

Pathways from rural schools: does school VET make a difference?

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Abstract

This paper reports findings from a survey of former students from six Australian rural school clusters. It compares the experiences and outcomes of students who had participated in a school vocational education and training (VET) program with those who had not. School VET courses intended to provide a pathway to local employment appear to be successful in retaining students who otherwise may have left school before completing Year 12, and in assisting their transition from school to work. For all school VET students, the work placement component of the program aids the transition to local jobs and apprenticeships, and increases youth retention in the community. As the findings indicate that school VET students are predisposed to live in a rural area at some time during their working life, the paper concludes that VET programs in rural areas have special potential to develop skills and pathways for the future workforce of rural Australia.

Introduction

Recent years have seen increased attention to youth transition pathways from school to work, and the role of vocational education and training (VET) in that transition. 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, Easthope & O'Connor 1997). Those young people most at risk of not making a successful transition from school to work include early school leavers, and those who are employed in part-time work, or unemployed or outside the labour force, in their first year out of school (Curtain 1999). A number of these young people are from rural areas. This study is particularly interested in

transition pathways for rural youth who, for some years, have been disadvantaged in terms of participation in post secondary education, and employment outcomes (Lamb, Long & Malley 1998; Lamb & Rumberger 1999).

This study focuses on rural youth transition through school VET 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 percent of all schools now involved in such programs (ANTA 2001). The study is timely given 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 the small body of research to date on the transition pathways of rural youth through school VET programs. It is also timely given the recent House of Representatives Inquiry into Vocational Education in Schools (2003), which featured a number of submissions in respect of the particular and far-reaching benefits associated with VET programs in rural schools. Key themes within these submissions were the role of rural school VET in: providing entry level skills and competencies in areas where other training opportunities are limited; helping to recruit young people into rural careers to ensure the future of rural industry and rural communities, and building community capacity by developing human and social capital to ensure sustainability of rural communities.

Vocational education and training, schooling, and the Australian context

Vocational education and training is defined as post-compulsory education and training designed to provide people with occupational or work-related knowledge or skills. In Australia, VET is delivered by a range of registered government, community and private providers. The largest government provider is TAFE (Technical and Further Education). Apprenticeships and traineeships form a significant part of the VET system. Apprenticeships are a legal contract between apprentice and employer, which provides for a combination of on-the-job training in the workplace, and formal, off-the-job training with a training provider. Traineeships are a more recent form of structured training involving on-the-job and off-the-job training, covering new industry areas such as agriculture, retail and hospitality, that were not traditionally covered by apprenticeships. In 1998, Australia established the New Apprenticeships system, which covers all former apprenticeship and traineeship arrangements. Nationally recognised qualifications for VET are defined by the Australian Qualifications Framework (AQF).

Students completing their final, senior secondary years of schooling (Years 11 and 12, with the option of Year 13 if required) have the choice of including VET courses as part of their senior secondary studies. However, there are no separate vocational secondary schools or technical high schools in Australia.

What do we mean by school VET?

For the purposes of this paper, the term ‘school VET’ is used to describe all vocational education and training programs offered in Australian schools. Such programs are usually known by the generic name ‘VET-in-schools’. School VET courses are those which result in, or lead to, a nationally recognised qualification, usually Australian Qualifications Framework (AQF) accreditation. Some courses are stand-alone VET courses, while others are embedded in the school curriculum. As Knight and Nestor (2000) note, usually school VET programs provide dual accreditation (the State Senior Secondary Certificate and a VET qualification), although this is not always the case, and differs from State to State.

In 1998, when participants in this survey undertook school VET, not all school VET courses involved on-the-job training through structured work placements, although many did. In 2004, it is mandated that school VET programs include a workplace component. Therefore, the distinction in this paper between school VET courses with and without structured work placements may be less relevant now than in the past.

There is a clear distinction between structured work placements offered as part of a school VET course, and other work placements such as work experience or work sampling programs common in many Australian secondary schools. School VET does not include work experience or work sampling programs, as these do not offer formal VET assessment or accreditation.

For clarity and ease of expression, this paper will refer to students who participated in a school VET course as school VET students, and to other students as school non-VET students.

Purposes of the study

The overarching purpose of the study was to assess the individual and community impacts of rural school VET programs in a preliminary investigation of the way in which such programs might help to address rural community decline. Specifically it aimed to compare education and training, employment, and community outcomes of rural school VET and school non-VET students, and to examine the features of effective rural school VET programs that enhance skills acquisition, influence participation in post-school VET courses, and influence the ability of rural youth to secure local employment within their chosen industry.

The study explores two key assumptions about school VET. First, do the outcomes for school VET students presented in other research appear to be similar to the outcomes for rural VET students? Second, do we need to expand our definition of ‘successful’ school VET outcomes? For example, is course non completion necessarily an unsuccessful outcome? Should we be paying more attention to the community-

wide benefits of school VET programs? Should we be focusing more on medium and longer term outcomes of school VET programs to assess their true impact on individuals and communities, rather than relying on short-term outcomes reported in much of the school VET research to date?

Literature review

The background to this study is couched in research on the outcomes and features of effective school VET in general, which will be reviewed in the two following sections. This research will provide a point of comparison in respect of the outcomes and features of effective rural school VET, that will be presented in the findings and discussion section. The literature review then examines the relatively small body of research to date that focuses specifically on the outcomes and features of VET in rural schools.

Post-school education and training outcomes from school VET participation

Studies of the post-school education and training outcomes of school VET students have generally found that in the year after completing school about half the cohort had gone onto further study, with a larger proportion of these going to TAFE (Technical and Further Education) than university (Polesel, Teese, O'Brien & Unger 1998; Polesel, Teese & O'Brien 1999). Other studies have also found that school VET study is a pathway to post-school VET participation in general, with higher proportions of school VET, compared with school non-VET students, going onto post-school VET study, including apprenticeships (Lamb, Long & Malley 1998; Ball & Lamb 1999–2000; Fullarton 2001). Specifically, Ball and Lamb (1999–2000) reported that twice as many school VET as school non-VET students gained an apprenticeship immediately on finishing school. The strong link between school VET participation and later apprenticeships is also supported by Fullarton (2001).

Research shows a strong link between the field of school VET and that of subsequent post-school VET study (Misko 2001). Progression to full-time study is linked to participation in school VET courses in areas such as information technology, tourism, business/finance and arts/media (Misko 2001; ECEF 2002). By comparison, Ball and Lamb (1999–2000) found that while school VET students who had studied a primary industries course were likely to gain employment in the same industry area on leaving school, they were less likely than school VET students who studied in other industry areas to undertake post-school VET (including apprenticeships and TAFE training).

Employment outcomes from school VET participation

Studies of outcomes related to employment indicate higher full-time employment levels for school VET students compared with school non-VET students (Fullarton

2001), and compared with all 15–19 year olds (Misko 2001; ECEF 2002). Research indicates that the link between participation in school VET and later employment increases beyond the first year out of school (Polesel, Teese & O'Brien 1999; Fullarton 2001). For example, school VET students in their second year out of school reported higher levels of participation in full-time work compared with students in their first year out of school (Polesel, Teese & O'Brien 1999; Fullarton 2001), although Fullarton noted a similar increase in employment levels in the second year out of school for school non-VET students as well. This suggests the need to extend destination studies beyond the first year out of school, to more accurately measure the true impact of school VET programs.

Research also shows a strong link between the industry area of school VET and later employment in a similar area (Ball & Lamb 1999–2000; Misko 2001; ECEF 2002). Industry areas with strong school VET/employment links include retail (Misko 2001), automotive (ECEF 2002) and primary industries (Ball & Lamb 1999–2000; Misko 2001; ECEF 2002).

In particular, school VET programs featuring structured work placements have been linked to positive employment outcomes, especially full-time employment in the automotive, building and construction, and primary industries areas (Misko 2001; ECEF 2002). Misko also highlighted the link between participation in a school VET structured work placement and the offer of later employment with the same structured work placement employer.

Related research by Smith and Green (2001) examines outcomes from three forms of on-the-job learning for students (part-time work while still at school, structured work placements as part of a school VET course, and traditional work experience programs). The researchers found that each of these provides valuable learning experiences, and that the first two in particular develop both generic and job specific skills. In addition, students reported transfer of learning between the different activities, most likely influenced by the fact that many of the students undertook the different activities in the same industry area and with the same employer.

Other outcomes from school VET participation

Other outcomes reported for school VET programs include those that accrue to individual students, such as self-confidence and self-efficacy (Kilpatrick, Bell & Kilpatrick 2001; Kilpatrick et al. 2002) and increased knowledge about vocational suitability (Misko 1998). Outcomes for teachers, schools and employers, include teacher satisfaction, greater collaboration between stakeholders, and opportunities for employers to encourage youth into their industry (Scharaschkin et al. 1995 cited in Frost 2000; Kilpatrick et al. 2002). However, perhaps one of the most interesting outcomes of school VET programs, identified by a growing body of research, and highlighted in submissions to the recent House of Representatives Inquiry into

Vocational Education in Schools (2003), is the development of community capacity by developing human and social capital to ensure sustainability of rural communities. School VET partnerships have been found to facilitate the development of new networks within the community and to encourage collective action for the benefit of all (Lane & Dorfman 1997; CRLRA 2001; Kilpatrick, Bell & Kilpatrick 2001; Kilpatrick et al. 2002). Outcomes of this process of network building include increased levels of intergenerational trust, increased opportunities for lifelong learning, and more positive attitudes towards education and training in the community.

Factors that influence the effectiveness of school VET outcomes

A number of factors have been found to impact on the nature and extent of school VET outcomes, including participation in work placements, overall student profile, and gender.

The employment outcomes of participation in structured work placements were discussed earlier. In addition to these outcomes, research indicates a variety of other outcomes of structured work placements for young people, including job skills, generic skills such as teamwork and communication, self confidence, and a greater understanding of the world of work (Misko 1998; Smith & Harris 2000; Smith & Green 2001).

Teese, Davies and Ryan (1997) reported a link between student profile and the outcomes gained from structured work placements, in that those most likely to participate were less academically inclined and more likely to be seeking employment on leaving school. This finding links with research into outcomes for school non-completers. While some research suggests that early school leavers (those who do not complete compulsory schooling, i.e. who leave before completing Year 10) are at greater risk than school completers in terms of their ability to enter and remain in the labour force (Lamb & Rumberger 1999), recent findings from the Longitudinal Survey of Australian Youth (McMillan & Marks 2003) are more positive, with early school leavers less likely to be engaged in marginal labour force activities than others in their cohort who are not in higher education. Of particular relevance to the current study is research into school non-completers (those who leave during Years 11 or 12), which reports favourable outcomes for rural school non-completers who left school to take up jobs related to their school VET course (Searston 1996; Smith 1996). These positive outcomes accrued largely to what Dwyer (1996) categorises as opportune, rather than discouraged or alienated, school leavers, fitting the profile of students most likely to participate in structured work placements presented by Teese, Davies and Ryan (1997). Later research by ECEF (2002) supports the finding that school VET courses offering a structured work placement yielded positive employment outcomes for school non-completers.

Gender differences in student outcomes 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 onto higher education (Lamb, Long & Malley 1998; Fullarton 2001; ECEF 2002). Regarding apprenticeships, Fullarton (2001) found that the participation rates of males in apprenticeships increased in the second year out of school, again supporting the need to look beyond short-term destination studies. Female participation in apprenticeships, however, differed little or decreased slightly between the first and second years out of school (Fullarton 2001).

Differing outcomes of school VET participation for males and females are linked to the gender differences apparent in choice of school VET study area. For example, research (see Fullarton 2001) reports much higher proportions of males in traditional trade areas such as electrical and mechanical, as well as information technology, while females are much more likely to choose travel and tourism, childcare, hairdressing, and business and clerical courses. The location and status of later employment is linked to area of school VET study, in that the three main employment areas for young people in the first year out of school were supermarkets, cafes and restaurants, and take-away food stores, and the status of employment in these areas is mainly casual or part-time. Given these factors, Fullarton's (2001) report that 25 percent of all female school VET students were likely to be working in these areas, compared with 12 percent of male school VET students, is not surprising.

Research specifically on rural students and school VET

Overall, research indicates that rural and isolated students are more likely to leave school and take up work than their urban counterparts (James 2000), while those who opt to undertake further study are more likely to select TAFE rather than university. These findings have implications for the provision of VET programs in rural schools.

On a broader level, research builds a picture of rural educational disadvantage, in terms of access and equity issues as identified in the Human Rights and Equal Opportunity Commission National Inquiry into Rural and Remote Education (2000); lower senior school retention rates when compared with urban students (Lamb, Long & Malley 1998; McMillan & Marks 2003), and an undervaluing of post-secondary education by rural students and their parents (James 2000). There are indications in the literature, supported by submissions to the House of Representatives Inquiry into Vocational Education in Schools (2003), that rural school VET is helping to address issues of rural disadvantage in several ways.

Rural school VET programs extend the range of learning opportunities for students, contributing to improved school retention rates (Kilpatrick, Bell & Kilpatrick 2001; *Australian Training Magazine* 2003), and directly related to this, to increased chances of small rural school viability (Kilpatrick, Bell & Kilpatrick 2001). More recent

research links participation in a rural school VET program with local employment outcomes, contributing to youth retention in rural areas (Both 1999; Country Education Project Inc. and Youth Research Centre 2001; Kilpatrick et al. 2002). In addition, a number of studies have identified the rural capacity building outcomes of school VET programs, including increased levels of intergenerational trust and, for youth, greater sense of belonging and acceptance (Smith 1996; Kilpatrick, Bell & Kilpatrick 2001; Kilpatrick et al. 2002).

Research identifies a variety of factors that influence the effectiveness of VET programs in rural communities, including commitment to the school VET program by students, the school and the community, 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. For example, Fullarton (1999) found that rural students (from communities of 1000 or less) tended to more actively seek school VET courses that provided structured work placements, because they were less likely to continue with tertiary education than regional or metropolitan students. Broader school and community commitment to school VET in rural areas is linked to the extent to which VET is an integral part of the school curriculum (*Australian Training Magazine* 2003), and the motivation and ability of school and community to develop partnerships for the planning and delivery of VET programs (Country Education Project Inc. and Youth Research Centre 2001; Kilpatrick et al. 2002; Johns 2003). In particular, research indicates that rural communities may be well placed to maximise the outcomes of school VET programs because of the strong local networks already in place in a number of communities (Smith 1996; Country Education Project Inc. and Youth Research Centre 2001; Kilpatrick et al. 2002).

Factors impacting positively on the availability and quality of rural school VET include flexibility and opportunities for customisation of courses to meet individual student needs, as well as strong employer support for structured work placements (Country Education Project Inc. and Youth Research Centre 2001; Smith & Green 2001). These are tempered with a range of issues that may impact negatively on rural school VET. Such issues, highlighted in submissions to the House of Representatives Inquiry into Vocational Education in Schools (2003), and supported by research, include insufficient financial and human resourcing and lack of continuity of resourcing; insufficient flexibility in internal school organisational and travel arrangements; difficulties in accessing sufficient and appropriate structured work placements, and difficulties faced by staff in keeping abreast of changes in the VET system (Country Education Project Inc. and Youth Research Centre 2001; Kilpatrick et al. 2002).

Summary

It seems reasonable to assume that the outcomes of much of the school VET research reviewed relate to both rural and urban communities, including the links between participation in a school VET program and later employment outcomes, and between

participation in school VET and post-school VET as opposed to tertiary study. There is also a suggestion that school VET programs may address specifically rural issues, such as youth retention in rural communities, which has implications for rural community development. However, because only a small amount of research specifically compares rural and urban school VET programs, it is difficult to assess the extent to which rural outcomes compare with, or differ from, urban outcomes. The study reported in this paper considers the outcomes for rural school VET students in the light of outcomes for all VET students, as reported in the existing research.

Research method

In late 2001, a mail survey of former school VET and school non-VET students was conducted. Respondents who had been in Year 11, 12 or 13 in 1998 were drawn from six rural school clusters that offered school VET programs funded by the Enterprise and Career Education Foundation (ECEF). At the time, ECEF was one of several Commonwealth government-funded stakeholders in school VET provision, with a focus on supporting structured workplace learning. Its functions have since been transferred to the Commonwealth Department of Education, Science and Training. For purposes of comparison, both school VET and school non-VET students were surveyed. The questionnaire was designed to collect background information about respondents, current and retrospective factual and attitudinal data regarding the value of their senior school experiences, and information about their post-school pathways. School VET students were asked an additional set of questions specifically relating to the nature and outcomes of their VET course. Survey data were supplemented by documentation from schools regarding the purpose, nature and outcomes of their VET programs.

Site and sample selection

School clusters, rather than individual schools, were selected, because of the small size of some rural schools. ECEF-funded clusters were selected to facilitate administration and data collection processes, given the time and budgetary constraints of the study. One cluster was selected from each State. The Northern Territory was not included because of the small number of school VET students in rural and remote schools in 1998, and because of difficulties in contacting students from remote Indigenous community schools. The Australian Capital Territory was not included because of the small number of rural schools.

To ensure clusters represented diversity in terms of levels of regional economic growth, final selection was informed by the Monash Multi-Regional-Green model of economic development (Adams, Horridge & Parmenter 2000, p. 25). Clusters selected (by State) were as follows: Tasmania (low regional economic growth); South Australia (medium low); New South Wales and Western Australia (both medium); Victoria (medium high), and Queensland (high).

Clusters also represented diversity in terms of the intended purpose(s) or reason(s) why each cluster established its school VET program (including anticipated outcomes), as well as the range of school VET courses offered. For three of the clusters (South Australia, Western Australia and Tasmania) the purpose of the VET program was to provide a pathway to local employment. The purpose for the other clusters was to provide general workplace skills and knowledge. The Tasmanian cluster had both these purposes. In Victoria and Queensland, the school VET program was also offered as an alternative to the mainstream curriculum. All clusters offered courses in hospitality/tourism, business/office skills, and traditional trade VET courses. The South Australian cluster had a focus on engineering, and the Western Australian cluster on primary industry, to meet local employment needs. The Tasmanian, New South Wales, South Australian and Western Australian clusters also offered work skills courses (a generic rather than industry-specific vocational course) in 1998.

School clusters selected typically contained between three to six small rural schools, and often one or more schools from a larger regional centre. For the purposes of this study, schools from larger regional centres (population greater than 10 000) were excluded, with the exception of Tasmania. This is because in Tasmania, Year 11 and 12 students usually attend one of the State's senior secondary colleges, which are located in the four main population centres. The number of students remaining in small rural high schools to complete senior secondary studies is therefore very small. Not all schools from the selected clusters agreed to participate, however discussions with ECEF confirmed that participating schools were representative of their cluster in terms of the profile of VET students, and the nature and extent of VET courses offered.

Of the 20 participating schools, 19 were State government schools, of which two were dedicated senior secondary colleges (Years 11 and 12 only); 15 were high schools or senior high schools (Years 7–12 or 8–12 depending on the State), and two were area (central) schools which cater for students from early childhood through to Year 12. The sample included one Catholic college, and no independent schools. It is recognised that the under-representation of Catholic and independent schools does not reflect the proportion of ECEF-funded government, Catholic and independent schools offering VET programs in rural areas in 1998.

The study targeted students who were in Year 11, 12 or 13 in 1998. Equal numbers of VET and randomly selected non-VET students from each cluster were surveyed. It is recognised that this sampling procedure is not a true reflection of the proportion of school VET and school non-VET students in most schools, in that most of the schools reported that approximately one quarter to one third of their senior students had undertaken school VET courses in 1998. However, as the key focus of this study is on the outcomes of school VET programs for rural students, it was necessary to ensure strong representation of VET students.

Response rate

The response rate of just over 20 percent (270 responses) varied according to school cluster, with similar response rates overall for school VET and school non-VET students, and for males and females.

Data analysis

Survey data were analysed with the aid of SPSS computer software. Because of the small number of participants in some school VET courses, the researchers devised five broad industry area categories for analysis purposes, based on the Australian Standard Classification of Occupations. The categories were:

- business and clerical
- human services (including retail, hospitality, tourism, community services, health and education, sport and recreation)
- primary industries
- technology and trades (including traditional trades such as automotive, building and construction, engineering and mining, as well as information technology)
- work skills (generic, rather than industry-specific, course)

The category of 'school non-completers' was devised, to allow for comparison with students who had completed school. School non-completers are defined as students who completed the compulsory years of schooling (Year 10) but who left school during Years 11 or 12, without completing their senior secondary certificate.

Limitations of the study

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 may have been biased towards more 'successful' students. In addition, it was beyond the scope of the study to identify current addresses of all potential respondents. As the survey was mailed to former students' 1998 addresses, the sample is therefore weighted towards those who had remained in the same location since that time.

Findings and discussion

Outcomes of rural school VET programs

Findings in this section are presented in three broad groupings: education and training, employment, and community outcomes.

Although school VET and school non-VET participants gave similar responses to most of the questions about the value of senior school in helping them develop generic skills (see figure 1), there were some clear differences between the two groups. 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.

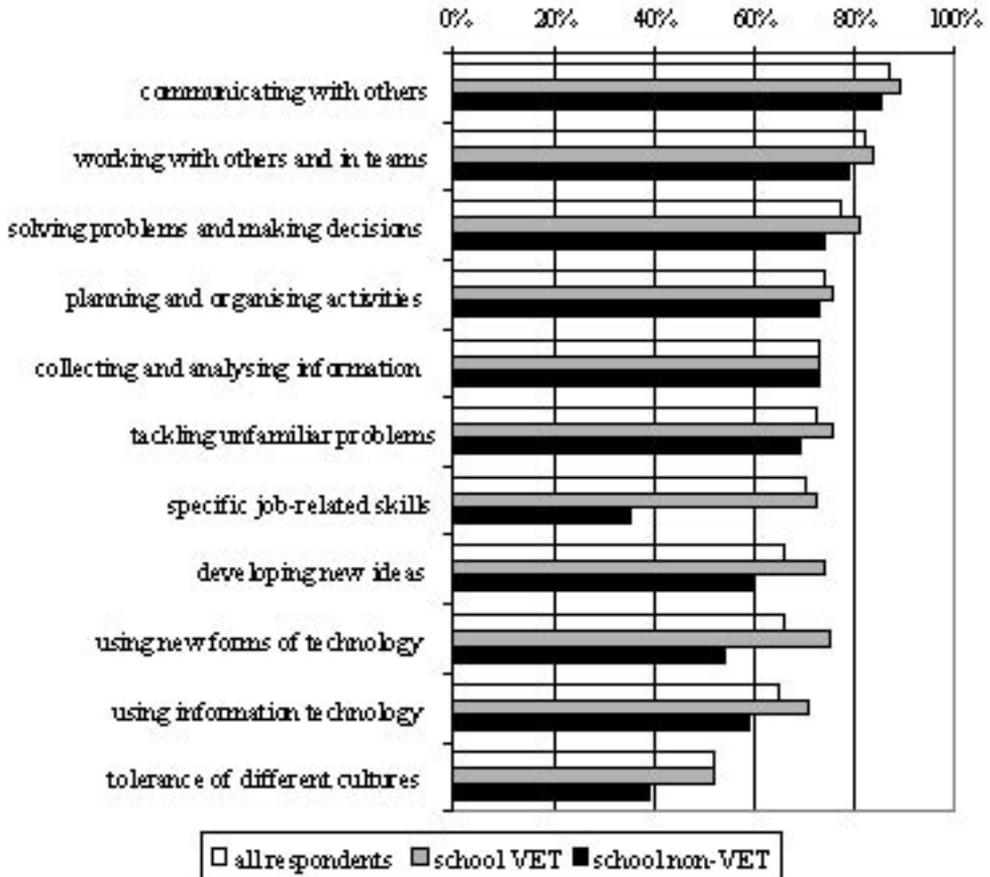
Post-school education and training outcomes

Findings from questions on post-school pathways and school VET study revealed that of the total number of respondents (school VET and school non-VET), 85 percent had commenced post-school education or training, including those undertaking a traineeship or apprenticeship. Whilst this figure is higher than may be expected for rural communities, it also reflects the sample bias towards more 'successful' students. Although school VET students were less likely to continue with post-school education and training in general, they were more likely to go onto further vocational education and training than school non-VET students. This supports other research findings into the post-school education and training outcomes of all school VET students (Lamb, Long & Malley 1998; Ball & Lamb 1999–2000; Fullarton 2001).

Over one third of all respondents (school VET and school non-VET) had commenced an apprenticeship or traineeship since leaving school. Of those, far more males than females went onto apprenticeships, consistent with findings by Lamb, Long and Malley (1998), Fullarton (2001) and ECEF (2002). There were gender differences in choice of apprenticeship and traineeship fields, with males principally choosing technology and trades, followed by primary industries and human services, and females choosing business and clerical, and human services. Contrary to other research (Ball & Lamb 1999–2000; Fullarton 2001), school VET students were no more likely to enter apprenticeships/traineeships after leaving school than school non-VET students, suggesting perhaps, that apprenticeships in rural communities may still be accessed largely through family connections and networks, rather than as a result of school VET study.

Over half of the post-school education and training courses undertaken were in the same broad industry area as the school VET course, consistent with Misko's (2001) findings. In particular, 70 percent of apprenticeships and traineeships undertaken were in the same broad industry area as the school VET course. The link is particularly strong in the technology and trades area for males, and in the human services area for both males and females. Consistent with other research into the outcomes of school VET students in general, those who had studied a school VET course in the primary industries area were the least likely to continue with post-school education and training (Ball & Lamb 1999–2000), while business and clerical school VET students were the most likely to continue (ECEF 2002).

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



Employment outcomes

Findings from questions on post-school pathways and school VET study revealed that 89 percent of all respondents (school VET and school non-VET) were employed at the time of the survey. Again, sample bias needs to be kept in mind when interpreting these findings.

Most (62%) of school VET students currently working indicated that their job was in the same broad industry area as their school VET course. The industry areas with the strongest links were human services, primary industry, and technology and trades;

and with the weakest link, business and clerical. These findings are consistent with Misko (2001) and ECEF (2002), although it should be noted that both these studies reported short-term employment outcomes, some three to four months after students had left school.

There were differences in employment outcomes by gender. Male respondents (both school VET and school non-VET) were more likely to be involved in full-time employment than female respondents (both school VET and school non-VET), in line with national labour force figures. Care needs to be taken in interpreting these findings, as the study did not provide chronological links between employment and study for each respondent. Therefore, it is likely that a number of those employed on a part-time basis were also studying at the same time. This would be viewed as a positive outcome, whereas part-time employment on its own would be a cause for concern (Curtain 1999). School VET students in general were no more likely to be currently employed than school non-VET students, although they were more likely to be involved in full-time employment, consistent with findings from other research (Fullarton 2001; Misko 2001).

Interestingly, of the 31 school non-completers, most were school VET students, and all were employed at the time of the survey. The majority left in Year 11 to take up employment offers, indicating they were opportune leavers (Dwyer 1996). This supports findings by McMillan and Marks (2003) who found early leavers were more likely to be well established in the labour market than others who were not participating in higher education, and Searston (1996) who found there was no disadvantage in terms of employment outcomes for school non-completers who remained in their local rural community. It is also consistent with Smith's (1996) research in rural communities, which found a positive relationship between successful employment outcomes for school non-completers and participation in a school VET program.

Employment outcomes are influenced by a variety of factors, including purpose of the school VET program, participation in work placements, student motivation, and gender. These outcomes will be explored in more detail in the later section titled 'Features of rural school VET programs'.

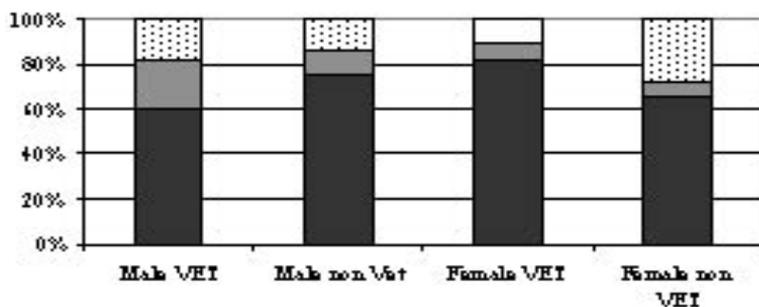
Community outcomes

The third group of outcomes, community outcomes, include issues relating to youth retention in rural communities. These relate to findings from all four groups of questions: respondents' backgrounds, value of senior school experience, post-school pathways, and, where relevant, school VET study. At the time of the survey, two to three years after they had left secondary school, 80 percent of all respondents (school VET and school non-VET) reported that they normally resided in a rural area and 20 percent in a metropolitan area. Again, care has to be taken in interpreting

these findings as the sample was biased towards those who remained in their home community.

Most students indicated their intention to live in a rural community at some stage in their working life, with school VET students more likely than school non-VET students to intend to live in their home community and in a rural area more generally. Female school VET students were the most likely, and female school non-VET students the least likely, to remain in their home community (figure 2). In addition, a comparison of current postcode against school postcode showed that male school VET students were the most likely to move after leaving school, often for employment or post-school education and training, closely followed by female school non-VET students, who were the most likely to move to metropolitan areas for university study.

Figure 2: Mobility of school VET and school non-VET students after leaving school



Moved to metropolitan
 Moved to other rural
 Not moved

Note: χ^2 p value for males 0.207; for females 0.035* significant for movement of school VET vs school non-VET females.

School VET respondents who intended to live in a rural area during their working life were more likely to have studied a school VET course in technology and trades, primary industry, or work skills. They were less likely to have continued with post-school education and training in general, but more likely to have undertaken further vocational education and training, than school non-VET students who intend to live in a rural area. This supports findings by others (Lamb, Long & Malley 1998; Ball & Lamb 1999–2000); Fullarton 2001) regarding the links between school VET study and post-school VET.

Features of rural school VET programs

Findings from questions on school VET study indicated that the outcomes of rural school VET programs were influenced by a number of factors, including the purpose of the program, whether structured work placements were involved, the motivation of school VET students, and gender. Each will be considered below.

Purpose of school VET programs

The sampled schools reported three main purposes for school VET programs: pathway to local employment, provision of general workplace skills and knowledge, and as an alternative to the mainstream curriculum. Where a school VET course was offered as a pathway to local employment, respondents were more likely to report that their school VET course had influenced their decision to continue with senior secondary school, helped improve their literacy and numeracy skills, and led to a job related to their school VET course. If those students had also participated in a structured work placement they were more likely to have received an offer of a job or an apprenticeship/traineeship through their structured work placement, and to have stayed in their home community. This suggests that school VET courses intended as a pathway to local employment were successful in terms of retaining students who otherwise may not have completed their senior secondary schooling, and in assisting their transition from school to work. When considered alongside research that found rural students are more likely to choose VET than urban students (Fullarton 2001), this suggests that school VET programs have special potential to develop skills for the future workforce of rural Australia.

Structured work placements

Over half of all school VET respondents participated in a structured work placement, and half of these received a job offer from their work placement employer, indicating structured work placements provided a pathway to initial employment. The study also revealed that structured 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. The link between structured work placement and initial employment appears to be greater for our sample of rural students than for school VET students in general, in that Misko's (2001) study reported that one third of students who had participated in a structured work placement had received a job offer from their work placement employer. Our findings are in line with research by Fullarton (1999) who reported that rural students (from communities with populations of less than 1000 people) more actively seek VET courses that offer structured work placements than their regional or metropolitan counterparts, because they are less likely to continue with tertiary education.

Findings from the current study also indicate that work placement students were more likely than other school VET students to have had a casual job while at school, so

it may be that a combination of the casual job and participation in structured work placements assisted students in gaining employment or an apprenticeship/traineeship. This is consistent with research by Smith and Green (2001) into the value for students of part-time work while still at school, and the transfer of learning between part-time work at school, structured work placements, and traditional work experience programs, suggesting further exploration of these links for rural students is required.

Taken together, the findings indicate that by providing an initial transition pathway to local jobs and apprenticeships, work placements also play a role in increasing youth retention in rural communities. Interestingly however, at the time of this survey some two to three years after leaving school, students who had undertaken a structured work placement as part of their school VET course were no more likely to be currently employed full-time or to have commenced an apprenticeship or traineeship, than other school VET students.

Student motivation

Student motivation for selecting a school VET course was influential in determining outcomes from the course. Many students were motivated to undertake a school VET course for career reasons, and it appears they undertook school VET as a pathway to their goal of local employment. Such students were more likely to do a structured work placement, and for this to have resulted in an offer of an apprenticeship or traineeship. This group was also less likely to finish Year 12, consistent with the profile of work placement students identified by Teese, Davies and Ryan (1997), but more likely to subsequently go on to post-school education and training than other school VET students. About a third of the structured work placement students who were offered a job or apprenticeship/traineeship while still at school, appear to have accepted the offer and left school before completing Year 12. As reported earlier, all school non-completers, most of whom were school VET students, were employed at the time of this survey. In this context, it is questionable whether the fact that these students left school before completing Year 12 to take up job or apprenticeship offers should be seen as a failure of school VET.

Gender

Outcomes of school VET courses differed according to the gender of participants. Females were more likely to choose business and clerical, and work skills courses, and males, technology and trades, and primary industry courses. Gender and choice of school VET industry area are strongly related, and this relationship appears to flow on to post-school outcomes. Male school VET students predominantly chose the technology and trades areas that are associated with full-time employment and apprenticeships, whereas females tended to choose human services, business and clerical, and work skills programs that are associated with casual or part-time jobs.

This supports similar findings regarding the difference in job industry area and job status for males and females reported by Fullarton (2001). 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) influence these outcomes. At the same time, it needs to be recognised that part-time and casual jobs provide an important source of support for students who are undertaking further education and training.

Conclusions and implications

This study provides evidence of a variety of positive individual and community outcomes that accrue from participation in school VET in rural areas. At a general level, the findings indicate that 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. This suggests that rural school VET is well positioned to assist in the transition from school to further education and training and careers for a wide range of rural students. At the same time, positive outcomes from participation in school VET can be linked to specific groups of students such as school non-completers, whose transition to the workforce was enhanced by participation in a school VET course. There also appears to be a link between female students' participation in school VET and their retention in the community, suggesting that rural schools and communities have an obligation to ensure a variety of school VET courses are made available for study by female students. These courses should reflect the broad skill needs of the local community rather than traditional female areas of study alone, and should include career-oriented options. At the same time, females need to be encouraged to consider areas of school VET study that lead to career paths in rural areas.

Particularly successful outcomes are linked to school VET courses designed to provide a pathway to local employment, and that include structured work placements. Such courses were successful in retaining students who may otherwise have left school before completing their senior secondary study, and in assisting in the transition from school to work. A key finding of this study is that structured work placements are a key component of the success of school VET in rural areas, in terms of providing a transition pathway to local employment and apprenticeships, and increasing youth retention in rural communities.

However, this study poses as many questions as it answers, and points clearly to the need for further research into the post-school pathways of rural students, and a need to consider new and expanded definitions of 'successful' school VET outcomes. This is in line with a similar recommendation by Malley, Keating, Robinson and Hawke (2001), who identify a 'lack of appropriate performance measures, whereby prevailing school performance measures tend not to identify as successful outcomes,

the placement of a student into a full-time job before completing Year 12' (p. 8). In addition, when the findings for school VET students from this study are compared with findings from short-term destination surveys (see, for example, Polesel, Teese & O'Brien 1999), there is an increase in employment and further education and training outcomes for students some three years out of school, confirming concerns by the researchers that post-school destination studies conducted during the first year of leaving school, present a limited picture of the post-school experiences of school VET students.

There are a number of research implications from this study, including the need to further research the link between VET in rural schools and post-school apprenticeships and traineeships, the effectiveness of school VET programs in meeting local skill needs, and further assessment of community outcomes of school VET programs, especially in rural areas. It is suggested that 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. For VET systems, the implication is that pathways from primary industry school VET courses need to be more flexible to improve access to further training in this area.

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