

Lower Certificates: Participant Profiles and Outcomes

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Abstract

The socio-demographic and educational backgrounds of young people whose first post-school program was a non-apprenticeship lower certificate VET course are examined. A particular focus is on the returns to lower certificate qualifications for early school leavers. Lower certificate participants are compared with all other young people of the same age cohort and, in particular, with young people who left school and undertook no further formal education and training. Their persistence in these courses, their progression to other courses and their subsequent labour market experiences are examined and compared with the labour market experiences of those young people who did not engage with the formal post-school education and training sectors. Data are drawn from the Longitudinal Surveys of Australian Youth (LSAY) cohort of young people who were in Year 9 at school in 1995. The study traces their progress to 2004 and includes information on participants' labour market outcomes over more than five years after completing their courses. The research adds to our understanding of the contribution lower certificate courses make to the pathways into further education, training and work, especially for low academic achievers and school non-completers. This research has implications for the advice that may be given to young people in making decisions about education and training choices in their passage into the labour market and for public policy in the provision of pathway options for young people.

Literature Review

Australia's most senior policy makers established the goal that "... all students have access to the high quality education necessary to enable the completion of school education to Year 12 or its vocational equivalent and that provides clear and recognised pathways to employment and further education and training." (MCEETYA, 1999, Goal 3.6). Achievement of this goal remains a concern to policy makers, who continue to note the importance of Year 12 completion or a vocational equivalent (Council of Australian Governments, 2006, p. 35). Although completion of senior secondary schooling grew steadily until the early 1990s, it has since reached a plateau and between 20 and 30 per cent of young people do not complete Year 12 at school (ABS, 2007). Young people in the lowest academic achievement band are over represented among school non-completers, with more than one third leaving school before the end of Year 12. Dockery (2005) has argued that remaining at school may be a penalty for the non-academically inclined and that their interests would be better served by undertaking alternative forms of education and training, specifically apprenticeships and traineeships.

Year 12 Equivalence

There is some debate about what level of qualification should be regarded as "Year 12 or its vocational equivalent". The AQF Advisory Board presents a diagram² showing certificates I and II being below senior secondary certificates. However, the text of the AQF Handbook

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² See <http://www.aqf.edu.au/aqfqual.htm>

(AQF Advisory Board, 2002), indicates that a qualification is “formal certification, [of] achieved learning outcomes or competencies ...” (p. v) and that, in the schools sector these outcomes “...prepare students for initial entry into the workforce, for vocational education, and training and university studies.” They neglect to acknowledge general education as a preparation for personal and interpersonal development, community engagement and civic participation. The AQF Handbook asserts that the role of certification in the VET sector is to attest that an individual has demonstrated certain competencies, namely “...the possession and application of both knowledge and skills to defined standards, expressed as outcomes, that correspond to relevant workplace requirements and other vocational needs” (p. v). Thus, senior school certification and vocational certificates are seen to be different in kind and do not provide a basis for comparing levels of attainment between schooling and post-school education and training pathways. Nonetheless, the MCEETYA goal of Year 12 completion *or a vocational equivalent* demands that some equating be attempted.

Karmel (2004) has argued that a Certificate III qualification is the appropriate Year 12 equivalent, while Long (2005, pp. 14-15) has suggested that a Certificate II is reasonable. However, Karmel argued that “...what counts is the level of the qualification and the degree of success in completing *qualifications of some substance*” (Karmel, 2004, p. 8, emphasis added). Later, Karmel said “In educational terms it could be argued that certificates I and II are more important in providing an entry into qualifications of some substance (certificate III and above) rather than an end-point qualification” (2007, p. 11). The problem then becomes one of identifying ‘qualifications of substance’ rather than identifying simple AQF levels or some equivalent. A qualification of substance is presumed to be one that leads, directly or indirectly through further study or training, to successful labour market outcomes. Rather than a debate about whether a Certificate II or III is equivalent to Year 12 completion, the question of interest then becomes; ‘Do current lower certificate qualifications lead to successful education and labour market outcomes?’

The issue of equivalence is far from simple. If a student remained at school and completed a vocational program, there needs to be some confidence that schools can provide the standards of training required to Certificate III level in some or all apprenticed fields. Anlezark, Karmel and Ong (2006, p. 33) indicated that VET provision in schools reflected the fields that schools were capable of offering rather than those that industry required. By contrast, post-school VET qualifications are more likely to be aligned with industry requirements and lead to more favourable labour market outcomes. The problem that requires resolution is whether school-based or post-school VET study leads to qualifications of substance and successful education or labour market outcomes.

The Substantive Meanings of Qualification Levels

The meanings that may be imputed for qualifications at various levels can be derived from their entry criteria, the depth and scope of the learning program that leads to the qualifications, and the outcomes that flow from them. There is a policy interest in the relative value of senior secondary certification and lower certificates.

In most jurisdictions, senior secondary studies are taken over two school years (Years 11 and 12). Entry to senior secondary study follows completion of Year 10 at school, although adult re-entry programs may accept equivalent experience.

The ABS, through the Australian Standard Classification of Education (ASCED), and the AQF provide similar descriptions of the studies that lead to the award of a senior secondary certificate.

... ranging from traditional academic disciplines taken to prepare students for university entry to more vocational and semi-vocational courses taken to prepare students to enter the workforce directly or to enter formal training programs. (AQF Advisory Board, 2002, p. 11)

A senior secondary certificate is designed to indicate that the person has completed a general education and is equipped to enter a post-secondary study program or to enter the workforce. University admission, in addition to a senior secondary certificate, also requires that applicants have been awarded a university entrance score (a TER or OP) and entry into courses is competitive.

The ASCED defines the entry criterion for lower certificate programs as Year 10 or an equivalent.

The scope and 'depth' of these qualifications, and their expected vocational competencies are defined as:

[A] Certificate I & II level [qualification] provides a knowledge and skills base ranging from basic knowledge in a narrow range of areas to basic operational knowledge in a moderate range of areas. and

The focus is on basic practical skills with some theoretical component and a prescribed range of functions involving known routines and procedures with some accountability for the quality of outcomes, underpinned by a basic knowledge in a range of areas. (ABS, 2001, p. 49)

Similar more detailed statements of expected outcomes of certificates at AQF Levels I, II and III are tabulated in the AQF Handbook (AQF Advisory Board, 2002, pp. 8 & 21).

Qualifications at AQF Levels I and II signify limited responsibility for one's own work and suggest that these qualifications equip individuals to work under direction rather than autonomously.

The entry criteria for certificate programs at AQF Levels III and IV are 'completion of Year 10 or equivalent, or higher, or completion of a recognised programme and/or recognition of prior learning.' (ABS, 2001, p.50).

Qualifications at AQF Level III and above indicate that individuals can take responsibility for their own work and for the work of others suggesting that these qualifications equip individuals to work autonomously and in supervisory roles.

The entry criteria, scope and depth, and descriptions of expected competencies certified by vocational certificate qualifications do not permit an easy equating with a senior secondary certificate. The ABS, however, rates Year 11 as being a higher level of educational attainment than lower certificates (ABS, 2006, see explanatory note 41 and decision table, pp. 61-2).

Equivalence between senior secondary and vocational certificates is not the only difficulty. There is some doubt about the equivalence of programs at particular levels between fields of vocational training. A certificate at a given level in some fields might be 'easier' to obtain because of both the demands of the program and the opportunities for training in those fields. In order to have confidence that a particular AQF level can be nominated as meeting the MCEETYA 'vocational equivalent to Year 12' goal, some assurance that all qualifications at that AQF level equally meet the test of a 'qualification of substance' is required. This implies that the educational and labour market outcomes across fields of study should be equivalent, but employment opportunities vary by field of study, so it seems unreasonable to place an onus on providers to ensure that the training they offer in a particular field has equivalent outcomes to those following qualifications in other fields.

Clearly, there are problems in attempting to define Year 12 equivalence and indeed equivalence of qualifications between fields. Karmel's requirement that 'qualifications of substance' should be valued is eminently sensible, although that too has its difficulties. It does suggest, however, that the outcomes that follow participation in lower certificate programs need to be examined in order to ascertain the extent to which current lower certificate programs assist young people into employment directly or via further study.

Outcomes Following Lower Certificate Qualifications

An important recent study of the outcomes of lower certificate courses was undertaken by Stanwick (2005). Using Student Outcomes Survey (SOS) data, he examined employment gains following the qualification, promotions or increased wages, and transition to further study for young people aged 15 to 24 years. He reported that the completion rate for these qualifications was rather low (33% for Certificate I and 43% for Certificate II qualifications). Those who completed these qualifications made employment gains of 25 per cent, but non-completers experienced only a 10 per cent improvement in their employment. Similarly, fewer than 40 per cent of graduates and 10 per cent of module completers went on to further qualifications, and given the proportions of completers, overall approximately 20 per cent of lower certificate commencers find them a pathway into higher level training.

A particular focus of policy interest in lower certificate courses is the extent to which they provide a pathway into higher level vocational programs for low academic achievers. Stanwick indicated that almost half of Certificate I enrolments and 10 per cent of Certificate II enrolments are in mixed field programs. These are preparatory programs with a focus on literacy and numeracy skills and are designed to enable young people to move into vocationally oriented programs.

The Stanwick study indicates that rather modest gains follow lower certificate participation. What is not clear is whether these limited gains flow from the characteristics of these programs or from the attributes of the individuals who undertake them. It is in this area that the present study seeks to complement Stanwick's, since this study is based on sources that include longitudinal data on early academic achievement as well as social background.

Karmel and Nguyen (2006) also used SOS and other VET data to examine the wages returns to VET qualifications. Their focus was not specifically on lower certificates, although their analysis included these qualifications. Like Stanwick, they concluded that people who completed lower certificates experienced quite modest wages gains. One limitation of their analysis was their reliance on people who were module completers only as a 'no-training' control group. They wrote "...we use students who have partially completed a certificate I. This ...is the closest state we have to undertaking no training at all" (p. 11). Moreover, they noted the importance of including prior educational achievement in analyses, saying "...we should be wary of using qualification completion rates as a performance indicator without taking into account the educational background of students" (p. 10).

Sherman (2006), also using extended SOS data, reported improvements in the employment status, wages and job status of VET graduates. For lower certificate graduates she found that 18 per cent of Certificate I and 37 per cent of Certificate II graduates went on to undertake higher level qualifications. However, she noted a limitation of the data; there was no control group of young people who had undertaken no post-school training, so changes in education and labour market outcomes over time cannot be uniquely attributed to training. Marks (2005) claimed that changes in employment status over time can be attributed to previous labour market experience rather than to training. Thus, we see two competing explanations for improving labour market status. A resolution of these alternative attributions requires longitudinal data and analytical methods such as those advocated by Singer and Willett (2003).

What is not known about the SOS sample of participants in lower certificate programs is their educational and social background. A more nuanced view of the roles of lower certificate programs in the transition from compulsory education and into the labour market is desired. The studies by Stanwick (2005), Sherman (2006) and Karmel and Nguyen (2006) were based on SOS data. The LSAY data sets have information on a stratified sample of young people. The proportion whose first post-school qualification was a lower certificate is modest, but an advantage of this data set is that it covers more than 10 years and includes information on family background and school achievement. It also includes information on longer term education and labour market outcomes. In addition, the sample includes young people who

did no post-school education or training who may serve as a control group. Any differences in the social and educational characteristics of those who enrol in lower certificates and of those who undertake no training must be statistically controlled in order to assert that any observed differences in outcomes between the groups are attributable to training.

The Emerging VET Context and Lower Level Qualifications

Lower certificate programs serve several purposes within the VET sector. Some young people have low levels of literacy and numeracy skills and may lack other work-related skills, and lower certificates provide a means of developing their skills and improving their employability. This role might best be described as labour market orientation. In some fields, employers are reluctant to hire Year 12 completers as apprentices and expect recent school leavers to undertake pre-apprenticeship programs. Lower level non-apprenticeship certificate courses are thus a pathway into apprenticeships and serve a sorting and selection role (Dumbrell, 2007; Smith, 2007). There are anecdotal reports of young people undertaking short lower certificate courses in order to gain skills that will enable casual and part-time employment, for example in hospitality, while they undertake other study, perhaps at university. Such uses of lower certificates might be described as short-term and instrumental, rather than vocational. It is difficult to gather data on the extent of this use of lower certificate programs.

Recent reviews of the VET sector have suggested that it needs to grow very substantially to meet the human capital demands of Australian industry, especially at the diploma and associate degree level (Hon. Andrew Robb, 2007; Shah & Burke, 2006). However, the sector faces severe challenges in achieving the required growth, in part because its labour force has a very skewed age profile and it will face substantial staff losses through retirement in the next few years (Guthrie *et al.*, 2006). How the sector will sustain lower certificate programs when faced with the need to support increasing numbers of higher level courses is a dilemma for managers in the sector. If lower certificate programs are found to be marginally effective, the decision to reduce their profile across the sector may be an easy one. If, however, lower certificate courses are found to be effective, especially for early school leavers and low academic achievers, any decrease of VET sector provision in this segment of the training market will leave a gap that will need to be filled by other agencies.

In order to address the issue of the relative effectiveness of lower certificate programs and Year 12 completion to labour market outcomes, the following research questions are posed.

Research Questions

1. What are the socio-demographic and school related characteristics of the young people whose first post-school qualification is a non-apprenticeship lower certificate course?
 - a. In what ways do these characteristics differ from those of young people who do other levels of non-apprenticeship VET study and from those who do no post-school study? (Do lower certificates provide a pathway for early school leavers and low academic achievers?)
2. What are the proportions of lower certificate participants in mixed-field and other vocational fields of study?
3. What proportions of participants in lower certificate VET courses, mixed-field and vocational, complete them?
4. What proportions of lower certificate enrollees, mixed-field and vocational, later participate in higher level certificates and Australian Apprenticeships?
5. Taking into account socio-demographic and school-related factors, how do the employment status and earnings of lower certificate participants compare with those of young people who do no post-school study?

Data, Scope and Methods

Data from LSAY participants who were in Year 9 in 1995 (the Y95 cohort) are used. This was a stratified sample, based on state or territory and school sector. Approximately 300 schools were selected for participation in the program. In the first year of the survey and while at school, 13,613 survey participants completed achievement tests and responded to written questionnaires about their aspirations and family backgrounds. From 1997 they have been interviewed annually by telephone. By 2004, 4,660 people remained active in the sample. Sample weights have been used to correct for over-sampling of minority groups in the original sample and for differential attrition over the 10 year life of the survey.

When young people leave school, they may choose to:

- undertake no further formal education and training (the no post-school study group);
- undertake Australian Apprenticeships (apprenticeships or traineeships);
- enrol in non-apprenticeship VET sector courses offered by TAFE institutes or private providers; or
- go to university.

The group of interest in this study are those young people whose first formal post-school program was a non-apprenticeship VET sector course taken at AQF level I or II. Participants' involvement in education and training was monitored up to and including 2001, and their subsequent education and labour market involvement was tracked to 2004. Participants in lower certificate TAFE courses are compared with the no post-school study group on both socio-demographic characteristics and education and labour market outcomes.

Data on socio-demographic and school-related characteristics and on education and labour market outcomes are tabulated for the groups of interest.

Results

Based on an analysis of the sample representative of young people who were in Year 9 at school in 1995 (the Y95 cohort), 21 per cent did no post-school education or training and 22 per cent enrolled in a non-apprenticeship VET program. Just over 20 per cent undertook an Australian Apprenticeship and 40 per cent enrolled in a university course. Four per cent of the sample (18% of all non-apprenticeship VET participants) commenced a lower certificate course as their first formal post-school qualification and two per cent of the sample (almost 9% of non-apprenticeship commencers) reported doing a certificate program but did not know the level of their program. The relatively high proportion of young people who do not know the level of their program imposes a limitation on the analyses reported below. Inspection of the characteristics of participants in higher certificate, lower certificate, and certificates of unknown level, suggests that many of the enrolments in certificates of unknown level are likely to be lower certificates. However, this assumption cannot be made with sufficient confidence to enable these programs to be treated as lower certificates. Thus, they are reported separately in this paper.

Characteristics of lower certificate participants

Selected characteristics of young people whose first formal post-school course was a lower certificate are compared with the sample as a whole, those who did no post-school study, and those who undertook other levels of non-apprenticeship courses in Table 1 (socio-demographic characteristics) and Table 2 (school-related characteristics).

The distribution of individuals between various post-school pathways is not uniform. Participation in university courses and apprenticeship programs is not reported in this paper, but females are more likely than males to enrol in university courses, slightly more likely than males to do traineeships, but much less likely to undertake apprenticeships (Curtis, forthcoming). From Table 1 it is apparent that males are slightly over-represented in the no post-school study group and under-represented in non-apprenticeship VET courses.

Compared with their proportions in the sample, non-metropolitan youth are more likely not to do any form of post-school study than metropolitan young people. Non-metropolitan young people are also less likely to go to university than their metropolitan peers. They do participate in apprenticeships and traineeships to a slightly greater degree than metropolitan residents. Those young people from regional and rural locations who do take non-apprenticeship VET courses are more likely than metropolitan youth to take lower certificate programs.

Table 1 Selected socio-demographic characteristics of young people grouped by first post-school course (percentages)

	Sample	No post-school study	Diploma	Higher certificate	Lower certificate	Certificate - level unknown
Sex						
Female	51	48	56	61	54	54
Male	49	52	44	39	46	46
Indigenous status						
Non-Indigenous	98	97	99	98	97	96
Indigenous	2	3	1 [#]	2 [#]	3 [#]	4 [#]
Location						
Metro	55	49	66	59	45	51
Regional	24	28	19	20	25	23
Rural	21	23	14	21	30	26
Parental education						
Incomplete secondary	39	49	43	38	50	50
Complete secondary	27	29	27	29	31	32
Technical or trade	9	9	7	9	8	10 [#]
Higher education	25	14	23	25	11	8 [#]
Parental occupation						
White-collar, high skill	46	35	43	39	42	44
White-collar, low skill	17	17	19	17	24	16
Blue-collar, high skill	20	25	20	23	14	29
Blue-collar, low skill	16	23	19	21	19	12
Home language						
English	89	91	83	86	95	89
NESB	11	9	17	14	5 [#]	11 [#]
N (weighted)	6876	1471	657	445	274	130
Row percentage	100	21	10	6	4	2

Notes: Weighted percentage frequencies based on a sample of 6876 individuals.

Figures are column percentages within each set of categories.

These percentages are based on small cell frequencies.

Parental education and occupation are related to the choice of post-school pathway. Children of university educated parents are rather unlikely to be among those who do no post-school education or training. When they do non-apprenticeship courses, they are likely to enter diploma level programs and are unlikely to do lower certificate courses. Conversely, children of parents who had lower levels of education are more likely than others to do no post-school study themselves and, if they do enter non-apprenticeship VET, to do lower level certificate courses. A similar, although slightly weaker, pattern of participation is seen in comparisons of pathways chosen by the children of parents in higher and lower status occupations.

Young people from non-English speaking home backgrounds are less likely than others to do no post-school study. They are much more likely to go to university, but less likely to do apprenticeships. When they enrol in non-apprenticeship VET courses, they gravitate towards diploma level courses. These trends are the inverse of what is observed for young people from English-speaking home backgrounds. It should be noted that the classification of English- versus non-English speaking is rather coarse. Marjoribanks (2004) noted some

variation in educational pathways and outcomes among different language background groups.

Early secondary achievement is strongly related to post-school pathways. Thirty-nine per cent of the young people who do no post-school study are from the lowest achievement quartile. Many high achieving youth go to university, and they are under-represented in the other major pathways. Non-apprenticeship courses provide a pathway for youth in the lowest two achievement quartiles and lower certificates do appear to open a door to post-school study for low achieving students, who make up 38 per cent of the lower-certificate contingent and 41 per cent of the group who do not know the level of their qualification.

There is also a strong relationship between school completion and participation in lower certificate programs. Most young people surveyed (almost 80%) had remained at school to the end of Year 12. Year 12 completers make up slightly more than their sample proportion in diploma level and higher certificate programs while school non-completers, who constitute just over 20 per cent of the sample, make up just over 40 per cent of the lower certificate and certificates of unknown level groups.

Table 2 Selected school-related characteristics of young people grouped by first post-school course (percentages)

	Sample	No post-school study	Diploma	Higher certificate	Lower certificate	Certificate - level unknown
Achievement quartile						
Lowest quartile	25	39	29	33	38	41
Second quartile	25	28	31	30	36	28
Third quartile	25	19	25	20	18	19
Highest quartile	25	14	15	17	8	13 [#]
Year 12 intention						
No specific intention	25	40	21	28	41	30
Intends completion	75	60	79	72	59	70
Any VET in School						
No VET study	76	65	70	70	64	71
Some VET study	24	35	30	30	36	29
Year level attained						
Year 10 or less	12	22	3	10	25	19
Year 11	9	16	4	6	17	19
Year 12	80	62	93	84	59	61
School sector						
Government	68	81	64	72	80	78
Catholic	20	13	25	18	12	15 [#]
Independent	13	6	11	10	8	7 [#]
Post-school study intent						
None	15	27	14	12	23	14
University	52	33	47	44	31	38
Apprenticeship	10	13	8	9	11	25
Other TAFE	17	21	24	27	28	18
Other course	6	7	7	8	7 [#]	5 [#]

Notes: Weighted percentage frequencies based on a sample of 6,876 individuals.

Figures are column percentages within each set of categories.

These percentages are based on small cell frequencies.

Young people who studied VET subjects while at school were more likely to enter the labour market without further training than those who did no VET study at school. However, this cannot be interpreted simply. VET study while at school may have provided young people with the skills they required for the employment they wanted. Conversely, the young people who did VET subjects at school were more likely than the non-VET students to have lower levels of achievement, and this may be the factor related to doing no post-school study or

training. The young people who do enter non-apprenticeship post-school VET programs are slightly more likely to have taken VET subjects while at school.

Other factors that are related to participation in lower certificates include school sector, Year 12 completion intention and post-school study intention. These factors are themselves related to early (Year 9) academic achievement, as is Year 12 completion, and it seems likely that low early academic achievement is the main factor related to later participation in lower certificate programs. Thus, it appears that lower certificate programs do provide a post-school education and training pathway for school non-completers and low academic achievers. Whether this pathway leads to later labour market success is addressed below.

Fields of Study of Lower Certificate Participants

The fields of study, classified using ASCED major groups (ABS, 2001), pursued by young people enrolled in lower certificate programs are shown Table 3. The most common fields of study over the three course level groups are food and hospitality, management and commerce and engineering and related technologies, together accounting for just over half of all enrolments. Management and commerce programs are much more common among Certificate II than Certificate I participants. The small number of enrolments identified as mixed field is quite surprising. Stanwick (2005, p. 19) showed that 45 per cent of Certificate I and 10 per cent of Certificate II enrolments were in mixed field courses while Karmel (2007, p. 11) estimated that over 10 per cent of school non-completers, those most likely to enter lower certificates, were enrolled in mixed field courses. It seems likely that many of the young people, for whom the field of study was not stated, were undertaking mixed field programs. Almost 10 per cent of all enrollees did not state their field of study.³

Table 3 Fields of study of participants in lower level non-apprenticeship VET courses (%)

Field of Study (ASCED)	Certificate I	Certificate II	Certificate, level unknown	Lower and unknown certificates
Natural & Physical Sciences	0	1	2	1
Information Technology	5	6	2	5
Engineering and Related Technologies	13	4	16	10
Architecture & Building	10	3	10	7
Agriculture, Environmental and Related Studies	3	6	5	5
Health	1	1	7	3
Education	2	0	0	1
Management & Commerce	13	30	20	22
Society & Culture	5	6	3	5
Creative Arts	8	10	8	9
Food, Hospitality & Personal Services	25	26	17	23
Mixed Field Programs	0	1	0	0
Not stated	15	5	10	9
Total %	100	100	100	100
Total N	110	155	129	394

Completion Rates of Lower Certificate Participants

The rates at which young people complete lower certificates (and certificates of unknown level) are shown in Table 4. Overall three-quarters of commencers completed these programs, with the rate being slightly lower (65%) for Certificate I qualifications and slightly higher for Certificate II awards. These completion rates are substantially higher than those reported elsewhere (eg Stanwick, 2005, p. 13). He estimated longer term completion rates of 35 and 44 per cent for Certificate I and II courses respectively. Two reasons are postulated for the higher completion rates found using LSAY data. First, young people are monitored over

³ It is possible that in the early interviews for this cohort, vocationally non-specific fields were not classified.

longer periods (from 1996 to 2004 for the Y95 sample) and we observe some respondents deferring and later resuming their studies. Second, some young people who withdraw from programs shortly after commencing them may not report those commencements in their annual interviews. Using self-report data may lead to over-estimations of completion rates.

Table 4 Completion rates for lower certificate participants (%)

	Certificate I	Certificate II	Certificate, level unknown	Lower and unknown certificates
Completed	65	86	71	75
Withdrawn	35	14	29	25
Total (%)	100	100	100	100

Note: N = 394

Completion rates for selected fields of study (in which there were adequate numbers of candidates) are shown in Table 5, along with a completion rate for all other fields. For the selected fields, completion rates vary from 70 to 90 per cent. For the remainder, including those cases where the field of study was not specified, the completion rate is 48 per cent. Completion of courses for which no field of study was given is quite low, at 15 per cent. While it is believed that these courses include mixed field commencements, the data are too sparse to be confident about asserting such low completion rates for mixed field courses.

Table 5 Completion rate by field of study for lower certificate qualifications (%)

Field of study of first post-school course	Completed	Withdrawn
Engineering and Related Technologies	86	14
Architecture & Building	72	28
Management & Commerce	90	10
Society & Culture	70	30
Creative Arts	81	19
Food, Hospitality & Personal Services	81	19
All other	48	52
Total (%)	75	25

Note: N = 402

Progression from Lower Certificates to Further Education and Training

The labour market outcomes following lower certificate qualifications are regarded as modest and the view is taken that study at a higher level is required to contribute to successful employment outcomes (Woods, 2007). In this section, the transition from a first formal post-school qualification at a lower certificate level (or certificate of unknown level) into further education or training is reported (Table 6). Just less than 40 per cent of young people whose first course is a lower certificate proceed to some form of further education or training. The forms of further study or training include apprenticeships, other non-apprenticeship VET courses, and university study. Overall, there is little difference in progression rates between first course completers and non-completers.

Table 6 Further study following a lower certificate first post-school course (%)

Subsequent study	Completion status of first course		
	Completed	Withdrawn	Total
No further study	61	64	62
Apprenticeship	8	10	9
Traineeship	7	9	7
Other VET study	21	13	19
University study	2	5	3
Total (%)	100	100	100

Note: N= 402

The level and type of any subsequent study is of interest. It is normally expected that subsequent courses would be at a higher level than the first course, especially as the first

course is a lower certificate one and as these certificates are expected to fulfil a role as a stepping stone into “qualifications of some substance” (Karmel, 2007, p. 11). The levels of subsequent programs of the 38 per cent of lower certificate commencers who progressed to a further program are shown in Table 7. In this table, certificate I and II programs have been combined.

Table 7 Progression from a first lower certificate to a second post-school course (%)

Level of first post-school course	Level of second post-school course					Total
	Bachelor	Diploma	Higher certificate	Lower certificate	Certificate, level unknown	
Lower certificate	8	7	32	39	14	100
Certificate - level unknown	0	15	21	32	32	100
Total %	6	8	29	38	18	100

Note: N = 156

The three categories of certificate levels for the subsequent post-school program shown in Table 7 include apprenticeships, traineeships and non-apprenticeship programs. It is interesting to note that over half of those who progress from an initial lower certificate (or certificate of unknown level) course move into a subsequent program also at a lower certificate level, although 40 per cent of them are apprenticeships or traineeships and therefore have a workplace learning component.

From the two tables above, it is apparent that just over one-third of young people who undertake initial lower certificate programs continue to further education or training, and that of them, one-half enter another lower certificate. Thus, only about 17 per cent of initial lower certificate commencers move into subsequent study at a higher level. This finding is consistent with that reported by Stanwick (2005).

Longer Term Labour Market Outcomes following Lower Certificate Participation

In order to investigate the influence of lower certificate participation compared with moving directly into the labour market from school, several tabulations are presented. The outcome variable, labour market engagement, was dichotomised as either full-time engagement or not fully engaged. Those fully engaged may have been working full-time, studying full-time or working part-time and studying. Those not fully engaged may have been working part-time, studying part-time, unemployed and seeking work, or out of the labour market. Some young people are out of the labour market because they are caring for their own children. These individuals were removed from the analysis. This left 1,076 individuals in the analysis; 823 of them had undertaken no post-school education or training and 253 had enrolled in a lower certificate non-apprenticeship qualification as their first post-school course. The factors that were believed to be influential on labour market activity were sex, because of a segmented labour market; general ability, for which Year 9 achievement (classified as either low or high) was taken as a proxy; school completion; and whether a lower certificate course had been taken. Because of a close relationship between general ability and school completion, these two variables were included in separate analyses. The effect of school completion was included in Table 8 and the effect of general ability in Table 9.

Some simple cross-tabulations on labour market engagement by each of lower certificate participation, sex, school completion and general ability were conducted separately. School completion had the strongest influence (an 8.5% greater rate of full-time engagement for school completers), followed by general ability (5.5% advantage for high ability students), sex (a 4% advantage for males) and finally lower certificate participation (1.5% advantage for lower certificate participants). Of more interest than the separate influences of these factors is the influence of lower certificate participation for low academic achievers and for school non-completers.

The data in Table 8 indicate that females who do not complete Year 12 and who undertake a lower certificate course fare less well in the labour market, by 13 percentage points, than

those who enter the workforce directly. For those who completed Year 12, however, participation in a lower certificate is associated with an 11 percentage point gain in labour market engagement. Female non-completers are at a 20 percentage point disadvantage in full-time labour market engagement compared with Year 12 completers who do no post-school study.

Male non-completers, whether they enter the labour market directly or enrol in lower certificate courses, do equally well in the labour market. Male school completers who enter the labour market appear to fare slightly better (by three percentage points) than those who participated in lower certificate programs. The effect is very small and unlikely to be significant. Male non-completers who do lower certificate courses fare slightly less well (by six percentage points) in the labour market than do Year 12 completers who do no further study.

Table 8 Labour market engagement (2004) by post-school activity, school completion and sex

Sex	School completion status	Post-school activity	Engagement		Total
			Not fully engaged	Fully engaged	
Female	Did not complete Year 12	No post-school study	29	71	100
		Lower certificate	42	58	100
	Completed Year 12	No post-school study	22	78	100
		Lower certificate	11	89	100
Male	Did not complete Year 12	No post-school study	22	78	100
		Lower certificate	22	78	100
	Completed Year 12	No post-school study	16	84	100
		Lower certificate	19	81	100

A similar analysis to that presented above but using general ability rather than school completion is summarised in Table 9. For female low achievers, lower certificates appear to confer an advantage of nine percentage points over direct entry into the labour market. There is little difference in the labour market engagement of female high achievers, whether they have entered the labour market directly from school or enrolled in lower certificate courses. For male low achievers, lower certificate enrolment appears to confer a very slight advantage, of four percentage points, over direct labour market entry. For male high achievers, direct entry into the labour market is associated with an 18 percentage point advantage over lower certificate participation.

Table 9 Labour market engagement (2004) by post-school activity, general ability and sex

Sex	Achievement	Post-school activity	Engagement		Total
			Not fully engaged	Fully engaged	
Female	Low achievers	No post-school study	29	71	100
		Lower certificate	20	80	100
	High achievers	No post-school study	16	84	100
		Lower certificate	17	83	100
Male	Low achievers	No post-school study	20	80	100
		Lower certificate	16	84	100
	High achievers	No post-school study	15	85	100
		Lower certificate	33	67	100

It is worth noting that the effects observed for lower certificates compared with no post-school study by school non-completion and low academic achievement are not consistent. It might be expected that the outcomes for lower achievers and school non-completers would be similar. Female non-completers appear to be advantaged by direct labour market entry, while female low achievers are advantaged by lower certificate participation. For males, the only

effect of substantial magnitude is for higher achievers, for whom direct labour market entry confers an advantage over lower certificate participation.

The specific research question was whether lower certificates were an appropriate vocational equivalent of Year 12 completion. The data in Table 8 show that school non-completers who did lower certificates fare less well than school completers who did no further study. The early secondary achievement scores in reading and mathematical literacy were compared for these two groups. There were significant differences in reading but not mathematical literacy between the groups, with Year 12 completers having higher scores. The effect size for reading was 0.2. It seems unlikely that this effect is adequate to explain the later superior performance in the labour market.

Summary of Results

There are modest differences in the socio-demographic and school-related characteristics of the young people who undertake lower certificate courses and those who do no post-school study. Parental education and occupation have small influences. Intention to complete school and intentions for post-school study also have modest influences on entry into lower certificate courses rather than doing no post-school study.

Three fields of study, namely food, hospitality, and personal services, business and management, and engineering and related technologies account for over half of all lower certificate commencements. Few individuals reported being enrolled in mixed field courses, although about ten per cent of enrolments were not classified and these are thought likely to be mixed field programs.

Previous studies have reported relatively low completion rates (about 40%) for lower certificate non-apprenticeship courses. In this analysis, about three-quarters of enrolments resulted in completions, the figure being lower for Certificate I and higher for Certificate II courses. It is thought that the longer duration over which progress was monitored may have resulted in more completions being recorded. It is also likely that young people who drop out of courses shortly after commencement may not report those enrolments.

Just over one-third of people whose first post-school program was a lower certificate non-apprenticeship course progressed to a subsequent program. Most subsequent programs were also at the lower certificate level, some being further non-apprenticeship courses and others being apprenticeships and traineeships. Only 17 per cent of lower certificate participants went on to higher level programs.

A policy question of interest is whether lower certificates provided a labour market advantage, compared with direct entry to the labour market, for low achievers and school non-completers. The findings are ambiguous. For male low achievers and school non-completers, there is little difference between lower certificate commencers and those who did no post school study. For females, a different pattern is apparent. Female school non-completers who entered the labour market directly fared better than those who enrolled in lower certificate programs, but female low achievers who did lower certificates did a little better in the labour market than those who did no post-school study.

For both males and females, participation in non-apprenticeship lower certificate courses following school non-completion resulted in poorer long-term labour market outcomes than were experienced by school completers who did no post school study. This suggests that lower certificate courses do not meet Karmel's test of being "qualifications of some substance" (Karmel, 2004, p. 8).

Implications

The prevalence of young people who do not know the level of the certificate programs in which they enrolled is a matter of concern. It suggests that these clients of the VET system are not well informed consumers, and in any market, informational asymmetry does not bode

well for smooth market functioning. It seems that more could be done to inform consumers in this market.

Lower level certificate programs do provide initial portal into post-school education and training for low academic achievers and school non-completers. However, they do not provide a substantial stepping stone into further training at a higher level. Their role in contributing to longer term labour market success for school non-completers and for low achievers is unclear. If they do provide an advantage over direct entry to the labour market, it is a modest one. Lower certificates do not overcome the disadvantage of school non-completion.

From a policy perspective, the choice is not limited to the alternatives of Year 12 completion or post-school lower certificate non-apprenticeship courses. Australian Apprenticeships, at various AQF levels, provide both training and labour market experience. The factors that limit access to apprenticeships require investigation as that pathway may be a more productive one than non-apprenticeship lower certificates for school non-completers.

It is not possible to be assertive about the contribution of lower certificate programs to longer term labour market success. It seems that lower certificates are used for a variety of purposes. For some young people, lower certificates are used to remediate a lack of basic literacy and numeracy skills. For some other young people, lower certificates are used as apprenticeship screening and selection programs. Yet other young people may use them in an instrumental way to gain qualifications that enable short term work goals to be achieved while working towards quite different career goals. These roles are difficult to disentangle and may contribute to the ambiguity in longer term labour market outcomes reported here.

It is clear from the analyses presented in this paper that lower certificate programs do not provide the same level of skill development or the same access to subsequent education and training programs as Year 12 completion does. The young people in this study undertook their senior secondary education in the late 1990s. Since then, there have been many changes to senior secondary offerings. Senior secondary programs now include more vocational opportunities, through VET in schools subjects, through more vocationally-oriented certificates such as the Victorian Certificate of Applied Learning, through the recent expansion of school-based apprenticeships, and most recently through the introduction of the specialist senior secondary Australian Technical Colleges. These in-school initiatives may replace some of the roles ascribed to post-school, lower level, non-apprenticeship VET sector courses. If these initiatives do replace some of the roles of lower level courses, there may be a case for reviewing their place in the post-school VET landscape.

More research is required, using larger samples of young people and taking into account a broader range of variables. In particular, the intervening labour market experiences of young people, between leaving school and reaching longer term labour market goals, need to be considered in future analyses. These analyses will be undertaken in the context of an emerging VET sector that will need to accommodate the training needs of industry for more people with higher levels of skills while managing challenges to the capacity of the sector.

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