

Research Insights

Does school-based Vocational Education and Training payoff in the long-run?

Around a quarter of Australian students participate in school-based Vocational Education and Training (VET). In this study we evaluate the long-term educational and labour market outcomes of participation in school-based VET using data from the Longitudinal Surveys of Australian Youth (LSAY).

Broadening the view of VET outcomes

Since the global financial crisis, youth (15-24 years) unemployment rates have remained stubbornly above 10% in Australia (currently 12%)—or more than double the rate for the entire population. The transition to work can be especially troublesome for young people who are not suited to higher education, for example, because they find academic study difficult or are reluctant/unable to relocate to access university. These students are forced to make early career choices with limited work experience and training, either to find a job or choose a post-secondary vocational education and training (VET) course that prepares them for work in a specific job. This is where upper-secondary (year 11 and 12) VET courses can play a vital role in helping students to gather job specific information and skills to help them find suitable post-secondary career pathways.

Studies on the outcomes of school-based VET programs in Australia and overseas to date, however, have focussed on initial labour market outcomes and not the longer-term impacts. In

this study, we extend this literature by estimating long-term education and labour market outcomes of school-based VET programs up to seven years after leaving school. To do this, we integrate data from three groups of 15 year-olds who participated in the Programme for International Student Assessment (PISA) in 2003, 2006 and 2009 and who were tracked annually in the Longitudinal Surveys of Australian Youth (LSAY). This produces a large initial sample of over 40,000 students with enough statistical power to measure long-run outcomes across different models of VET (classroom-based without workplace learning; classroom-based with workplace learning; and apprenticeships/traineeships) and across specific demographic sub-groups. The long-term outcomes from school-based VET study are estimated by comparing outcomes in the first seven years after school of those who did and did not participate in VET subjects in years 11 and/or 12, adjusting for differences in student characteristics between the two groups that may also influence outcomes. Measures of long-term outcomes are important to inform program design and funding decisions.

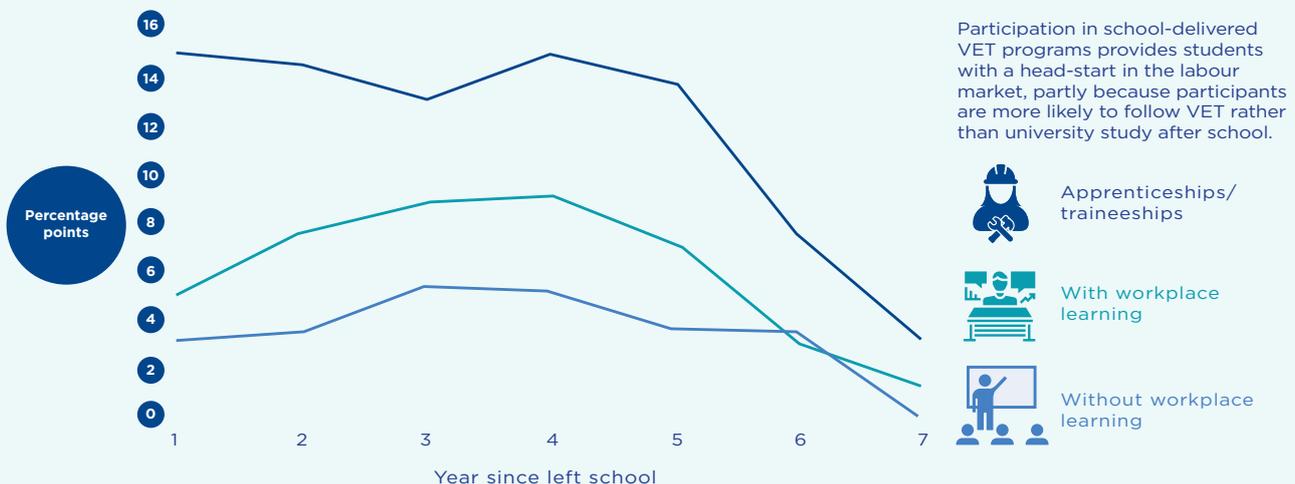
Key Insights

- 1 Students who participate in upper-secondary school VET have higher chances of finding full-time and satisfying work

Enrolling in classroom-based upper-secondary VET programs with no workplace learning is associated with a three-percentage point higher chance of full-time employment in the first year after school. However,

programs that include workplace learning have even better full-time employment outcomes—the rate of full-time employment associated with apprenticeships/traineeships and classroom-based VET with a workplace component is 15 percentage points and five percentage points higher respectively (Figure 1). Enrolling in an apprenticeship/traineeship in school is also associated with higher reported levels of job satisfaction in the first year after school.

Figure 1: Full-time employment outcomes of VET participation relative to non-participation



Financial value of head-start in the labour market

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The head-start in the labour market over the first seven years is estimated to provide upper-secondary VET participants with extra earnings that are equivalent to receiving a one-off payment at the time of leaving school of \$26,408 for VET without workplace learning, \$39,954 for VET with workplace learning, and \$60,294 for apprenticeships/traineeships.

2

VET provides a valuable head-start in employment, but it is not long-lasting

The head-start in employment associated with upper-secondary VET participation is, in part, because VET students are more likely to pursue post-secondary VET, which is shorter than a university degree course, or go straight to work after school. However, over time their head-start diminishes because non-participants find better jobs, either because they graduate from university studies or they change jobs. After seven years since leaving school, we observe no difference in the rates of full-time employment, job earning capacity, job satisfaction or rate at which a job is reported to be a career job.

After seven years out from school there is a negative association between VET participation and attainment of post-school qualifications of certificate III and above.

3

Longer-term benefits from upper-secondary VET depend on post-secondary study choices

For upper-secondary VET students who completed either model of VET with workplace learning, the continuation of VET study after school is associated with higher rates of full-time employment, career job attainment (Figure 2) and job satisfaction up to seven years after school. No such longer-term benefits are found for students who participated in post-secondary VET without a workplace learning component. A possible interpretation is that for those who continue study after school, workplace learning in upper-secondary VET provides the labour market information and employer connections to help them find post-secondary VET courses that better match labour market needs.

4

Gains from upper-secondary apprenticeship/traineeships are greater for males

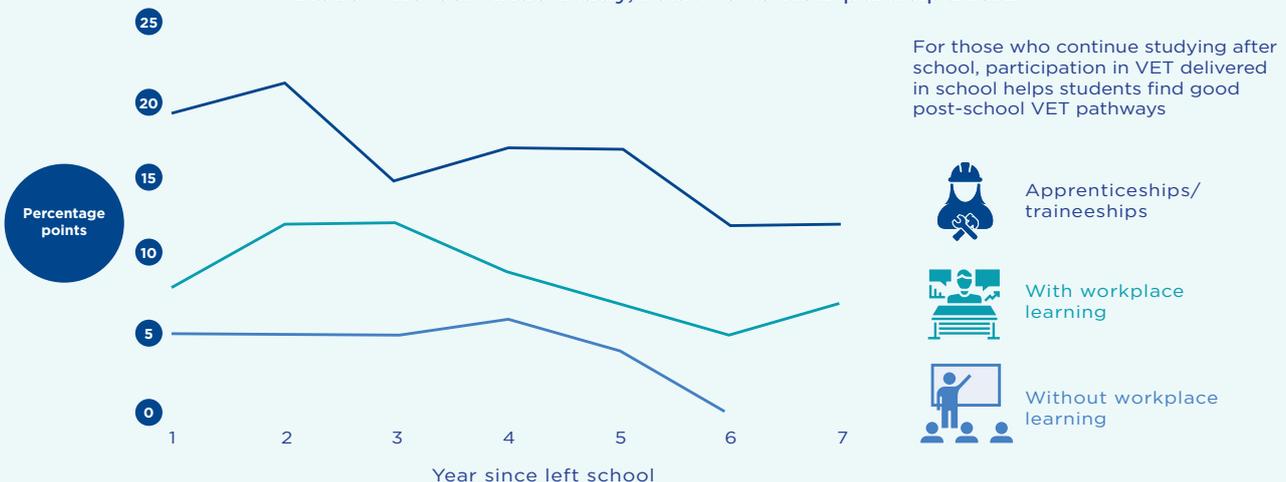
For young men seven years out from school, participation in apprenticeships or traineeships while in school is associated with jobs that pay around \$50,000 more than jobs attained by non-participants of VET programs with similar characteristics. There is no equivalent earning premium found for females who participate in apprenticeships or traineeships while in school. The difference in payoffs by gender are likely to reflect the variation in the pay of gender-based occupations that are associated with apprenticeship/traineeship programs—especially the higher pay of trade-based apprenticeships that are dominated by males. No statistical differences in year seven outcomes from upper-secondary VET are observed according to students' socio-economic status, indigenous status or metropolitan/rural locality.

5

VET participation only indirectly related to socio-economic factors

The study found no evidence that upper-secondary VET participation varies according to students' parental education, neighborhood traits, migrant and indigenous status. However, socio-economic status plays an indirect role in VET participation, which is clearly associated with lower academic achievement, post-secondary work/study intentions, and the availability of quality VET programs within the school.

Figure 2: 'Career job' attainment of VET participation among those who continue study, relative to non-participation.



What's the way forward?

Students who participate in upper-secondary VET get a head-start in the labour market that helps them achieve early financial independence, and this opportunity is far greater for students who participate in programs that include workplace learning. VET that includes workplace learning helps promote longer-term benefits (up to seven years out from school) for those who continue VET study after school, highlighting its importance in helping young people find good pathways through upper-secondary VET programs. Currently there are more than 1,000 nationally accredited VET courses, however, there is little information available on the employment outcomes that students can expect on graduation. Except for VET courses in the trades, there is a weak relationship between the occupation that VET courses are designed to prepare students for and the types of jobs attained. To further improve the outcomes of upper-secondary VET programs, we recommend the following next steps:



Explore barriers to accessing VET programs in schools

Given that school-based VET programs that involve workplace learning are associated with better employment outcomes, it is important to explore and understand the extent and nature of barriers to accessing these programs in schools.



Better understand the outcomes from school-based VET over a working life

The job-specific nature of VET—in addition to the lower levels of attainment of certificate III qualifications and above—means that VET graduates may be more sensitive to changes in skill demands, which could be a disadvantage for them in their later career.



Make course-level information on expected outcomes at graduation more widely available

Compile and make available course-level information on expected outcomes at graduation for students to help better inform their choice of VET pathways. This data is currently collected from graduate surveys, but is only published in highly aggregated form.

Further Information

Datasets:

Participants in the 2003, 2006 and 2009 Program for International Student Assessment are tracked annually from 15 to age 25 through the Longitudinal Surveys of Australian Youth (LSAY). The use of data from three PISA cohorts provides the statistical power to precisely estimate effects from upper-secondary VET participation up to seven years out from school.

Authors

Julie Moschion

Melbourne Institute: Applied Economic & Social Research, The University of Melbourne

Cain Polidano

Melbourne Institute: Applied Economic & Social Research, The University of Melbourne

Marco Castillo

Melbourne Institute: Applied Economic & Social Research, The University of Melbourne

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