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# Pathways from rural schools

Does school VET make a difference?

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## Publisher's note

Additional information relating to this research is available in *Pathways from rural schools: Does school VET make a difference? – Support document*. It can be accessed from NCVER's website <<http://www.ncver.edu.au/research/proj/nr1028s.pdf>>.

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- ✧ the 1998 Year 11, 12 and 13 cohort from the 20 participating schools for completing and returning the surveys.

# Executive summary

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This report investigates the medium-term outcomes of vocational education and training (VET) programs delivered by rural schools for youth and their communities. It is a more concise version of the detailed full report of the study. The full report is available as a support document on NCVER's website <<http://www.ncver.edu.au/research/proj/nr1028s.pdf>>.

The research was designed to:

- ✧ investigate the extent of linkages between rural youth's participation in school VET programs, participation in post-school VET courses, labour market status, and their retention in their local communities
- ✧ examine the features of school VET programs delivered in rural schools that enhance skills acquisition, influence rural youth's participation in post-school VET courses, and influence the ability of rural youth to secure local employment within their chosen industry area
- ✧ explore whether the outcomes of participation in rural school VET programs are the same as those reported for school VET programs more generally.

Former students from six rural school clusters in six states were surveyed, including those who participated in school VET programs and those who did not. Principals and school VET program coordinators provided information on the purpose, nature and outcomes of their VET programs. Case studies of three states, Western Australia, South Australia and Tasmania, are included in summary in this report.

Key findings from this research include:

- ✧ School VET courses intended as a pathway to local employment appear to be successful in terms of retaining students who otherwise may have left school early, and are assisting the transition from school to work.
- ✧ Work placements are a key component of the success of these programs, in terms of aiding the transition to local jobs and apprenticeships and thereby increasing youth retention in the community.
- ✧ Rural school students apparently undertake VET and work placements as a pathway to their goal of local employment. Their choice of VET field of study is, generally, closely aligned to their employment goals, as are their post-school education and training choices.
- ✧ Many of the outcomes of participation in VET for rural school students are similar to those for school students identified in other research.
- ✧ School students who participate in VET programs are more likely to indicate their intention to live in a rural location during their working life than those who do not undertake a VET program.

These findings suggest that school-based VET programs in rural areas have special potential to develop skills and pathways for the future workforce of rural Australia. The research also suggests that pathways from school-based VET programs in the primary industries area need to be more flexible to improve access to training and participation, particularly in remote areas. In addition, females need to be encouraged to consider areas of school VET study that lead to career paths in rural areas.

# Project overview

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The first section of this report includes an overview of the project including the purpose of the study, relevant issues and assumptions around school-based vocational education and training (VET), a brief overview of research literature as it applies to rural schools, and an outline of the study methodology. The second section outlines the key findings of the study and the conclusions and implications that flow from them. The final section presents three case studies illustrating pathways that young people have taken from rural school VET programs in Tasmania, South Australia and Western Australia. Linkages between the key findings and case study examples are noted in the text.

## Project scope and objectives

### Purpose of the study

The research sought to provide evidence of the medium-term outcomes (some two to three years after leaving school) for youth and their communities of VET programs delivered by rural schools. Its overarching purpose is to assess the community and individual impact of school VET programs in addressing rural community decline, and highlight implications for the VET sector, particularly in regional and rural Australia.

### Background to the study

Recent years have seen increased attention to transition pathways for youth from school to work. These initiatives are critical, given that the initial study or work destination of school leavers in their first year out of school is a key factor that affects their subsequent post-school outcomes (Abbott-Chapman et al. 1997). Young people are at high risk of not making a successful transition from school to work if they leave school before completing the final years and if, in their first year out of school, they are employed in part-time work only, or are unemployed or are outside the labour force (Curtain 1999). A number of such students are from rural areas. This study is particularly interested in transition pathways for rural youth, who in the past have been disadvantaged in terms of participation in post-secondary education, and in terms of employment outcomes (Cunningham et al. 1992; Lamb et al. 1998; Lamb & Rumberger 1999).

The project focuses specifically on youth transitions to work through participation in VET in Schools programs, which have expanded rapidly in Australia in recent years, from 26 500 students in 1995, to 169 000 students in 2001, with over 94% of all schools now involved in such programs (Australian National Training Authority 2001). This growth has been influenced by a variety of factors, including the decline in full-time employment opportunities for youth in the past decade or so (Roussel & Murphy 2000), and the introduction of the Youth Allowance in 1998. It is also part of Australia's broader focus on creating a more highly skilled and flexible workforce in order to respond to increasing international competition and the new global economy.

Very little research to date has focused specifically on rural youth and the pathways they take from school VET programs. In an earlier study by the researchers (Kilpatrick et al. 2002) there were indications that school VET programs in rural areas have contributed to youth retention at school.

There were also indications of a strong link between participation in a school VET program and local employment outcomes. This study further explores rural youth transition pathways from school to work, by comparing the outcomes of participation and non-participation in school VET programs by rural students.

## Contribution made by this research

This is a pilot study with a small sample size, and it is expected that it will give rise to subsequent larger scale research into the outcomes of school VET programs in both rural and urban areas. It is expected that knowledge gained from this study may be used by relevant industry and education bodies to inform the design, content and delivery of VET programs in rural schools, and by policy makers to inform decisions in relation to the provision of VET services in rural communities. An awareness of the inter-related social and economic outcomes of school VET programs in rural communities is likely to increase the collaborative efforts of government and private sectors, and ensure better use of limited funding and resources, as they address issues in relation to rural youth and rural community sustainability, including the ‘brain drain’ of rural youth to the cities.

## Relevant issues and assumptions

### Definition of school VET

For the purposes of this study, school VET courses are defined as those which result in, or lead to, a nationally recognised VET qualification, usually Australian Qualifications Framework (AQF) accreditation in terms of a certificate or statement of attainment. Students who participated in a school VET course are referred to as school VET students. Other students are termed school non-VET students. This definition of school VET is slightly broader than that currently used by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) which states that VET in Schools comprises Australian Qualification Framework programs that count towards the senior secondary certificate.

### Link between school VET and later study and employment pathways

Previous research shows that those who participate in school VET are more likely than those who have not participated in school VET to go on to post-school VET study, including apprenticeships (Lamb et al. 1998; Ball & Lamb 1999–2000; Fullarton 2001), and are more likely to be in employment, especially full-time (Fullarton 2001, Misko 2001, Enterprise and Career Education Foundation 2002). Research also shows the field or industry area undertaken for school VET is strongly related to the area of subsequent post-school VET study (Misko 2001) and employment (Ball & Lamb 1999–2000; Misko 2001; Enterprise and Career Education Foundation 2002). The issue this study sought to clarify is whether these findings hold true for rural VET students.

### What is ‘successful’ school VET?

In planning this research, the researchers perceived the need to consider new and expanded definitions of ‘successful’ school VET outcomes, in addition to existing definitions such as course completion rates, and further education, training, and employment outcomes. For example, is non-completion of a school VET course necessarily an unsuccessful outcome when non-completers leave school to take up employment and apprenticeship offers associated with their school VET program? Does the measurement of outcomes at different times in a person’s post-school life yield different results, and how important is it for research to look beyond short-term outcomes (in the following year) to the medium and longer term benefits? Should outcomes be measured in terms of both individual and community-wide benefits, in the light of recent research (Kilpatrick et al. 2002) suggesting that youth retention in rural communities may be a powerful outcome of school VET programs? In the case of rural students, who may leave for study or work experience and return to a



rural community in the future, the issues of short-term versus medium to longer term outcomes, and of community-wide benefits, as well as individual benefits of school VET programs, would seem to be particularly relevant. The current study is an attempt to examine some of these issues.

## Research context

There is a paucity of available research which is specifically on the outcomes for rural school VET students compared with urban students. This is despite the increasing rate of uptake of school VET in rural Australia (Frost 2000), the fact that rural students are more likely to undertake a school VET course than urban students (Ball & Lamb 1999–2000), and that research has shown rural students are disadvantaged in terms of post-compulsory education opportunities because of their lower senior school retention rates (Cunningham et al. 1992; Lamb et al. 1998). Many of the studies investigating the effectiveness of school VET are short-term destination surveys, often surveying students less than six months after they finish school. A limitation of much of the existing research is the lack of comparison between outcomes for school VET and school non-VET students. Despite these limitations, it seems reasonable to assume that the outcomes of much of the school VET research apply, at least to some extent, to both urban and rural communities.

Studies of post-school education and training outcomes of school VET students (both rural and urban) have generally found that in the year after completing school about half the cohort had gone on to further study, with a larger proportion of these going to TAFE rather than university (Polesel et al. 1998; Polesel et al. 1999; Gordon Institute of TAFE 2000). Other studies have suggested that school VET study is a pathway to post-school VET participation, with higher proportions of school VET students going on to post-school VET study (Lamb et al. 1998; Ball & Lamb 1999–2000; Fullarton 2001). There are also strong links reported between the industry area of the school VET course and further education and training (Misko 2001, Enterprise and Career Education Foundation 2002).

Studies of outcomes related to employment have tended to reflect favourably on school VET programs with higher employment levels, particularly full-time employment, reported for school VET students (Fullarton 2001). Research indicates that the link between school VET and employment increases beyond the first year out of school (Polesel et al. 1999; Fullarton 2001). Work placements in particular have been linked to positive employment outcomes (Misko 2001; Enterprise and Career Education Foundation 2002) for students after completion of the school VET program.

Other outcomes reported from school VET programs include those that accrue to individual students, such as self-confidence and self-efficacy (Misko et al. 1998; Misko 1999; Kilpatrick et al. 2001; Kilpatrick et al. 2002) and to teachers, schools and employers, such as teacher satisfaction, greater collaboration between students, teachers and employers, and opportunity for employers to encourage youth into their industry (Cumming 1992; Scharaschkin et al. 1995 [cited in Frost 2000]; Figgis 1998; Kilpatrick et al. 2002). Perhaps one of the most interesting outcomes of school VET programs, identified by a growing body of research, relates to the development of community social capital, in particular, networks within the community, between students and local employers, between employers and students' families, and between the participating businesses themselves, that build community capacity (Cumming 1992; Misko 1998a, 1998b; Centre for Research and Learning in Regional Australia 2000, 2001; Kilpatrick et al. 2001; Kilpatrick et al. 2002).

A number of factors impact on the nature and extent of school VET outcomes, including state/territory differences, participant details such as ethnicity, indigenous background, the effects of a disability, and gender, as well as early school leaving. Gender differences are particularly pronounced, with participation in school VET more likely to be a pathway to full-time work and apprenticeships for males than females, while females are more likely to go on to higher education (Lamb et al. 1998; Fullarton 2001; Enterprise and Career Education Foundation 2002). These

outcomes are linked to the gender differences apparent in choice of school VET study area (Fullarton 2001). For early school leavers, the literature in general indicates that they are at greater risk than school completers, in terms of their ability to enter and remain in the labour force (see, for example, Lamb & Rumberger 1999). However, a number of studies have shown that school VET students who leave early, particularly those in rural areas, are not disadvantaged in terms of employment outcomes, at least in the short term, with many leaving early to take up jobs related to their school VET course (Searston 1996; Smith 1996; Dwyer 1996).

## Research specifically on school VET for rural students

Existing research into school VET programs in rural communities has found benefits in terms of school-to-work transition, a greater variety of learning opportunities leading to improved school retention rates and, directly related to this, increased chances of small rural school viability (Kilpatrick et al. 2001). Research also indicates a strong link between participation in a rural school VET program and local employment outcomes, contributing to youth retention in rural areas (Both 1999; Goondiwindi State High School 2000; Kilpatrick et al. 2002). As noted earlier, a number of studies have identified the rural capacity building outcomes of school VET programs (Smith 1996; Kilpatrick et al. 2001; Kilpatrick et al. 2002).

Research identifies a range of factors that influence the effectiveness of VET programs in rural communities. Some of these, such as prevailing economic conditions, are largely outside the control of rural communities, while those more within their control include commitment and attitude towards school VET programs and the attendant issues of leadership, as well as factors relating to the availability and quality of the VET course provided. Student commitment has been linked to the relevance of the school VET program to their needs (Fullarton 1999), while broader school and community commitment is linked to their ability and desire to work together in the form of partnerships (Country Education Project Inc. & Youth Research Centre 2001; Kilpatrick et al. 2002). Factors relating to the availability and quality of the school VET courses in rural schools include issues of access and equity, resourcing, the need for more staff professional development, availability of suitable work placements, internal school organisational and travel issues, and difficulties faced by staff in keeping abreast of changes in the VET system (Country Education Project Inc. & Youth Research Centre 2001; Kilpatrick et al. 2002).

In short, there are indications from the small amount of existing research to suggest that school VET programs may be particularly beneficial for rural students and that rural schools, partly due to their strong local networks, may be well placed to deliver programs that promote favourable outcomes.

## Methodology outline

Former school VET and school non-VET students from six rural school clusters funded by the Enterprise and Career Education Foundation (one from each state) were mailed a survey questionnaire that collected current and retrospective factual and attitudinal data from students. The only variation to this was New South Wales where two small clusters were selected and the data from these combined for analysis. The study targeted those in Year 11, 12 or 13 in 1998. For the purposes of comparison, equal numbers of VET and randomly selected non-VET students from each cluster were surveyed. Excluding those returned to sender, 1333 surveys were distributed to equal numbers of former school VET and school non-VET students. The response rate of just over 20% (270 responses) varied according to school cluster, with similar response rates overall for VET and non-VET students and males and females. This response rate is considered typical for mailed out questionnaires (Funnell 1996).

Because of budget constraints, it was decided to target only small rural schools (located in communities with populations of 10 000 or less) within each cluster. In Tasmania, it was necessary

to select a community with a population greater than 10 000, because rural Year 11 and 12 students traditionally attend one of the senior secondary colleges located in the main population centres.

Survey data were supplemented by written documentation from schools within the cluster regarding the purpose, nature and outcomes of their VET programs or, where written documentation was not available, by verbal information from school principals or school VET coordinators. Survey data were analysed with the aid of quantitative data analysis software.

Documentation collected from each school cluster indicated that the stated purpose of the VET program in three of the clusters was to provide a pathway to local employment (South Australia, Western Australia and Tasmania). The other clusters' purpose was to provide general workplace skills and knowledge. The Tasmanian cluster had both these purposes. In addition, in Victoria and Queensland the VET program was also offered to provide an alternative to the mainstream curriculum. All clusters offered programs in hospitality/tourism and business/office skills. The South Australian cluster had a focus on engineering and the Western Australian cluster on primary industries to meet local employment needs. All clusters offered some technology or traditional trade VET courses. The Tasmanian, New South Wales, South Australian and Western Australian clusters offered work skills (a generic rather than industry-specific vocational course) in 1998.

The researchers devised five broad 'industry area' categories (technology and trades, primary industries, human services, business and clerical, and work skills/other) to represent school VET and post-school study areas, and industry of employment. These categories were based on the Australian Standard Classification of Occupations.

Some of the main limitations of the study include it being relatively small scale, such that the findings cannot necessarily be generalised to all rural schools and communities. The sample was self-selecting, so students who had done well after leaving school, for example, may have welcomed the opportunity to 'report' their success, and, conversely, the survey instrument may have discouraged participation by those with lower literacy levels. As the survey was mailed using addresses supplied by schools, the sample of respondents is weighted towards those who had remained in the same location as when they were attending school, or whose families were still in the same location. Finally, the study did not provide chronological links between study, employment and locality of residence.

# Project findings, conclusions and implications

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## Key findings

Many of the key findings are illustrated in the case studies at the end of this report. A detailed description of findings is provided in the full report.

The key findings include those relating to the *features* of rural school VET programs that contribute to successful outcomes and to the *outcomes* themselves, in terms of education and training, employment and rural youth retention/community development. These outcomes are reported for both rural school VET and non-VET students. Many of the outcomes of school VET programs in terms of further education and training and employment were similar to those of other research studies and not all are described here.

## Features of rural school VET programs

### *Purpose of school VET program*

As outlined earlier, there were three main purposes for school VET programs across the different clusters: a pathway to local employment, the provision of general workplace skills and knowledge, and an alternative to the mainstream curriculum.

School VET students in a cluster with the purpose *pathway to local employment* were more likely to report that their school VET course:

- ✧ influenced their decision to continue with senior secondary school
- ✧ helped improve their literacy and numeracy skills
- ✧ led to a job related to their school VET course.

Those undertaking a school VET program with this purpose and who participated in a work placement were also more likely to have received an offer of a job or an apprenticeship/traineeship through their work placement, and to have stayed in their home community.

All three clusters in the case studies provided at the end of this report intended their VET program to be a pathway to local employment. The South Australian and Tasmanian clusters demonstrate the value of these programs, particularly those that offered a work placement component.

### *Work placements*

Over half of all school VET respondents participated in a work placement (also called structured workplace learning). The case studies, particularly of the Tasmanian and South Australian clusters, give examples of how work placements are linked to post-school employment and education and training choices.

- ✧ Completion of a work placement appeared to be a pathway to initial employment on leaving school:
  - ◆ Half of the work placement students were offered employment by their employer.

- ◆ Females were more likely to receive offers of employment from their work placement and males were more likely to receive offers of an apprenticeship/traineeship.
- ✧ Work placement students were less likely to have completed Year 12 than other school VET students. About a third of work placement students who were offered a job or apprenticeship/traineeship while still at school appear to have accepted the offer and left school early.
- ✧ Despite half of the work placement students receiving a job offer from their employer, at the time of the survey (two to three years after they had left school) work placement students were no more likely to be currently employed full-time or to have commenced an apprenticeship or traineeship than other school VET students.
- ✧ Work placement students were more likely than other school VET students to have obtained employment in the same industry area as their school VET study.
- ✧ A higher proportion of work skills students (85%) did a work placement than those in a specific industry area. This may be because work skills students are not tied to any one industry and so have a greater pool of potential employers from which a placement can be sourced in rural areas.

### *School VET student motivation*

Respondents were asked to indicate what motivated them to do a school VET course. Compared with school VET students, those students who chose their school VET subjects for career reasons were:

- ✧ more likely to do a work placement and for this to have resulted in an offer of an apprenticeship or traineeship
- ✧ less likely to finish Year 12
- ✧ more likely to go on to post-school education and training.

The Tasmanian and South Australian case studies include examples of the post-school experiences of students who chose school VET for career reasons.

### *Gender*

There were clear gender differences in the choice of school VET courses. Females were more likely to choose business and clerical or work skills courses. Males were more likely to choose technology and trades or primary industry courses.

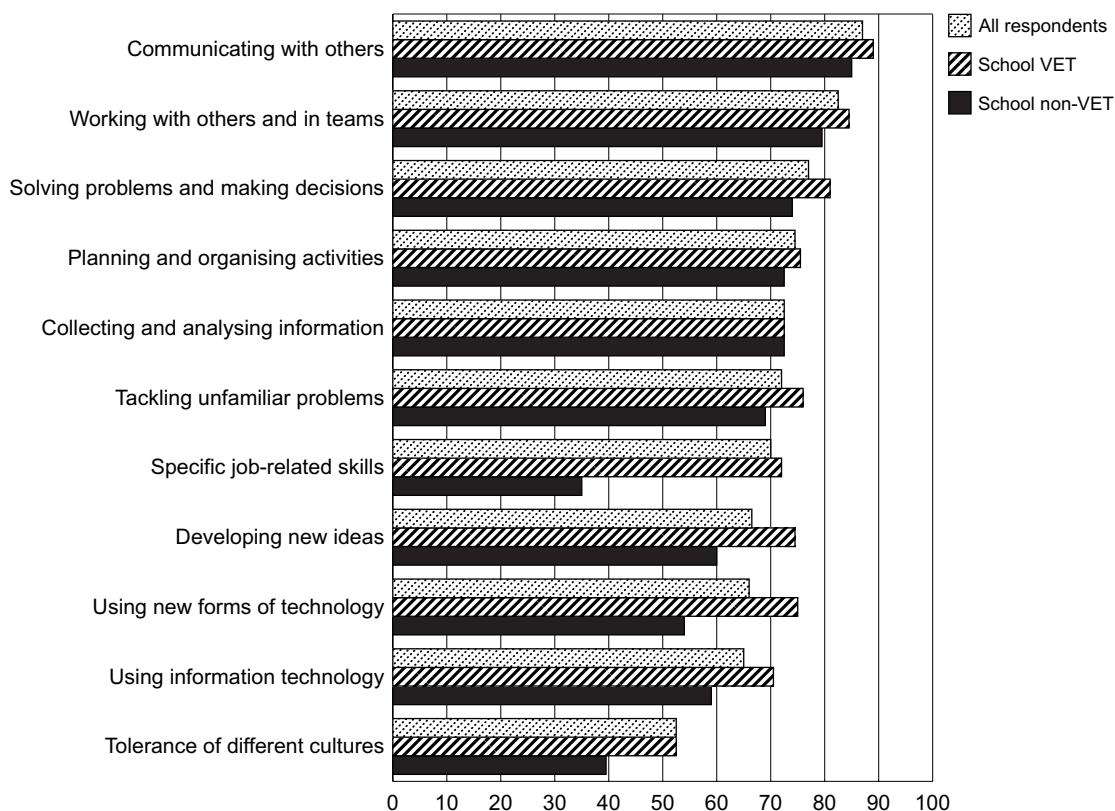
### *Education and training outcomes*

- ✧ Eighty-five per cent of all respondents had commenced post-school education or training, including those undertaking a traineeship or apprenticeship.
- ✧ School VET and school non-VET participants gave similar responses to most of the questions on the value of senior school in helping them develop generic and job-specific skills (see figure 1). However, more school VET than school non-VET participants agreed that school helped them in developing specific, job-related skills, developing new ideas and in using information technology and new forms of technology. Female school VET students in particular reported benefits from learning to use information technology and new forms of technology.
- ✧ School VET students were less likely to continue with post-school education and training in general, but more likely to go on to further vocational education and training than school non-VET students. All three case studies highlight these post-school VET pathways.
- ✧ School VET females' post-school education and training participation pattern was more similar to that of males (VET and non-VET) than to that of female non-VET respondents (see figure 2).
- ✧ Over one-third of all respondents had commenced an apprenticeship or traineeship since leaving school. Regardless of whether they did school VET or not, far more males than females went on to apprenticeships. There was also a gender difference in choice of apprenticeship and

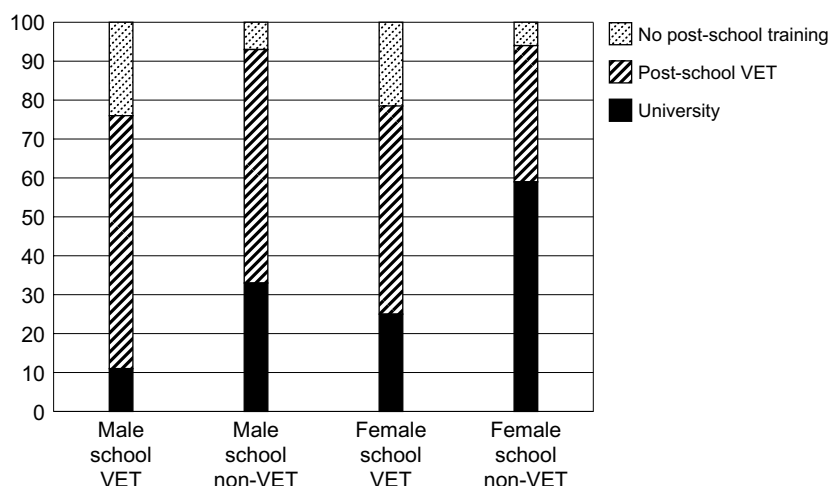
traineeship fields, with males principally choosing the area of technology and trades, followed by primary industry and human services, while females mainly chose business and clerical or human services. These points are illustrated in the case studies.

- ✧ School VET students were no more likely to enter apprenticeships/traineeships after leaving school than school non-VET students (see in particular the South Australian case study).

**Figure 1: Percentage of respondents agreeing that their Year 11/12 school studies helped them gain general and specific job skills**



**Figure 2: Post-school education and training by school VET participation and gender**



- ✧ Over half of the post-school education and training courses undertaken were in the same broad industry area as the school VET course; examples are included in the case studies. Seventy per cent of apprenticeships and traineeships undertaken were in the same broad industry area as the school VET course. There is a link between a school VET course in technology and trades or human services and a course in post-school education and training in the same area. For technology and trades this link is especially strong for males who go into apprenticeships and traineeships.
- ✧ Business and clerical school VET students were the most likely, and primary industry the least likely, to continue with any post-school education and training. The weak link between primary industries and post-school education and training is highlighted in the Western Australian case study.
- ✧ Of respondents who indicated their further education and training was related to their school VET course, one-third had received advanced standing or credit for the school VET course (such as time taken off their apprenticeship—see the South Australian case study). Those *most* likely to receive credit had undertaken school VET study in human services (mainly tourism and hospitality); those *least* likely to gain credit had studied in the business and clerical and work skills areas.

## Employment outcomes

The case studies provide illustrations of post-school employment experiences.

- ✧ Of all respondents, 89% were employed at the time of the survey. School VET students in general were no more likely to be currently employed than school non-VET students. All 31 early school leavers were employed.
- ✧ Male respondents were more likely to be involved in full-time employment than female respondents, in line with national labour force figures for this age group, and school VET students were more likely to be involved in full-time employment than school non-VET students, many of whom were studying at university.
- ✧ Most jobs in the technology and trades area were full-time and occupied by males, whereas the human services area was dominated by females in casual jobs. The gendered nature of employment outcomes is particularly apparent in the Western Australian case study.
- ✧ Of those school VET students currently working, 62% indicated that their job was in the same broad industry area as their school VET course. The industry area with the strongest link was human services, and with the weakest link, business and clerical.
- ✧ Females who did an industry-specific school VET course, as opposed to a work skills course, were more likely to be currently employed.

## Community outcomes

- ✧ At the time of the survey, two to three years after they had left secondary school, 80% of respondents normally resided in a rural area and 20% in a metropolitan area. Care has to be taken in interpreting these findings, because questionnaires were mailed to the last-known address of students as per 1998 school records, so there was some bias towards those who remained in the locality where they had attended school. Rural retention of youth through pathways to local employment are highlighted in all three of the case studies.
- ✧ Most students surveyed indicated their intention to live in a rural community at some stage in their working life, with school VET students more likely to intend to live in their school locality, and in a rural area more generally. In particular:
  - ◆ Female school VET students were the *most* likely, and female school non-VET students the *least* likely, to intend to remain in their home community.
  - ◆ A comparison of current postcode against school postcode showed that male school VET students were the most likely to move after leaving school (many to metropolitan areas for apprenticeships), closely followed by female school non-VET students, who were the most likely to move to metropolitan areas for university study.

- ◆ School VET males were the most likely to reside in a remote area.
- ✧ School VET respondents who intend to live in a rural area during their working life are more likely to have studied a school VET course in technology and trades, primary industry or work skills, than business and clerical or human services.
- ✧ School VET students were no more likely to have a current job in a rural area than school non-VET students.
- ✧ A significantly higher percentage of school non-VET students were involved in community activities while at school than school VET students.
- ✧ There appeared to be no relationship between community involvement at school and whether or not respondents remained in, or returned to live in, rural communities.
- ✧ Those students who moved to metropolitan areas were less likely to have any current community involvement than those who were living in rural or remote areas. The loss of community connectedness associated with this move is similar for school VET and non-VET students but particularly significant for school VET males.
- ✧ School VET students who intend to live in a rural area were less likely to continue with post-school education and training in general, but more likely to go on to further VET, than school non-VET students who intend to live in a rural area.

## Discussion and conclusions

The features of rural school VET programs that appear to influence post-school education and training, employment and community outcomes include the purpose of the school VET program, work placements, and course industry area. Student motivation and gender also influence outcomes.

School VET courses intended as a pathway to local employment appeared to be successful in terms of retaining students who otherwise might have left school early and in assisting the transition from school to work. Work placements are a key component of the success of these programs, in terms of both a transition pathway to local jobs and apprenticeships and in increasing youth retention in the community. These findings are illustrated in the case studies.

Many students are motivated to do school VET for career reasons, and it appears they undertake school VET and work placements as a pathway to their goal of local employment. Their choice of school VET industry area is generally closely aligned to their employment goals, as are their post-school education and training choices. In this context, the fact that a proportion of these students leave school before completing Year 12 to take up a job or an apprenticeship, should not be seen as a failure of school VET. Other researchers have focused on these students (Smith 1996; Searston 1996), whom Dwyer (1996) has termed 'opportunistic leavers', raising the need to consider new and expanded definitions of 'successful' school VET outcomes.

Gender and choice of school VET industry area are strongly related and appear to be related to post-school outcomes. Male school VET students predominantly choose the technology and trades areas that are associated with full-time employment and apprenticeships, whereas females tend to choose human services, business and clerical, and work skills programs that are associated with casual or part-time jobs. These are challenging issues for schools and communities, as both traditional gender occupational choices and industry occupational arrangements (such as the part-time and casual nature of hospitality jobs) play a key part in these outcomes.

In terms of further education and training and employment outcomes, the findings suggest that many of the outcomes of participation in school VET for rural students are similar to the outcomes for school VET students identified in other research studies. For example, school VET students were more likely to go on to post-school VET study (Lamb et al. 1998; Ball & Lamb 1999–2000; Fullarton 2001), and there was a clear link between area of school VET study and further education



and training (Misko 2001; Enterprise and Career Education Foundation 2002). The link was particularly strong for those who undertook apprenticeships and traineeships. A comparison with other research studies (Fullarton 2001; Misko 2001; Enterprise and Career Education Foundation 2002) indicates similarities in terms of employment outcomes, specifically the links between participation in a school VET course and full-time employment. The current study also supports research that links work placements with positive employment outcomes (Misko 2001; Enterprise and Career Education Foundation 2002), although this advantage appears to relate only to initial employment on leaving school. The three case studies at the end of this report illustrate the diversity of pathways for rural students, and the role of school VET courses in strengthening the transition from school to post-school life.

When the findings for school VET students from the current study are compared with the findings from short-term destination surveys (see, for example, Polesel et al. 1999), our survey shows an increase in employment and further education and training rates for students after three years out of school. This suggests that immediate post-school destination studies present a limited picture of the post-school experiences in regard to education and training, and employment. Another difference between our study and other school VET studies (Ball & Lamb 1999–2000; Fullarton 2001) was in the area of post-school apprenticeships and traineeships, where there was very little difference in the participation rate between school VET and school non-VET students. This suggests that apprenticeships in rural communities may still be accessed largely through family connections and networks, rather than as a result of school VET study.

There was less evidence of an association between school VET participation and the engagement and retention of rural youth in their communities than the researchers had expected. However, school VET students were more likely than non-VET students to indicate their intention to live in a rural location during their working life. When considered alongside other findings that rural students are more likely to choose VET than urban students (for example, Fullarton 2001), this suggests that school VET programs have special potential to develop skills for the future workforce of rural Australia. Further, there are indications that school VET in rural areas does make a positive difference in terms of employment for early leavers, and in terms of retention in the community for female school VET students.

The findings suggest that rural school VET courses are pathways to related education and training (and presumably careers, particularly in technology and trades areas) both for students who intend to live in a rural area during their working life and for those who do not intend to join the workforce in rural Australia. For example, school VET appears to be used by some students to gain skills for casual and part-time jobs that will help finance their studies in metropolitan areas. These students are more likely to have studied a school VET course in the business and clerical or human services areas than other areas. Thus, school VET programs have a role to play, both in providing education, training, and skills for the rural workforce and in assisting those students who wish to undertake further study in metropolitan areas. This suggests there is an opportunity for VET programs in rural schools to assist in the transition from school to further education and training and careers for a wide range of rural students.

## Implications

A number of implications arise from this study. As this was a pilot study of the post-school education and training and work experiences of students from small rural schools, further research with a larger sample is needed to test a number of the findings. These include the link between VET in rural schools and post-school apprenticeships and traineeships, and the effectiveness of school VET programs in meeting local skill needs. Such studies should ensure that data are captured for those not represented adequately in our survey, for example, for those who leave a school VET program before the end of Year 12 in order to continue the VET pathway in the workforce.

In addition, more longitudinal studies of post-school outcomes are needed (approximately five years after leaving school) for all rural students (school VET and non-school VET). These studies will need to use different methodologies, as questionnaires tend to favour those with higher literacy levels.

More research into community outcomes of school VET programs is required, especially in rural areas. Community outcomes include outcomes for industry and rural businesses as well as social outcomes, for example, building social capital through the retention of young people. In particular, further research is required into 'pathways' and 'mosaics' of post-school work, study and geographic mobility using techniques such as the chronological matrix of post-school activities suggested in the full report.

Notwithstanding the need for further, larger scale research, the current study captures important baseline data on rural post-school pathways. It is therefore suggested that this group be followed at regular intervals to capture post-school 'mosaics' and actual impacts on the rural workforce and rural communities. The fact that a number of respondents indicated they were prepared to participate in a follow-up study would facilitate such research.

Further research is also required into how to develop successful school–local industry/community partnerships in rural areas, in light of the positive outcomes reported from school VET programs whose purpose was to provide a pathway to local employment.

In addition to the implications for research, there are implications for VET systems. Findings from the study suggest that pathways from primary industries school VET courses must be more flexible to improve access to further training in this area, particularly for those who work in primary industries in remote areas.

Also, females need to be encouraged to consider areas of school VET study that lead to career paths in rural areas (e.g. trades and technology). Schools and communities have an obligation to ensure alternative career-oriented options are available for female students.

# Case studies

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Three case studies illustrating rural school VET pathways are provided, drawn from the Tasmanian, South Australian and Western Australian clusters. These clusters were chosen as case studies for different reasons: the Tasmanian cluster illustrates in some detail the main pathways for both school VET and non-VET students and highlights a variety of benefits of work placements for school VET students; the South Australian case study demonstrates the value of school VET programs provided as a pathway to local employment and the crucial role of work placements in these programs; and the Western Australian case study highlights a range of primary industry pathways as well as other pathways from school VET. Profiles of the sites provided at the beginning of each case study are based on details supplied in the methodology chapter in the full report.

## Tasmanian case study

The Tasmanian site is in an area of low average regional economic growth, with high youth unemployment and high levels of welfare dependence. Industries include primary industry, plus paper manufacturing in the large rural community. Expected future employment growth areas include hospitality and tourism, business, health and community services, as well as manufacturing related to primary industry.

School VET courses were introduced in the mid-1990s, designed to provide post-school pathways to limited local employment, as well as to provide generic workplace skills and awareness. School VET is strongly supported by the local community. In 1998, school VET courses with the highest enrolments were work skills (work education), automotive and foundation engineering, business, hospitality, information technology and retail. Respondents to the study largely reflected this pattern. No courses were offered in primary industry in 1998. Notably, a high level of Tasmanian school VET students (94%) completed a work placement, compared with other states, and the majority expressed satisfaction with their work placements.

Consistent with the low school-retention rate in the north-west of Tasmania, one-third of the school VET students who participated in the survey did not complete Year 12, compared with 13% of non-VET students. Students who participated in work skills or human services school VET were more likely to complete Year 12 than school VET students in other areas. Of all the early school leavers, only one was *not* in current paid employment.

In terms of post-school pathways, nearly three-quarters of school VET students went on to post-school VET study. A much higher percentage of school non-VET students went on to university study than school VET students, although it must be noted that in Tasmania, in 1998, school VET subjects were not recognised for university entrance purposes. Relatively high rates of school VET students who undertook technology and trades courses continued with post-school VET studies, compared with human services students and business and clerical students. Those most likely to continue with further full-time studies were work skills students. In terms of employment, of those students (school VET and non-VET) who are currently employed, 83% are employed in a rural area. The main area of employment at the time of the survey, for all Tasmanian cluster respondents, was in human services (community services, health, education, sales and personal services, tourism and hospitality).

## Pathways for school VET students

### *Pathway 1: Local employment*

In general, this was the main pathway for school VET students, including early school leavers. A pathway to local employment was most closely associated with participation in a school VET course in work skills (mainly females), business and clerical (all females) or technology and trades (all males). This pathway was mainly through full-time apprenticeships and traineeships, often in the same industry area as their school VET course. About half of the students who followed this pathway had a part-time job while they were still at school. Interestingly, less than half of this group identified career-related reasons for selecting their school VET course.

A number of this group had gained local employment as the result of employment offers from work placement employers and, as well as currently living locally, indicated their intention to stay in their local area. They indicated the relevance of the work placement component of their school VET course in terms of increasing their communication and teamwork skills and their levels of self-confidence and, specifically, because of the way in which they helped to build linkages with local employers. Daniel<sup>1</sup>, who completed a music industry school VET course and is now self-employed locally in the music industry, noted the importance of work placements in helping him to make ‘contacts within the music industry’. Sally, an early school leaver, who is currently completing a hairdressing apprenticeship in her local community, noted:

... the [work] placement was [relevant]. It helped local employers because I showed them my skills and initiative first hand.

### *Pathway 2: Further VET study combined with work*

The second most popular pathway for school VET students was a combination of post-school VET study (excluding apprenticeships and traineeships) and work. The majority of this group had chosen their school VET course for career reasons. For most, their post-school VET study was in a similar area to their school VET course. For about half of the group, employment was also in a related area, but, for the remainder, employment was unrelated to either the school VET course or to post-school study. From the questionnaires, it was not possible to tell whether work and study were undertaken concurrently or separately, therefore it is difficult to assess the extent to which post-school study contributed to gaining employment.

Although most of this group had not been offered a job by their school VET work placement employer, they found their work placements useful, particularly as an introduction to the broader world of work. For example, Sarah, who intends to remain in her local community, partly completed a school VET course in hospitality. She is now working part-time in retail, as well as studying hospitality part-time, having received some credit for her school VET course. Sarah was positive about her school VET experience, particularly the work placements:

The work placements were really good because you got to meet new people and see how different places run.

Simon, on the other hand, chose a school VET course in information technology for career reasons, and was offered work by his work-placement employer while at school, and after leaving school. Currently, however, Simon is working full-time in a local retail outlet, and has undertaken post-school study in this field (Certificate III in Retail). He indicated that he was unlikely to remain in his local community—possibly for career-related reasons—but that he would be likely to live in another rural/regional area during his working life.

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<sup>1</sup> Surveys were completed anonymously, so names in these case studies are fictitious.

### *Other pathways*

Respondents reported a variety of other pathways, but these were less common than the pathways to local employment, or the further study combined with work pathways, described above. Several described how the work placement component of their school VET course had helped them to decide on a career (sometimes in the same area as their school VET study and sometimes not). For example, Margie now has casual work in the hospitality industry in the small west coast community in which she lives, where hospitality and tourism are the mainstay of the local economy. She commented that her school VET course in work skills, which she chose for general interest, had built her self-confidence and that 'doing work placement helped me decide that I wanted to go into hospitality'. However, Margie does not intend to stay in this community in the future, and may need to consider gaining formal qualifications in the hospitality industry if she is to compete for employment in a larger rural or regional centre. Rebecca, on the other hand, chose to do a work skills school VET course because she didn't know what she wanted to do when she left school. She was one of only three school VET students surveyed who subsequently chose to go on to tertiary study. However, she noted that school VET had allowed her to 'explore careers and I made my decision to become a nurse through my work placements'. Rebecca intends to return to her local community to work after she has completed her study.

### *Pathways out of the community*

Although most of the school VET students surveyed had remained in, or intended to return to, their local community, some indicated their intention not to do so. Of this group, most were in study or employment that was not related to their school VET study area. Half had already left the community to undertake studies elsewhere and indicated they would not return. The remainder were currently working full-time in their local community, mainly in apprenticeships/traineeships. It seems likely that this group planned to complete their apprenticeships/traineeships before moving away.

Despite their intentions not to remain in their local community, nearly all of this group indicated they had found their school VET course and work placements to be useful, particularly in terms of improving literacy/numeracy skills, and nearly all indicated they intended to live in another rural/regional area during their working life, suggesting a transfer of skills to other rural/regional settings. Early school leaver, Brian, currently completing a diesel mechanic apprenticeship in his local community, is typical of this group, when he comments on the role of the school VET course in facilitating youth mobility:

VET gave me communication skills and prepared me for job opportunities. It also helped me how to look for work and what to say and do at interviews.

Sophie's pathway out of her local community is interesting, because it led her to live in another rural community and to utilise her skills gained from a business and clerical school VET course for the good of her adopted community. An early school leaver, Sophie reported active participation in a number of voluntary community groups, in areas including lifelong learning, family and child health, and craft and recreation, and it seems likely that her roles in these areas draw in part upon training provided by her school VET course. At the same time, she is currently enrolled in post-school VET study in the business and clerical area. Sophie is not currently in the labour force, opting to combine motherhood with voluntary community work and study.

### *Less positive experiences of school VET*

For two students, school VET does not appear to have been a positive experience. Amy has done no post-school study and has had no employment since leaving school. She chose the work-skills school VET course for general interest, but is unsure whether the course and work placements have been useful to her. Amy did not have part-time work while still at school, and was not offered employment by her work-placement employer. She is currently seeking work and intends to stay in

her local community, suggesting that she may need to consider post-school VET study to enhance her employment chances.

Bianca, on the other hand, chose a hospitality school VET course for several reasons, including career, general interest and on the recommendation of teachers. Like Amy, she did not have a part-time job at school, and was not offered employment by her work placement employer. Bianca indicated that she did not find the school VET course and work placements useful. Subsequently, she chose to continue with full-time tertiary study in an area unrelated to her school VET course, and moved away from her local community to pursue full-time study. Unlike a number of tertiary students, Bianca has no casual employment to help fund her studies, despite having completed a school VET course in hospitality. She has no intention of returning to her local community when she has completed her studies, nor does she intend to live in another rural/regional area during her working life.

## Pathways for school non-VET students

### *Pathway 1: Tertiary study*

Unlike the school VET students who participated in the survey, the main post-school pathway for school non-VET students was tertiary study, primarily in the areas of human services (Arts/Education) and technology (Science/Engineering), and mainly at the University of Tasmania campuses in either Launceston or Hobart. Several were studying on the mainland, but nearly all of these students still listed their local Tasmanian community as their normal place of residence. However, the majority of all respondents undertaking tertiary studies indicated they were either unsure or unlikely to return to the locality in which they attended school, but that they would probably live in another rural or regional area during their working life. The majority also reported having current casual or part-time work as well, presumably to help fund their tertiary studies.

### *Pathway 2: VET and employment*

The second main pathway for school non-VET students was post-school VET, mainly in the form of apprenticeships/traineeships, but including post-school VET study not linked to apprenticeships or traineeships. However, far fewer school non-VET students continued with a VET pathway than school VET students. Of the small number of early school leavers who had not completed a school VET course, nearly all had secured apprenticeships and traineeships. Half of the school non-VET students who have continued with post-school VET have left their local community in Tasmania to continue their VET studies in mainland Australia. This group indicated they were unlikely to return to their local community or to live in another rural/regional community during their working life. Typical of this group is Michael, who left his community to undertake an aircraft maintenance apprenticeship in the Royal Australian Air Force in Queensland.

Of those who are participating in post-school VET locally, only one, Jason, indicated he is likely to remain in his local community in the future. Jason, an early school leaver, is undertaking an aquaculture traineeship, an industry closely linked to his small community's local economy. Others, however, were either unsure or unlikely to remain in their local community in the future. However, this group did indicate they were likely to live in another rural/regional community during their working life.

### *Other pathways*

Very few other pathways were listed for school non-VET respondents. Although this may suggest that nearly all of this group had gone on to some form of post-school study, it must be remembered that this reflects the bias of the sample towards such students.

## South Australian case study

The South Australian cluster of three public schools is situated in a region of medium to low economic growth with unemployment levels comparable to the national average, but with restricted employment opportunities for youth. The main industries include agriculture, aquaculture, viticulture and forestry.

The South Australian cluster was established in 1997, with a focus on helping youth find local employment. Courses considered most likely to result in employment are building and construction, hair and beauty, automotive and engineering pathways. Other VET areas within the cluster include viticulture, forestry, aquaculture, racing, business and clerical, community services and health, furnishing, hospitality, retail and tourism. Three-quarters of the South Australian respondents remained in their local area, with others moving to Adelaide or, to a lesser extent, other Australian capital cities, for further education and training or employment.

### *Pathways to local employment*

The majority of school VET respondents from the South Australian cluster undertook their VET course in primary industries (mainly viticulture) or technology and trades (mainly engineering pathways) and participated in a work placement. The school VET programs seem to have been largely successful in terms of equipping students with skills that are relevant locally. The majority of school VET respondents were currently employed locally in the same industry as their school VET course. However, it must be noted that the majority of school non-VET respondents were also employed locally in the same industry areas with no great difference between these school VET and non-VET respondents in terms of the status (casual, part-time, full-time) of their local job, whether it was an apprenticeship/traineeship or not, or in their uptake of other post-school education and training. However, the advantage of school VET programs is possibly summed up by Adam who, having done the viticulture program with a work placement, had gone on to local full-time employment in vineyards and orchards:

You (have) already gained the skills to go into the workplace before you leave school rather than training after you leave school.

### *Further VET study combined with work*

Adam indicated he was motivated to do his school VET course partly out of a desire for a career in the industry and had gone on to complement his employment in the industry with TAFE training, to gain specific qualifications relevant to that work, such as a truck licence and chemical handling training. Thus the school VET program provided foundational skills and experience relevant to a job in local industry and, potentially, future career development.

### *Other pathways*

Peter had also done the viticulture course, mainly because subject choices were limited. He did not do a work placement and had gone on to a range of mainly casual jobs in the local industry, working in the vineyards and wineries, but had done no further education or training. Two other school VET students who had gone on to casual work in the vineyards had done their VET course in an unrelated industry and had also chosen their school VET course because subject choices were limited. These students had done further part-time TAFE study unrelated to their employment or their school VET course. These diverse pathways or work/study mosaics suggest school VET may be an opportunity, amongst a limited range of choices, to gain an introduction to a job area for those unsure of a career direction.

### *Work placements as pathways to local employment*

Work placements were an integral part of school VET programs particularly intended as a pathway to local employment, with three-quarters of the school VET respondents from this cluster participating in a work placement. Most work placement students who went on to an apprenticeship/traineeship continued in the same industry area as their school VET course, and two of the work placement students gained recognition or advanced standing for their school VET course. An interesting case includes Anne, who undertook a traditionally male dominated technology and trades school VET course that included a work placement because she wanted a career in a particular trade. She went on to gain an apprenticeship in the trade, receiving recognition for her school VET course by 'having time taken off my apprenticeship'.

## Western Australian case study

This cluster of four schools is situated in a large, sparsely populated area of Western Australia with strong focus on primary industry, particularly grain production. Economic growth in the region is rated medium and local school principals perceive limited work opportunities and socio-economic disadvantage within the region. Youth unemployment is relatively high and many young people leave to seek employment elsewhere. The number of students continuing with university is low.

The cluster was established in 1997 and includes five schools, one of which is not represented in this study. Courses offered in 1998 included business, tourism and hospitality, primary industries (agriculture, landcare), automotive, childcare, and building and construction. About 40% of the Western Australian respondents (mainly male) went to a selective agricultural senior secondary school where all students participate in school VET. A high proportion of these students were from farms in surrounding and remote areas.

The purpose of the school VET program within this cluster was as a pathway to local employment, although for the agricultural school 'local' would incorporate the rural industry more generally. School VET respondents were evenly distributed across industry areas, although males predominantly chose technology and trades or primary industry (particularly at the agricultural school), while females were more evenly spread between business and clerical, human services and work skills. Respondents who had done a school VET course had a variety of outcomes, ranging from a fairly straightforward continuation in a related area, in many cases via an apprenticeship, to casual employment, despite undertaking further VET courses.

### *Primary industry pathways*

The vast majority of the agricultural school students were employed in agriculture, many as farmers or farm hands—probably on their family property. This is consistent with selection to the school being based, to a certain extent, on the student's demonstrated desire for a career in agriculture. For example, Geoff went to the agricultural school and undertook a 'trades course: automotive, metalwork, woodwork, building and construction', then returned to work full-time at the family farm, where he says 'the trades course helped me with the building and metalworking side of farming'. Almost all of those who indicated they were farmers or farmhands were working full-time, but few continued with any post-school education and training. Some, however, were like John, who indicated he was a self-employed farmer on the family farm and continued on part-time through TAFE to gain a Certificate III in Agriculture. Those from the agricultural school *not* going back on the land as farmers or farmhands were often successful gaining an apprenticeship in a traditional trade or going into some other area of agriculture. Malcolm, for example, after a stint as a part-time farmhand obtained a full-time job in rural merchandise sales, later progressing to a territory sales manager. During this period he attended TAFE to gain a Diploma of Business Management. Although only a small number of respondents from the agricultural school went on to university, they all studied agribusiness.



### *Local employment combined with further VET study*

Outcomes for respondents who had attended the other three schools were much more diverse in terms of industry of employment, as could be expected. About half had done a school VET course and these respondents were generally quite successful in gaining full-time employment and post-school VET qualifications related to their school VET course, often via an apprenticeship. Suzy, for example, whose school VET course was in 'business and tourism', went on to further full-time VET study, gaining credit for her school VET studies to obtain a Certificate III in Travel Consultancy. Her employment was as a full-time travel consultant first in her local town and later in a Perth suburb. She noted the most useful aspects of the school VET course were 'the variety of skills learnt and the way it focused on certain aspects that I was directly interested in'. Brett also did business studies as his school VET course, going on to local full-time employment, first as a bank clerk then as a financial planner while doing part-time study at TAFE to gain a Diploma of Financial Planning. Brett stayed in his local community and said of his school VET course:

It was great to get out in the community on work placement to meet the business people of the town. This was a help in building confidence and self-esteem.

Although most female school VET respondents had successful post-school employment and education pathways, they tended to be more at risk of casual employment than male school VET students, even if they had undertaken post-school VET studies. Hannah is a typical example, having done a school VET course in business studies, followed by a Certificate III in Rural Office Practice part-time through TAFE. She stayed in her local community, working in a range of casual and part-time jobs from shop assistant to conference communications assistant, waitress and, at the time of the survey, a part-time secretary. Her VET studies do not appear to have led to a full-time position in her local town.

### *School non-VET pathways*

About half of the school non-VET students went on to university. School non-VET students who did not go on to full-time university studies had, in the main, similar post-school outcomes to school VET students. The only difference was a slightly greater number of casual and part-time jobs before achieving full-time employment.

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