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**Pathways from rural schools: Does school VET make
a difference?**

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Pathways from rural schools: Does school VET¹ make a difference?

Abstract

This paper reports results from an NREC funded study of the medium term outcomes for youth and their communities of VET programs delivered by rural schools. The key findings relate to the *outcomes* of school VET programs in terms of education and training, employment, and community outcomes such as rural youth retention, and to the *features* that contribute to successful outcomes. Rural school VET students are less likely to continue with post school education and training in general, but more likely to go onto further vocational education and training than school non-VET students. The study reports strong links between industry area of school VET course, and further education and training, or employment, in the same industry area. It also indicates that school VET students are more likely to live in a rural area at some time during their working life. The features of rural school VET programs that influence outcomes include the purpose of the school VET program and work placements. Student motivation and gender also influence outcomes for individual students. Rural school VET courses represent pathways to related education and training for students who intend to live in a rural area during their working life, and for those who do not.

Introduction

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). 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). Very little research to date has focused specifically on the transition pathways of rural youth through school VET programs.

The overarching purpose of the study was to assess the individual and community impact of school VET programs in addressing rural community decline. Specifically it

¹ The term 'school VET' is used to describe all VET-in-schools programs, including school-based new apprenticeships. School VET courses are those which result in, or lead to, a nationally recognised qualification, usually Australian Qualifications Framework (AQF) accreditation. Students who participated in a school VET course are referred to as school VET students. Other students are termed school non-VET students.

aimed to compare education and training, employment and community outcomes of 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 rural school VET students experience the same outcomes as school VET students in general? 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?

Literature review

There is a paucity of research available specifically on the outcomes for rural school VET students compared with all school VET students. This is despite the increasing rate of uptake of school VET in rural Australia (Frost 2000), and the fact that rural students are more likely to undertake a school VET course than urban students (Ball & Lamb 1999–2000). The background to the current study is therefore couched in the research on school VET in general.

Outcomes from school VET participation

Studies of 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 than University (Polesel, Teese, O’Brien & Unger 1998; Polesel, Teese & O’Brien 1999). Other studies have found that school VET study is a pathway to post-school VET participation in general, with higher proportions of school VET than school non-VET students going onto post-school VET study, including apprenticeships (Lamb, Long & Malley 1998; Ball & Lamb 1999–2000; 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). On the other hand, 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 area on leaving school, they were less likely to undertake further VET study (including apprenticeships and TAFE) than other school VET students. Misko (2001) and Malley, Ainley and Robinson (2001) expressed concern at the relatively low rate of credit transfer/advanced standing accorded to school VET students who undertook post school study. For example, in her national study, Misko reported that nearly half of the school VET respondents failed to gain credit for post school VET study in a related area.

Studies of outcomes related to employment indicate higher full-time employment levels for school VET students (Fullarton 2001; 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 1999a; Fullarton 2001). For example, 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 1999a; 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.

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 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 highlighted the link between school VET work placements and later employment with the same work placement employer. Still on the issue of work placements, Teese, Davies and Ryan (1997) reported a link between student profile and the outcomes gained from work placements, in that those most likely to participate in work placements were less academically inclined and more likely to be seeking employment on leaving school.

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). 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. School VET partnerships have been found to facilitate the development of new networks within the community and encourage collective action for the benefit of all (CRLRA 2001; Kilpatrick, Bell & Kilpatrick 2001; Kilpatrick et al. 2002).

Factors that influence the effectiveness of school VET outcomes

A number of factors impact on the nature and extent of school VET outcomes, including gender and non completion of school. 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 onto higher education (Lamb, Long & Malley 1998; Fullarton 2001; ECEF 2002). These outcomes are linked to the gender differences apparent in choice of school VET study area (Fullarton 2001). It is accepted that early school leavers are at greater risk than school completers, in terms of their ability to enter and remain in the labour force (Lamb & Rumberger 1999). However, several studies have shown that this may not be the case for school non completers (those who leave during Years 11 or 12), particularly those in rural areas who have undertaken school VET. A number of these left to take up jobs related to their school VET course (Searston 1996; Smith 1996). These positive outcomes accrued largely to opportune, rather than discouraged or alienated, non completers (Dwyer 1996).

Research specifically on school VET for rural students

Research has shown that rural students are disadvantaged in terms of post compulsory education opportunities because of their lower senior school retention rates (Lamb, Long & Malley. 1998). In addition, post-secondary education is seen as less relevant and is less valued by rural and isolated students compared with urban students (James 2000). Rural and isolated students are more likely to leave school and take up work than their urban counterparts (James 2000). Those who opted to undertake further study were more likely to select TAFE rather than university.

The literature suggests that rural school VET is helping to address issues of rural disadvantage. Research has increased learning opportunities for students leading to improved school retention rates, and directly related to this, 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; 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).

Various factors 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 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 their ability and desire to work together in the form of partnerships (Country Education Project Inc. and Youth Research Centre 2001; Kilpatrick et al. 2002). Research indicates that rural communities may be well placed to maximise the outcomes of school VET programs because of a key attribute—their strong local networks (Smith 1996; Country Education Project Inc. and Youth Research Centre 2001).

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 work placements (Country Education Project Inc. and Youth Research Centre 2001; Smith & Green 2001). These are tempered with issues that may impact negatively on rural school VET, including access and equity, resourcing, and availability of suitable work placements (Country Education Project Inc. and Youth Research Centre 2001; Kilpatrick et al. 2002).

Research method

Former school VET and school non-VET students from six rural school clusters² funded by the Enterprise and Career Education Foundation were surveyed by mail. The study targeted those in Year 11, 12 or 13 in 1998. Equal numbers of VET and randomly selected non-VET students from each cluster were surveyed. 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.

Survey data were analysed with the aid of SPSS computer software, and were supplemented by documentation from schools regarding the purpose, nature and outcomes of their VET programs. 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. As the survey was mailed to former students' 1998 addresses, the sample of respondents is also weighted towards those who had remained in the same location since that time.

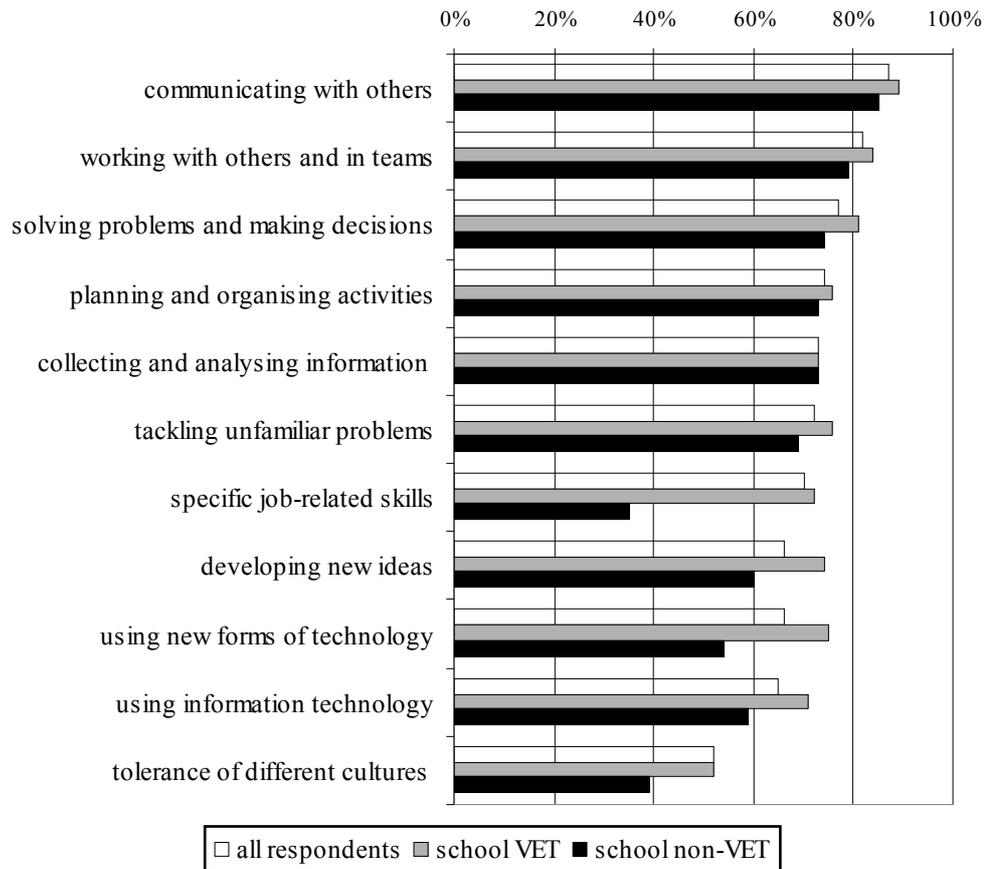
Findings and discussion

Outcomes of rural school VET programs

Findings 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 and job specific 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.

² One cluster was selected from each State. Clusters included communities with populations of 10 000 or less, except for Tasmania, where a community with a population greater than 10 000 was included.

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



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 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 (Lamb, Long & Malley 1998; Ball & Lamb 1999–2000; Fullarton 2001).

Over one third of all respondents had commenced an apprenticeship or traineeship since leaving school. Of those, far more males than females went onto apprenticeships. There were gender differences in choice of apprenticeship and traineeship fields, with males principally choosing technology and trades, followed by primary industry, 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, 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 (ECEP 2002).

Of respondents who indicated their further education and training was related to their school VET course, only one third reported having received advanced standing or credit for the school VET course. 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 taken business and clerical, and work skills courses (e.g. Certificate in Work Education). Similar concerns regarding credit for school VET courses are reported by Misko (2001) and Malley, Ainley and Robinson (2001).

Regarding employment, 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. 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. However, 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). Of the 31 non completers³, most were school VET students, and all were currently employed, confirming similar outcomes reported by Smith (1996) and Searston (1996).

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 area with the strongest link was human services, and with the weakest link, business and clerical. Again, this is consistent with previous research (Misko 2001).

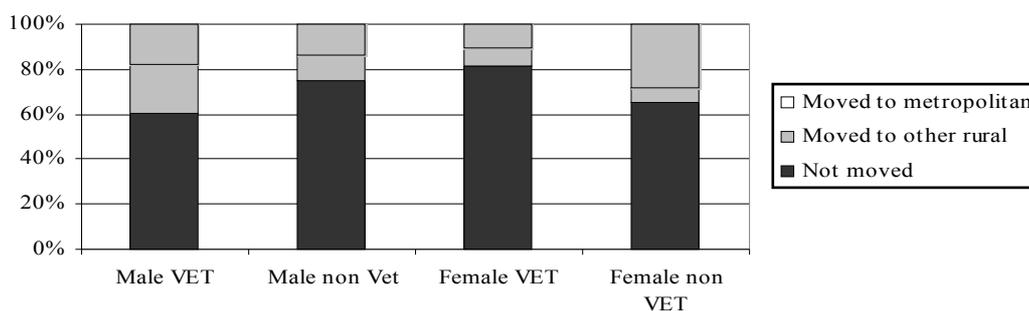
The third group of outcomes from participation in school VET courses were community outcomes, including youth retention in rural communities. At the time of the survey, two to three years after they had left secondary school, 80 percent of all respondents reported that they normally resided in a rural 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 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, closely followed by female school non-VET students, who were the most likely to move to metropolitan areas for university study.

³

Those who completed the compulsory years of schooling (Year 10) but did not complete senior secondary schooling (left before the end of Year 12).

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



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.

Features of rural school VET programs

Outcomes of rural school VET programs were influenced by a number of factors, including the purpose of the program, whether work placements were involved, the motivation of school VET students, and gender. Each will be considered below.

There were 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 work placement they were 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. This suggests that school VET courses intended as a pathway to local employment were successful in terms of retaining students who otherwise may have left school early, and in assisting the transition from school to work. 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.

Over half of all school VET respondents participated in a work placement. Consistent with Teese, Davies and Ryan (1997), work placement students were less likely to have completed Year 12 than other school VET students. However, despite the fact that half of the work placement students received a job offer from their work placement employer, at the time of the survey two to three years after leaving 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. 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 before completing Year 12. Completion of a work placement was a pathway to initial employment on leaving school, with half the work placement students being offered employment by their 'employer'. This figure is higher than the figure of one third cited in research by Misko (2001). In general, 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.

Student motivation for selecting a school VET course was influential in determining outcomes from the course. Many students were 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. Such students were more likely to do a 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, but more likely to subsequently go on to post-school education and training than other school VET students. This profile of work placement students and their motivation for choosing school VET study is consistent with the research of Teese, Davies and Ryan (1997). In this context, the fact that a proportion of these students leave school before completing Year 12 to take up job or apprenticeship offers 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 'opportune leavers', perhaps raising the need to consider expanded definitions of 'successful' school VET outcomes.

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 choose the technology and trades areas that are associated with full-time employment and apprenticeships, whereas females tended 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) influence these outcomes.

Conclusions

Perhaps nowhere will the impact of the changing face of VET being felt more strongly than in the context of rural school VET. There are indications that school VET in rural areas does make a positive difference in terms of employment for school non completers, and in terms of retention in the community for female school VET students. Specifically, this study suggests 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. Rural school VET is therefore well positioned to assist in the transition from school to further education and training and careers for a wide range of rural students.

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. These include 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. 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.

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