	1
Laborers	5		9	7
Total	100		100	100
Maximum margin of error*	±6		±8	±5
Unweighted sample size	726		392	1143

*The range above and below the reported figure representing the 90 percent confidence interval for percentage equal to 50 and adjusting for design effects of the *Youth in Transition* data due to cluster sampling. The margin of error is smaller for percentages less than 50.

** Sample too small to derive meaningful estimates.

SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

Earnings varied more by gender than by high school completion status, at least in the US. In the US, male dropouts who completed high school had higher monthly wages than either male non-dropouts or male dropouts who did not complete, although the differences were not statistically significant (Table 17). They may have had higher wages than non-dropouts because most had been out of school longer, while they may have had higher wages than dropouts who did not complete because by completing high school, they may have had more access to better paying jobs. Overall, females had lower earnings than males, which probably reflected difference in the types of occupations that they held. There were few differences in earnings among females by high school completion status. Female dropouts who never completed actually had higher average earnings than both non-dropouts or dropouts who completed, although again the differences were not statistically significant.

In Australia, at age 19 male dropouts in full-time work received higher monthly earnings, on average, than male high school graduates (Table 18). The gap was not statistically significant. The advantage for dropouts may well be because of their longer exposure to the workforce and longer periods in employment. Other work, using longitudinal data, suggests that the advantage in favor of dropouts does not endure as high school graduates gain more work experience; by their mid-twenties earnings are higher and earnings growth steeper for graduates, particularly for those moving from higher education into professional careers (Miller & Volker, 1987; Long, McKenzie & Sturman, 1996). The gap is reversed for females, with female graduates earning more at age 19 than their counterparts who dropped out of school, even though they have been exposed to the labor market for a shorter period. It reveals the disadvantage female dropouts experience in obtaining secure, well-paid work. Reinforcing this point, there is a small gap in earnings between male and female graduates ($31 per month on average), but a much larger gap favoring male over female dropouts ($143 on average). The gender gap in earnings is consistent with the US figures, though in the US female dropouts earn more on average at this stage than female graduates.

Table 17 Mean monthly earnings of persons working full-time, by high school dropout and completion status and gender, February 1994: United States 1988 grade 8 students ($)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed	Dropped out, did not complete	
Both sexes				
Mean monthly earnings	1094	1238	1114	1115
(margin of error*)	(± 56)	(± 160)	(± 140)	(± 50)
Males				
Mean monthly earnings	1186	1421	1137	1206
(margin of error*)	(± 75)	(± 247)	(± 147)	(± 66)
Females				
Mean monthly earnings	962	964	1067	975
(margin of error*)	(± 84)	(± 127)	(± 302)	(± 75)
Unweighted sample size	2794	412	489	3695

*The range above and below the reported figure that may contain the actual figure in the population. It represents the 90 percent confidence interval and adjusts for design effects of the NELS data due to nonrandom sampling.
SOURCE: Tabulations from the National Education Longitudinal Survey of 1988 based on 8th grade panel from the 1994 third follow-up survey (unweighted N=13,120; weighted N=2,968,426).

Table 18 Mean monthly earnings of 19 year-olds in full-time work, by high school dropout and completion status and gender, October 1994: Australia ($)

	High school dropout and completion status			Total
	Never dropped out	Dropped out, completed**	Dropped out, did not complete	
All persons				
Working full-time	1274		1313	1287
(margin of error)*	±48		±76	±40
Males				
Working full-time	1287		1369	1322
(margin of error)*	±78		±118	±68
Females				
Working full-time	1256		1226	1248
(margin of error)*	±59		±83	±48
Unweighted sample size	726		392	1143

*The range above and below the reported figure representing the 90 percent confidence interval adjusting for design effects of the *Youth in Transition* data due to cluster sampling.
** Sample too small to derive meaningful estimates.
SOURCE: Tabulations from Youth in Transition based on the 1994 follow-up survey (unweighted N=3,213; weighted N=251,407).

In summary, the quality of jobs held by US and Australian dropouts and non-dropouts did not vary greatly. This could be due, in part, to the fact that at least some of the dropouts probably had more labor market experience than non-dropouts. Although the earlier figures showed that dropouts were more likely to have difficulty in securing full-time work or enrolling in post-secondary education and training, those who were able to secure full-time work appeared to hold jobs of similar quality to those who did not drop out, even if they were not in the same types of occupations. The exception to these general patterns is the situation for female dropouts in Australia who are in more poorly paid jobs than their male and female peers. Combined with higher rates of unemployment as a group it suggests that they more often experience disadvantage in the transition to work.

Summary and Conclusions

This study examined the early education and employment experiences of high school dropouts in the US and Australia. Unlike most studies of high school dropouts, this study identified all students who ever dropped out of high school in two similar cohorts of youth in the US and Australia. By doing so, it was not only possible to determine how many students ever dropped out of school, but also to examine differences in the subsequent education and labor market experiences between dropouts and persons who never dropped out. The analysis not only revealed substantial differences between both groups, but also substantial differences between the United States and Australia in the experiences of dropouts and non-dropouts.

Almost identical percentages of students dropped out of high school in the US and Australia—21 percent in the US and 22 percent in Australia. And in both countries, dropout rates were substantially higher for students from lower social class backgrounds, for students in rural areas, for students attending public or government schools, and for students with low achievement levels. It would seem that the social and school-based factors influencing the rates of dropping out are similar in both the US and Australia.

But there were substantial differences between the two countries in when dropouts left school and, more importantly, whether they eventually finished school. In Australia, about half of all dropouts left school at grade 10 and most of the rest left at grade 11. In the US, the majority of dropouts left in grades 11 and 12, with only about one-third leaving in grade 10 or earlier. One reason for these contrasts is a difference in access to post-school education and training opportunities and a difference in the role of credentials. In Australia, school dropouts still successfully enter apprenticeships and other forms of vocational education and training (such as certificate courses offered by TAFE colleges) from Year 10 even though over the last decade Year 12 has increasingly become the main entry point. In the US, students do not receive a regular school credential until they complete a specified number of course credits, which are usually acquired at the completion of four years of high school. Students can dropout anytime, but most appear to complete at least some of their high school credits before leaving school, usually after completing grade 10 or two years of high school.

There were even greater differences in the extent to which dropouts eventually finished high school. Almost half of dropouts in the US had completed high school within two years of normal high school graduation, most by acquiring a General Educational Development credential, which is recognized by most employers and post-secondary institutions as equivalent to a high school diploma. In contrast, fewer than 10 percent of dropouts in Australia complete high school. Yet Australian dropouts had more opportunities to pursue post-school education and training than US dropouts. In the US, nine out of ten dropouts who never completed high school had not participated in any post-secondary education or training during the first two years after high school, while three-quarters of students who never dropped out participated in various forms of postsecondary education and training. In Australia, about two in three male dropouts had participated in postsecondary education or training compared to about three in four graduates. For most dropouts this was in apprenticeships or other vocational education and training programs, whereas for graduates it was mainly in higher education. Among female dropouts, only about one in three participated in any formal post-school education or training program, compared to about two in three female graduates.

In both countries, dropouts had more difficulty in securing productive employment than those who never dropped out. But the disparities were greater in the US than in Australia. Two years after high school graduation, 45 percent of all dropouts in the US who did not complete high school were not working at any job or enrolled in postsecondary education and training, compared to only 8 percent for students who had never dropped out of high school. In Australia, only 17 percent of dropouts who did

not complete high school were not working or enrolled in postsecondary school, compared to 5 percent for those who had never dropped out. Therefore, relative to those who had never dropped out, high school dropouts who had not completed high school were much more disadvantaged in the US than in Australia. This same relative disadvantage was observed by looking at the total number of months not working or enrolled since high school—US dropouts were much more likely than Australian dropouts to have spent the majority of their time not employed or enrolled in school or training programs. In both countries, female dropouts were relatively more disadvantaged than male dropouts compared to their counterparts who had never dropped out.

Finally, we examined the quality of jobs held by young workers in full-time employment. Here the differences between dropouts and graduates who never dropped out were less pronounced, but differences between males and females remained large. In both countries, young workers who had never dropped out were more likely to be employed in white collar occupations whereas dropouts were more likely be employed in skilled trades and laboring jobs. But the differences were not substantial and reflect the effects of age-segmented, relatively narrow and structured youth labor markets in both countries. Most entry-level jobs available to teenagers are provided within a limited range of occupations and this is particularly true for females where available full-time jobs are heavily concentrated in two main fields: clerical and sales and related work. Therefore it is not surprising that wages were fairly even among groups, particularly given that wages at ages 19 and 20 are subject to relatively low youth-wage awards and training wages.

Because almost half of all dropouts in the US eventually completed school, it was possible to compare education and employment experiences of dropouts who completed high school with those of dropouts who never completed high school. The results presented a mixed picture of the benefits to completing high school. Dropouts who completed high school were more likely to have enrolled in some form of post-secondary education or training within the first two years after high school than dropouts who had never completed. This finding confirms one of the benefits of receiving a high school credential—it provides access to post-school education and training that would not be there otherwise. However, the percentage participating in post-school education and training was still quite small—35 percent—and much smaller than the participation rate among students who had never dropped out. Dropouts who completed high school also had difficulty securing productive employment in the first two years beyond high school. Almost a third of all dropouts who had completed high school were not working two years after high school, compared to 45 percent for dropouts who had never completed and only 8 percent for those who had never dropped out. And almost as many dropout-completers had highs spells of non-employment as dropout-noncompleters. These results raise questions about the economic benefits of completing high school in the US, which is the subject of some debate in the US (e.g., Cameron & Heckman, 1993; Murnane, Willett, & Boudett, 1995, 1997).

This study found that similar proportions of young people dropped out of high school in the US and Australia. But the educational and economic consequences were quite different. In the US, many dropouts eventually completed high school, although most did so by completing a national examination instead of earning a traditional high school diploma. This alternative credential grants access to some postsecondary education institutions, but the majority of dropouts who even completed high school had not entered any form of postsecondary education and training two years after high school. In Australia, in contrast, few school dropouts eventually complete high school. But about half of all dropouts enroll in some form of postsecondary education and training. In other words, although a higher proportion of Australians than Americans fail to complete high school, Australian dropouts are more likely than their American counterparts to enroll in postsecondary education and training. Moreover, high school dropouts in the US were much less likely than high school graduates to settle into productive employment within the first two years of high school compared to dropouts in Australia. This suggests

that dropouts are at a relatively larger disadvantage compared to high school graduates in the US than in Australia.

The findings from this study underscore the importance of examining in greater detail the education and employment experiences of youth as they complete high school. There may be a multitude of pathways from secondary school completion to post-school education, training, and employment. By using longitudinal data sources, it is possible to identify those alternative pathways and determine which ones form the training and experience that will lead to productive employment as adults.

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