9

Individual needs and pathways

- 9.1 This chapter examines in more detail individual factors that affect the accessibility and effectiveness of vocational education for students.

 Students with a disability, or those at risk of leaving school early, such as Indigenous students, have a real need for individualised support and mentoring.
- 9.2 Support structures within schools and external to schools that aid students in the transition from school to further study or employment are particularly important in this context. The role of part-time work is also relevant. The important issue of the limitations of current outcomes data is noted and is critical for the meaningful evaluation of the effectiveness of vocational education.

Overview

- 9.3 The picture presented to the inquiry has been one of the emerging potential of vocational education programs, particularly VET in Schools and School-based New Apprenticeships (SBNAs), to assist students in pursuing their post-school pathways. However, there are significant improvements still to be made to address the following findings.
- 9.4 To gain an overview of the situation of young people in Australia it is useful to be reminded that in May 2003:
 - 85 per cent of 15–19 year olds were in full-time study or full-time work; however:
 - only 55 per cent of Indigenous teenagers were in full-time learning or work in 2001;

 five months after leaving school, 26 per cent of school leavers (76,100)
 were either working part-time but not studying were unemployed or not in the labour force and not studying;

- full-time jobs for teenagers had declined by almost 7 per cent since 1995;
- entry level full-time work was a more effective pathway to sustainable full-time work over the medium term than part-time work; and
- school leavers completing an apprenticeship had a lower unemployment rate than other school leavers, while those who had competed a traineeship had a higher unemployment rate than other school leavers.¹
- 9.5 Australia is recognised internationally as having employment rates that are above the OECD average for young adults, and a relatively high proportion of young adults obtain tertiary qualifications, but teenage unemployment and early school leaving rates compare less favourably.² As outlined in Chapters 2 and 3, there is considerable momentum in addressing these issues, but significant work is still required. Identifying where resources and strategies should be targeted is central to improving outcomes in preparing students for post-school pathways. One strategy is to focus efforts on students with particular identified needs for assistance.

Access and equity

9.6 One of the key priority areas identified in the Principles and Guidelines for Improving Outcomes for Vocational Education and Training in Schools (2002-2004) is:

the introduction of specific strategies to improve access for students in rural and remote areas and for educationally disadvantaged students including Indigenous students and students with a disability.³

9.7 The Queensland Government's submission indicates that the intent of the initiatives introduced in that state is to ensure equitable access to VET in Schools, and that this access provides a pathway for transitions for students with identified needs.⁴ NSW aims to ensure that the cost to the student of participating in VET and the cost to the school of conducting

Dusseldorp Skills Forum, 2003, *How Young People are Faring: Key Indicators 2003*, p. 4, Dusseldorp Skills Forum, http://www.dsf.org.au/papers/108.htm>.

² OECD, 2003, Economic Survey Australia 2003, Paris, p. 91.

³ DEST, Submission No. 75, p. 9.

⁴ Queensland Government, Submission No. 93, p. 3.

VET courses is equitable across all its schools. The objective is that government school students have equal access to VET courses in a wide range of industry areas, independent of their location and circumstances. Where local or individual factors act to increase costs or reduce access (e.g. in rural and remote schools or for students with disabilities) additional funding is provided, such as distance and on line delivery, student and teacher travel subsidies, and disability support funds.⁵ However, this is recognised as a significant and rapidly growing cost,⁶ and in one region the managing committee in Wagga Wagga questions its ability to maintain such a diverse provision.⁷

- 9.8 As part of the Tasmanian Department of Education's VET in Schools Equity Project, barriers to participation and effectiveness were identified in the following areas:
 - access to prerequisite skills, and the availability of courses;
 - lack of learning supports, and the need for flexible provision;
 - perception and awareness;
 - costs to families and individuals of undertaking VET programs;
 - discrimination and workplace culture; and
 - lack of coordinated pathway planning and work place opportunities.⁸
- 9.9 The project is now looking to address these barriers and propose possible solutions. Included in the Tasmanian State plan is a destination survey to trace longitudinally the entire 2001 Year 10 cohort for the three years 2002-2004.9 Many state activities link with national plans to support greater participation and improved outcomes in VET. *Bridging Pathways*, the national strategy for people with a disability in vocational education and training, identifies the issue of the accessibility of VET in Schools. ¹⁰ *Partners in a Learning Culture* identifies strategies for Indigenous students and vocational education in schools.
- 9.10 These national strategies are two examples of addressing equity issues for groups of students identified as having special needs. Other groups of young people who have been identified as needing additional support are students in rural and remote locations and students at risk of early school

⁵ NSW Department of Education and Training, Submission No. 94, p. 23.

⁶ NSW Department of Education and Training, Submission No. 94, Appendix, Table 1, p. 41.

⁷ Mr Peter Brabin, Chief Education Officer, Wagga Wagga District Office, Department of Education and Training *Transcript of Evidence*, 2 July 2003, Wagga Wagga, NSW, p. 829.

⁸ Tasmanian Government, Submission No. 92, p. 11.

⁹ Tasmanian Government, Submission No. 92, p. 12.

¹⁰ ANTA, 2000, *Bridging Pathways*, *National Strategy from 2000 to 2005*, http://www.anta.gov.au/dapBridging.asp.

leaving. Chapters 5 and 6 provided an overview of the some of the issues affecting students and schools in rural and remote locations, and will not be reconsidered here.

9.11 Young people with a disability, students 'at risk' and Indigenous students experience particular challenges. The Committee notes with regret that more information was not received to consider more fully the issues concerning students in these identified equity groups, which could be the area for a specific inquiry. A recent publication, *Equity in vocational education and training: research readings,* provides an excellent overview of progress, activity and outcomes in the broader VET sector, with reference also to vocational education in schools.¹¹

Students with disabilities

- 9.12 Australian Bureau of Statistics data indicate that nearly 17 per cent of 15 to 64 year old Australians have a disability of some kind. The proportion of VET students with a disability is around 5 per cent of all students and so they are under-represented in vocational education. This has implications for their employability. One strategy has been to increase the use of vocational education in schools to improve the pathways for young people with disabilities.¹²
- 9.13 In NSW, Schools for Special Purposes (SSPs) have developed vocational programs for their students for over thirty years. These programs for students with disabilities have been successful in assisting students to gain employment in a wide range of vocational areas, from sheltered workshops through to apprenticeships ultimately producing qualified chefs, butchers, cabinet makers, cleaners, greenkeepers and vehicle detailers. The submission from the SSP Principals' Network notes that the student population in SSP schools has changed over the past ten years with the greater inclusion of students with disabilities in mainstream schools. This has resulted in SSPs enrolling students with more complex needs, and other secondary schools have had to provide more appropriate programs for the increasing number of students with learning difficulties and behavioural disorders, as well as intellectual disabilities.
- 9.14 Vocational programs in SSPs begin with students under fourteen years of age, with work studies integrated across the curriculum and practical

¹¹ NCVER, 2004, *Equity in vocational education and training: Research readings*. This publication also includes reference to outcomes for women and people from non-English speaking backgrounds.

Barnett, K. 2004, VET-ability. The capacity of the Australian VET system to be inclusive for people with a disability, in *Equity in VET: Research readings*, NCVER.

¹³ NSW SSP Principals' Network, Submission No. 11, p.1.

- components of work practices organised through enterprise activities or through school routines. External work placements take place once the student is over fourteen, with appropriate training and supervision in enclave sites, for example in factories, registered clubs and nurseries.
- 9.15 In South Australia, Salisbury High School manages a complex student population. Students with disabilities comprise over 13 per cent of the school. Salisbury High School has received *The Australian*'s Best School award for excellence in disability education in a large public high school. The school focus is on pathways to success, with the aim of placing every student in higher education, training, or employment They also focus on placing students with disabilities in community service. The school focus of the school focus on placing students with disabilities in community service.
- 9.16 Salisbury High School is also part of a group of schools working with disability support services in the Department of Education and Children's Services. It aims to examine concerns across the north of Adelaide regarding access to and the effectiveness of vocational education programs in schools for students with disabilities. In 1999/2000, it was identified that students with disabilities and those with learning difficulties were not accessing VET modules with links to National Training Packages. Consequently, many students with disabilities were not well prepared for their role in the workplace, as other agencies did not recognise their achievements. It was considered that it would be beneficial for some students if VET preparation work could be commenced in Years 8, 9 and 10. This has resulted in the development of guides to assist teachers in the Certificate 1 in Employment Skills Training.¹⁶
- 9.17 Similarly, in Queensland, Certificate 1 in Work Readiness and Certificate 1 in Work Education were developed to enable a flexible delivery of VET in Schools. It has been reported that there has been a high growth in the numbers of students with special needs participating in VET in Schools. Nineteen special schools in Queensland are registered training organisations (RTOs), including Aspley Special School, which has an Australian National Training Authority funded Skills Centre for Hospitality.¹⁷
- 9.18 In NSW, the opportunities that vocational education in schools offers students with moderate levels of disabilities in mainstream schools have

The Australian, 5 December 2003, 'Salisbury High School SA', http://www.theaustralian.news.com.au/printpage/0,5942,8063094,00.html>.

¹⁵ Ms Helen Paphitis, Principal, Salisbury High School, *Transcript of Evidence*, 7 August 2003, Adelaide, p. 1099.

¹⁶ Disability Services Adelaide North, 2001, *Steps to VET*, http://www.northsupportservices.nexus.edu.au/pdf/dsm_vt05.pdf>.

¹⁷ Queensland Government, Submission No. 93, p. 28.

been recognised. The involvement of these students with VET and work placements has added to life skills programs that cover personal and social skills. However, there is still a need for sufficient resourcing. Additional support for some students may be required and the Queensland Government submission specifies that this support may include:

- workplace mentoring;
- tutorial support;
- adjusting the time to complete the course;
- modifying learning materials;
- adaptive equipment;
- transition planning support;
- transport to the industry and training placement; and
- on-the-job support.
- 9.19 It is suggested that the models for funding VET in Schools need to take account of the additional costs that are incurred in assisting students with a disability. Similarly, the Australian Federation of Special Education Administrators identifies the greater need for flexibility of course and program delivery. A commitment to adequate financial resourcing with appropriate accountability and monitoring of student outcomes is also required to ensure improvements for students with special needs. ²⁰
- 9.20 Limited access to vocational education programs for students with disabilities has been identified in the broader VET systems as well.²¹ Improving the pathways from school to further education is identified as a way to improve the effectiveness of vocational education for these students. *Bridging Pathways* reported that in 1998 almost 20 per cent of VET students with a disability left school before turning fifteen. Vocational education and training in schools is considered an important development, that can encourage individuals who might otherwise leave school early to take up further training options. It is suggested that those who do leave school early need alternative transitional pathways to access vocational education and training.²²

⁸ Mr Philip Wood, Deputy Principal, Junee High School, *Transcript of Evidence*, 1 July 2003, Junee, NSW, p. 769.

¹⁹ Queensland Government, Submission No. 93, pp. 28-29.

²⁰ Australian Federation of Special Education Administrators, Submission No. 108, pp. 5-7.

²¹ ANTA, 2000, *Bridging Pathways*, *National Strategy from 2000 to 2005*, p. 5, http://www.anta.gov.au/dapBridging.asp.

²² ANTA, 2000, *Bridging Pathways*, *National Strategy from 2000 to 2005*, p. 12, http://www.anta.gov.au/dapBridging.asp.

- 9.21 Examples of successful programs are found in the Lighthouse Initiative of the Enterprise and Career Education Foundation (ECEF).²³ These programs focussed on early intervention, additional learning and other support for effective participation and work placement, and developing pathways to employment.²⁴
- 9.22 There is a need to develop links between schools, pre-vocational initiatives and disability employment assistance services to improve access, support and placement in appropriate training and workplace opportunities. This is one of the range of goals and areas of action identified for all the VET sector, which the Committee notes could equally apply in the subset of school vocational education. These goals are to:
 - open the door:
 - ⇒ improve pathways to vocational education and training,
 - ⇒ provide accessible information;
 - Improve the learning experience:
 - ⇒ provide client focused training;
 - ⇒ equip the vocational education and training sector with skills in providing inclusive training;
 - Achieve employment and life-long learning outcomes:
 - ⇒ develop links with employers and employment assistance services;
 - ⇒ support efforts to undertake further education and life-long-learning;
 - Create an accountable system:
 - ⇒ ensure compliance with legislation and regulative frameworks;
 - ⇒ implement inclusive resource allocation practices; and
 - ⇒ promote collaboration through partnerships.²⁵
- 9.23 Improvements to school systems that incorporate and emphasise these changes, would assist young people with disabilities who may be at risk of leaving school early and not achieving their potential. Addressing these issues would improve opportunities for success in further education or employment.

ECEF, 2000, *Disability Initiative: Vocational Learning for Young Australians with a disability*,. http://www.ecef.com.au/web/ProjInit.nsf/ECEF/disability?OpenDocument&site=ab>.

²⁴ Barnett, K, 2004, VET-ability. The capacity of the Australian VET system to be inclusive for people with a disability, in *Equity in VET: Research readings*, NCVER.

ANTA, 2000, *Bridging Pathways, National Strategy from 2000 to 2005*, p. 6, http://www.anta.gov.au/dapBridging.asp>.

Recommendation 34

The Committee recommends that Commonwealth, state and territory education authorities give further attention to providing VET programs, and effecting transitions to work and further training, for people with disabilities, by:

- providing necessary modifications to learning materials, programs and equipment;
- increased work placement mentoring and support; and
- improving links between workplace coordinators and disability employment services.

Students 'at risk' and early school leavers

- 9.24 Around one in four young people in Australia leave school without completing their senior secondary certificate. As discussed in Chapter 2, this has been a fairly stable pattern throughout the 1990s, although at the start of the decade recession kept more young people at school. Two major motives identified for dropping out of school early are:
 - a pull into the workforce with a demand for work or an income; and
 - a push associated with a lack of interest in schoolwork.
- 9.25 Large variations exist across the states and territories, ranging from about 11 per cent who leave school early in the Australian Capital Territory to nearly 50 per cent in the Northern Territory. There are also significant differences between boys and girls. About one in five girls does not complete secondary school, compared with about one in three boys. As well as the gender gap, and the gap between the states and territories, there is variation based on region, socio-economic status and Aboriginality. Reasons for leaving school can only be partly linked to low achievement and economic insecurity within the family. Therefore, a range of strategies is needed to identify the particular issues for the student and to provide greater support.
- 9.26 Early leavers generally find work, with more boys than girls finding full-time work, often involving an apprenticeship. Girls are less likely to find

²⁶ Teese, R, 2003, Early school leavers and VET, in Equity in vocational education and training: Research readings, NCVER.

- full-time work, relying heavily on part-time work or casual employment, usually associated with lower incomes and greater job insecurity.²⁷
- 9.27 The Queensland Government provided information to the Committee on the higher support needs of young people who are at risk of leaving school early. Programs and pathways need to be negotiated with young people, and focused on their individual needs. It was suggested that successful strategies must include:
 - well-organised links between school and work or further study;
 - assistance for those at risk of leaving school early;
 - additional support and alternative education programs for those disengaged from learning;
 - employment programs specifically designed to assist young people at risk of disengaging from learning; and
 - good information and direction, and a key person to guide each student.
- 9.28 For the 2002 school year, \$2.5 million was allocated to the Youth Access program to support 1101 students at risk of not completing secondary schooling. The Youth Access program aims to provide pathways involving elements of general school-based education and formal vocational training, support and guidance, which can include on-the-job training. With early intervention, it is anticipated that young people will develop the basic skills necessary to move into employment or a school-based apprenticeship or traineeship.²⁸
- 9.29 The need for early intervention has been identified as crucial to the effectiveness of vocational education in schools in assisting with school retention rates. One purpose of VET in Schools has been ensuring that students 'at risk' receive education that will connect them to improved post-school opportunities in either work or education and training. However, research cited by the Australian Education Union (AEU) questions the extent to which VET in Schools is serving the needs of students most at risk of not completing school. The AEU implies that for the most disadvantaged students, VET is too demanding and comes too late. The union observes that the problems such students have with school arise much earlier and require earlier attention.²⁹
- 9.30 Other researchers note that the massive enrolment growth in VET in Schools has not coincided with any significant increase in overall Year

²⁷ McMillan, J and Marks, G, 2003, *School leavers in Australia: Profiles and Pathways*, LSAY Research Report No. 31, ACER, p. 89.

²⁸ Queensland Government, Submission No. 93, pp. 31-32.

²⁹ AEU, Submission No. 72, p. 53.

10-12 retention rates.³⁰ They consider that VET enrolment growth has come from 'continuers' who switched preferences from general education subjects to vocational ones rather than from any decrease in the numbers of early school leavers. It is suggested that the nature of the VET currently being offered (i.e. based on a higher level, industry-specific, post school training model) may need to change if early school leavers are to be attracted to VET in Schools as an option.

- 9.31 More recently, there is evidence from 2003 that VET in Schools contributes to retaining more young people to the end of secondary schooling.³¹ The work/study mix has been found to be attractive, vocational careers are emphasised and there is more general interest. Additionally, quality relationships between students, teachers, schools and community partners are crucial to the success of vocational programs in re-engaging students in school.³²
- 9.32 The Committee notes that some evidence received indicated that VET was encouraging students who may otherwise have left to stay at school, and that this issue needs to be researched more fully. The further consideration and development of non-industry-specific work readiness or work education courses may be warranted for this group of students, as discussed in Chapter 7 in relation to generic workplace skills.

 Additionally, the earlier provision of support is required to ensure there is a safety net for students disengaging from school.
- 9.33 Achievement in literacy and numeracy in middle schooling was found to be an important influence on school non-completion, and its effects impact considerably on post-school outcomes. Students who had not completed schooling, with lower literacy and numeracy, were more likely to be unemployed, and those that were employed had lower earnings.³³
- 9.34 Additional examination of early school leavers has found that within three years of leaving school early, between two-thirds and three-quarters of these young people have some contact with VET. The evidence from a variety of sources is that this contact is positive in terms of employment and other social benefits. However, some of those early school leavers do not participate in further education and this 'at risk' group still needs

³⁰ Malley, J et al., 2002, The quest for a working blueprint. Vocational education and training in Australian secondary schools, NCVER, p. 25.

Teese, R, 2003, Early school leavers and VET, in *Equity in vocational education and training:* Research readings, NCVER.

³² James, P and St Ledger, P, 2003, 'Crossing school-community boundaries for vocational education: enabling learning for potential early school leavers', *International Journal of Training Research*, vol 1, no. 1, p. 1.

³³ McMillan, J and Marks, G, 2003, *School leavers in Australia: Profiles and Pathways*, LSAY Research Report No. 31, ACER, p. 88.

ongoing attention. Increasing literacy and numeracy, and providing a more general VET certificate before Year 10 may assist with the transition to more industry-specific VET.

Recommendation 35

The Committee recommends that the *Principles and Guidelines for Improving Outcomes for Vocational Education and Training (VET) in Schools (2002-2004)* be revised for the next period to reflect the greater need for access to VET qualifications prior to senior secondary years.

Recommendation 36

The Committee recommends that Commonwealth, state and territory education authorities through ANTA fast track the development of a Certificate I in Generic Workskills for all students to complete by Year 10.

9.35 While boys from lower socioeconomic families are more likely than other socio-economic groups to leave school early, Indigenous students have the highest rates of school drop out. Reference has been made previously in the report to Indigenous students' participation in vocational education programs and suggested strategies to assist.

Indigenous students

9.36 Reliable information about Indigenous students' participation in vocational education and VET in Schools programs and their outcomes is not currently available.³⁴ Barriers to completing school for Indigenous students are complex, and include low achievement, lower aspirations, racism and fewer role models of successful students and teachers. Sometimes Indigenous students suffer multiple disadvantages that provide a further barrier to making a successful school to work transition. There is widespread recognition of the poorer outcomes in general for Indigenous students, and as described in Chapter 4, the Commonwealth has provided funding under the Indigenous Education Strategic Initiatives

Programme (IESIP) and Indigenous Education Direct Assistance (IEDA) to support vocational education.³⁵

- 9.37 Key issues identified are that location has an influence on accessing training or work experiences, and thus the viability of VET in Schools programs. The importance of exposure to work environments and the culture of paid employment is important in seeing a future of alternatives. The development of role models is considered an important strategy to improve educational outcomes for young Indigenous people.
- 9.38 Flexibility in supporting pathways is a key theme in assisting young people for post-school options. Individual factors will be a major influence in the decision making to determine what pathway to take.
- 9.39 Under *Partners in a Learning Culture*, a Blueprint for the National Strategy for Aboriginal and Torres Strait Islander Vocational Education and Training, 2000-2005, MCEETYA has commissioned projects to:
 - address the lack of qualitative and quantitative information regarding Indigenous VET in Schools participation and outcomes;
 - develop pilot models which assist Indigenous students to participate in VET in Schools; and
 - expand awareness of career and VET in Schools options for Indigenous students in the middle years of schooling.³⁶
- 9.40 The Committee considers that these projects will provide considerable input to more effectively supporting Indigenous young people. The Committee looks forward to the reporting on activities and improved outcomes.

³⁵ ANAO, 2002, Indigenous Education Strategies, DEST, Performance Audit Report No. 43, 2001-2002, pp. 12-14.

³⁶ DEST, *Submission No. 75*, Appendix B, pp. 79-81. See DEST Appendix B for a more thorough description of Commonwealth support for Indigenous youth strategies.

Recommendation 37

The Committee recommends that there be an increased focus on earlier assistance to support students 'at risk' and Indigenous students by:

- strengthening literacy and numeracy skills;
- supporting the development of vocational skills and VET qualifications earlier than Year 10; and
- monitoring the progress of Partners in a Learning Culture projects and programs for the purpose of replicating and expanding those which effectively meet the training and transition needs of Indigenous students.

Recommendation 38

The Committee recommends that Commonwealth, state and territory education authorities fund additional support, mentoring and career guidance, ideally by Indigenous staff, for Indigenous students undertaking or considering undertaking VET in Schools or SBNAs, and that consideration be given to more effectively linking these courses to real post-school employment opportunities and career paths.

Recommendation 39

The Committee recommends that there be an evaluation of funding for a wide range of specific ancillary vocational education and careers support programs, in order to:

- determine their effectiveness;
- improve coordination;
- ensure greater continuity of funding; and
- reduce community confusion by eliminating the frequent rebadging of similar programs.

Diversity of pathways

9.41 Young people face a number of decision points and transitions in their mid to late teens:

- whether to leave school at the end of compulsory years of schooling versus participating in senior secondary school;
- whether to complete Year 12 or not;
- whether to pursue a purely academic program or include VET options;
- whether to embark on a School-based New Apprenticeship to combine working with study;
- whether to undertake post-secondary education or training; and
- when to enter the labour market and gain employment.
- 9.42 Therefore, there is considerable diversity in the range of pathways that young people can choose to access the employment market. At most of these decision or branching points, processes of selection occur to be accepted into further study or by an employer. Much of the work to develop vocational education, and specifically VET in Schools, has aimed to increase the range of options for students post-school and increase the versatility of students in being able to access further study or employment through interconnected pathways.
- 9.43 ANTA commented that the 'one size fits all' approach is long gone, and that the current emphasis is on increasing the flexibility in moving from one path to another.³⁷ Examples of this flexibility include school, VET and university articulation, or the identification of generic workplace competencies to enable recognition of prior learning in order to embark on an alternative vocational path. However, as there are selection decisions involved, and as better employment outcomes are associated with increased education, a fundamental question to be asked is: What are the factors that assist young people in the transition to post-school options, and what delays that transition?³⁸ This report has discussed a range of system factors associated with the delivery of vocational education in schools, and individual factors relating to the background characteristics of students. The next section considers other influences and supports that can affect post-school pathways.
- 9.44 As an example of influences and support that can assist in this transition, many schools offer dual recognition and celebrate VET qualifications as

³⁷ ANTA, Submission No. 90, p. 6.

³⁸ McMillan, J. & Marks, G., 2003, *School leavers in Australia: Profiles and Pathways*, LSAY Research Report No. 31, ACER, pp. 87-88. Please refer to this report for an extensive discussion of students that do not complete school, including influences and outcomes.

- enthusiastically as senior secondary certificate completions. One example is Bradfield College in Sydney.
- 9.45 Bradfield College is a TAFE-run senior high school within the Northern Sydney Institute of TAFE, and was the first of its kind in New South Wales. It began operating on its present site at Crows Nest in 1993. Those involved in the establishment of Bradfield College believed that by bringing education and work closer together learning could be more stimulating and students could see positive outcomes from classroom activities. Bradfield College students can gain their Higher School Certificate (HSC) as well as a TAFE Certificate and at the same time be introduced to the workforce through work studies and industry training. This initial approach has also been developed to offer specialised HSC studies to prepare students for further education in a particular field. The Director of Bradfield College, Mr Michael Hyam, stated that:

The outcome is for a student to get their HSC. But underpinning that are all sorts of layers which are really positive. One of the things we do not want to do is only have that one outcome, because that is how you set a student up for failure. If all a student ever wants is a HSC and a UAI [University Admission Index], if there is nothing else under that, I think you have real problems. If you have things underneath that, for example, a TAFE certificate, you are much better off. At our presentation night we would have 200 students on stage who are getting their HSC fantastic but, equally, we would have another 200 students, many of whom are the same, who are getting their TAFE certificate. It is a dual graduation. To us that is as equal a celebration as the HSC.³⁹

9.46 Other strategies are also in place to assist with school students who are contemplating leaving or have left. The Committee notes the success of Bradfield College, and considers that the vocational orientation of a senior college is a model that could be adopted in other metropolitan centres, as a joint facility between the schooling sector and TAFE.

Jobs Pathway Programme/ External services

- 9.47 The importance of individual support is emphasised in the Jobs Pathway Programme, and is provided as an external program to schools.
- 9.48 The Jobs Pathway Programme (JPP) is designed to assist young people to make a successful transition through school and from school to further education, training or work. JPP service providers are contracted by the

Mr Michael Hyam, Director, Bradfield College, Transcript of Evidence, 25 February 2003, Sydney, p. 40.

Commonwealth Government to assist eligible young people by providing practical assistance based on an assessment of their needs. JPP assists young people between the ages of 14 and 19 who are still at school and preparing to leave school or who have left school within the preceding twelve months.⁴⁰

- 9.49 The JPP provider can also provide information about ways to improve literacy and numeracy skills, career choices, school-based and full-time New Apprenticeships, local jobs and the job market, and provide help and guidance throughout the year. If young people have been receiving unemployment assistance they can also use the service as part of their mutual obligation requirements. 41 Other services, such as the Careers and Transition (CAT) Pilots referred to in Chapter 8, also provide more intensive assistance to students.
- 9.50 The JPP provider may refer young people to other providers for additional assistance, such as Career Information Centres operated through Centrelink⁴² and New Apprenticeship Centres (NACs). Additional support for early school leavers is also provided through the New Apprenticeships Access Programme. This is designed to support job seekers experiencing disadvantage, including early school leavers.⁴³ Greater involvement of the training system, such as New Apprenticeship Centres was one outcome of the review into School-based New Apprenticeships, which would assist in the transition for young people from school to work.⁴⁴
- 9.51 The view of community organisations, such as the South Coast Industry Schools Coordinating Organisation (SCISCO) in Queensland, as well as schools, is that students and young people need individualised attention. Putting strategies in place to meet most young people's needs requires one-on-one support. SCISCO indicated that in its view individualised support is poorly resourced, and suggested the use of existing community based organisations to enhance what is currently happening, particularly

⁴⁰ DEST, Submission No. 75, Appendix B, p. 82.

⁴¹ DEST, Jobs Pathway Programme, Quick Guide, http://jpp.dest.gov.au/Information/JPPQuickGuide.asp.

⁴² Centrelink, Career Information Centres are 'one-stop-shops' providing a free service to all Australians through 12 Centres. Specialist staff provide assistance to students, the unemployed, and career changers, including rural and remote clients.

 < jobshttp://www.centrelink.gov.au/internet/internet.nsf/services/career_centres.htm>.

⁴³ DEST, 2003, New Apprenticeships Access Programme, http://naap.dest.gov.au/asp/InfoForJobseekers.asp>.

⁴⁴ ECEF, Submission No. 84, p. 31.

- the Jobs Pathway Programme. Extensions or enhancements of the JPP program were considered worthwhile.⁴⁵
- 9.52 As highlighted by the range of programs and service providers referred to above, it has been reported that there is a need to develop better coordinated services, to avoid duplication and enable easier navigation for young people to access support services. 46 Suggestions have been made that a new youth transition service modelled on the Jobs Pathway Programme should be based within, but not delivered by, schools. Coordinating the service with existing state and territory and local initiatives would add greater value using a community based approach maximising existing resources. 47
- 9.53 The Committee supports further investigation of better integration of career and transition services, to enable a broadening of coverage of schools and to provide more intensive assistance to students in school and to those students who are at risk of leaving school.

Recommendation 40

The Committee recommends that a full analysis be undertaken of the wide range of training pathway, career and transition services in order to:

- achieve better understanding and coordination of services, avoid duplication and remedy deficiencies;
- improve the links between SBNAs and New Apprenticeship Centres, making NACS more accessible for young people; and
- improve the information available to students on transition options and available assistance.
- 9.54 One issue that has arisen in the discussion of reasons for students leaving school is the demand for work, and how students access work opportunities. Students gain access to work opportunities through three

⁴⁵ Ms Andrea Meredith, Programs Manager, South Coast Industry Schools Coordinating Organisation, *Transcript of Evidence*, 9 April 2003, Brisbane, p. 373.

Whittleston, S., 2001, The report from the prime minister's youth pathways action plan taskforce: footprints to the future, *Understanding Youth Pathways*, ACER Research Conference 2001, Proceedings, p. 27; Dusseldorp Skills Forum, 2003, *How Young People are Faring: Key Indicators 2003*, Dusseldorp Skills Forum, p. 26, http://www.dsf.org.au/papers/108.htm>.

⁴⁷ Kellock, P. 2003, *Towards a new youth transition service built on JPP*, Jobs Pathway Programme National Provider Network and Dusseldorp Skills Forum, http://www.dsf.org.au/papers/101.htm.

means: work experience, structured work placements such as vocational placements and part-time work. Many of the students the Committee spoke to during the course of the inquiry were in part-time work.

Part-time work

- 9.55 Relatively little study has been undertaken into part-time work but it is generally agreed that the proportion of students participating is increasing. Somewhere around 50 to 60 per cent of Australian school students of working age in Years 10, 11 and 12 are believed to have formal part-time work.⁴⁸ There has been recent interest in acknowledging the learning that comes from paid work or community work and integrating this to develop a skills passport or recognition of prior learning for the demonstrated competencies.⁴⁹ This is part of acknowledging that extensive learning takes place outside the classroom and that it should be recognised.⁵⁰
- 9.56 The differences in participation in the three types of work place exposure have been examined in South Australia and NSW in a study funded by the National Centre for Vocational Education Research (NCVER). Paid work for students was found to be highly concentrated in two industry areas, retail and fast food. This contrasts with work experience and structured work placements, which are more widely distributed across a range of industry areas. Other findings were that work experience was viewed as a process of career sampling, structured work placements were seen as sites for developing specific skills and paid work was primarily undertaken as a way of earning extra spending money, although significant learning also occurred in that context. The skills which were developed best in all workplace activity were verbal communication, how to behave at work, using initiative, dealing with customers and operating a computer. Written communication was the least well developed.
- 9.57 Ten per cent of the students in the NCVER study needed the money to support themselves or their families.⁵¹ Students worked on average 8.5 hours per week and generally could fit their study in without too much difficulty. However, the Committee found that with school and part-time work some students had little time to fit in other activities, especially when

⁴⁸ Smith, E and Green, A, 2001, *School students' learning from their paid and unpaid work*, NCVER, Executive Summary, p. 2.

⁴⁹ ECEF, Submission No. 84, p. 23; Ms Moira Scollay, Chief Executive Officer, ANTA, Transcript of Evidence, 9 April 2003, Brisbane, p. 350.

⁵⁰ Ms Alice George, Assistant Principal, Senior School, Salisbury High School, *Transcript of Evidence*, 7 August 2003, Adelaide, p. 1106.

⁵¹ Smith, E. & Green, A. 2001, *School students' learning from their paid and unpaid work*, NCVER, Executive Summary, p. 3.

- combined with a School-based New Apprenticeship.⁵² Reasons students did not engage in paid work included wanting to focus on study or sport, or that they were unable to find a job in the local area.⁵³
- 9.58 As discussed in previous sections, there has been considerable pressure to locate work placements, and less attention has been paid to the quality of the learning taking place and the fact that students with specific needs may have less access to work site exposure and will be further disadvantaged.⁵⁴
- 9.59 There are some concerns that part-time work may interfere with effective studying and result in students disengaging from school. It has been argued that working five hours or less per week during Year 9 makes no difference to completing Year 12, but participation in employment beyond five hours is associated with an increased likelihood of dropping out before the end of Year 12, especially for males. On the positive side for students who do not wish to complete tertiary study, part-time employment while at school is associated with higher rates of participation in apprenticeships or traineeships and full-time employment rather than unemployment on leaving school. Beyond the school environment, another question in youth transitions is whether part-time work without study assists young people to enter full-time work.
- 9.60 The Committee notes that further study is required to determine the causal relationship between part-time work and school outcomes. This would include identifying whether working part-time increases the likelihood of students leaving school and the extent to which those who are working part-time have already decided to leave and are establishing a work history. This raises consideration of pathways which is a key theme of this report.

⁵² For example: Ms Yolanda Erlandson, Student, Centralian College, *Transcript of Evidence*, 30 April 2003, Alice Springs, p. 557.

⁵³ Smith, E & Green, A, 2001, *School students' learning from their paid and unpaid work*, NCVER, Executive Summary, p. 3.

⁵⁴ Smith, E & Green, A 2001, *School students' learning from their paid and unpaid work*, NCVER, Executive Summary, p. 6.

Vickers, M, Lamb, S & Hinkley, J, 2003, Student workers in high school and beyond: the effects of part-time employment on participation in education training and work, LSAY Research Report No. 30, ACER, Executive Summary, pp. v-vi.

Dusseldorp Skills Forum, 2003, *How Young People are Faring: Key Indicators 2003*, Dusseldorp Skills Forum, p. 5, http://www.dsf.org.au/papers/108.htm>.

Outputs and outcomes

9.61 Part of the policy agenda for vocational education in schools as outlined in Chapters 2 and 3 has been to increase the range of pathways open to students from a range of backgrounds. A critical question is: How successful has vocational education in schools been in preparing students for post-school options?

9.62 A major area of growth that has been noted is VET in Schools:

There has been a continued increase in VET-in-schools, through states, territories and the Commonwealth actively promoting VET-in-schools as a pathway from school to post-school activities. This has made VET-in-schools an important alternative to more traditional pathways.⁵⁷

- 9.63 But what are those pathways and how has the success of VET in Schools been monitored? Indicators of success in determining the achievement of such goals are currently unclear, and there is only preliminary information available.⁵⁸
- 9.64 Witnesses at Committee hearings commented on employment prior to completion of Year 12 as an important measure of success which has not been recognised in retention rates to Year 12, or completion of Certificate II or III qualifications as another measure of success. The reporting of employment outcomes would provide a broader picture of outcomes.⁵⁹ Centralian College in the Northern Territory includes full-time employment and full apprenticeships as performance indicators in reporting to the NT Government.
- 9.65 Part of the lack of information on post-school options arises from not distinguishing between measures of success in terms of outputs and outcomes. The **outputs** of the vocational education and training system refer to the qualifications, skills and competencies achieved from undertaking a VET program. The **outcomes** refer to the students gaining their first employment, improving job prospects or increasing employment income. For employers, outcomes would include increased productivity or greater satisfaction with the VET system.⁶⁰

⁵⁷ NCVER 2003 Australian Vocational Education and Training Statistics Students and Courses 2002: At a glance, p. 2.

⁵⁸ ANTA, *Submission No. 90*, p. 22.

⁵⁹ Mr Michael Stevens, Deputy Secretary (VET Strategies), Department of Education, Tasmania, *Transcript of Evidence*, 1 October 2003, Hobart, p. 1376; Centralian College, *Submission No. 30*, p. 4.

⁶⁰ NCVER, 2000, Australian Vocational Education and Training: An overview, pp. 29-30.

9.66 Much of the evidence given to the Committee (as guided by the terms of reference) refers to outputs of vocational education and training, with only limited information on outcomes in terms of future employment and continuing participation in education. This information is required to fully evaluate the effectiveness and overall success of vocational education in schools. The South Australian Government considers that:

It is therefore recommended that further work be undertaken to research the efficacy of VET programs undertaken by senior secondary students which identifies both qualitative and quantitative outcomes.⁶¹

9.67 For employers, satisfaction with the outputs of the education system translates into employment outcomes for the students. As an example of the difference in industry acceptance of vocational education programs included in the National Training Framework, there is a preference for New Apprentices over VET in Schools students:

the achievement of parity of outcomes between VET and VET in Schools sectors is of critical importance for industry. To achieve this, on-the-job experience (where considered appropriate by industry) must be made available on terms acceptable to industry partners. On-the-job experience as part of the overall delivery process is a key reason why some industries (such as Retail) have declared a preference for School-based New Apprenticeships over VET in Schools programs. ⁶²

- 9.68 However, the greater use of incentives to support employers' take up of School-based New Apprenticeships (SBNAs), and particularly for students with identified needs, has been suggested as a way to improve outcomes in employment.⁶³
- 9.69 Processes are underway to develop a nationally consistent approach for both outputs and outcomes, and a broader vocational education and training student outcomes survey. The Committee notes that it is essential that systems place as much emphasis on measuring the outcomes as they do in measuring student characteristics, training activity and the costs of training.⁶⁴
- 9.70 This summary of the Committee's findings has mainly reported on the outcomes of VET in Schools as provided by evidence to the inquiry.

⁶¹ South Australian Government, *Submission No. 97*, pp. 4-5.

⁶² MCEETYA, 2003, National Data on participation on VET in Schools: Programs and School-based New Apprenticeships for 2002 school year, p. 11.

⁶³ Mr Matthew Row, Acting Operations Manager, BIGA Training Ltd, *Transcript of Evidence*, 9 April 2003, Brisbane, p. 340.

⁶⁴ NCVER, 2000, Australian Vocational Education and Training: An overview, p. 30.

Evidence of the effectiveness of School-based New Apprenticeships is lacking, and yet the outcomes for apprentices are reported to be particularly favourable as shown in Table 9.1. The distinction between the types of vocational education in schools and their outcomes needs to be determined. The *National Evaluation of School-based New Apprenticeships* recommends data collection processes for measuring outcomes from SBNA be progressed as a matter of urgency.⁶⁵

- 9.71 The Longitudinal Survey of Australian Youth (LSAY)⁶⁶ provides some indication of outcomes, with data available from 2001 from students who completed Year 11 in 1997 and Year 12 in 1998. However, major growth in VET in Schools occurred after this time. More recent national analysis is therefore required. Given that qualification, an important criterion for judging the impact of VET in Schools is the extent to which that experience is associated with being in full-time work and/or formal education or training in the years immediately after completing Year 12. The key findings were that:
 - Unemployment rates were similar for the VET in Schools group and for the non-VET in Schools group.
 - Participation in VET in Schools appears to be more likely to be a pathway to the labour force than to further education or training, more so for males than for females. For young females, participation in further education is at a much higher rate than for young males.
 - For those in the lowest achievement quartile at Year 9, VET in Schools appears to act to improve the pathway to employment, but not to tertiary education. Participation in two years of VET in Schools appears to facilitate the achievement of positive labour and education outcomes, particularly for young males.
 - There is some evidence that VET in Schools is associated with a pathway either into a recognised form of post-secondary vocational eduction or training or work.⁶⁷
- 9.72 The Committee notes the importance of the LSAY program and encourages further investigation into vocational education in schools issues. Given the lack of national outcome data on VET in Schools, the broader VET system provides a frame of reference to gain some sense of VET, university and employment outcomes.

⁶⁵ ANTA, Exhibit No. 56, p. 4.

The LSAY is a national programme jointly managed by DEST and the Australian Council for Educational Research (ACER) to improve the knowledge base concerning the transition of young people from school to further education, training and work in Australia.

⁶⁷ Fullarton, S, 2001, *VET in Schools: Participation and Pathways*, LSAY Research Report No. 21, ACER, pp. ix-x.

National outcomes

- 9.73 The employment and earnings outcomes for university and VET graduates are summarised below. As an example, the NCVER reported on TAFE and university graduates in 2000. The report concluded that the two sectors service very different industries, and prepare students for employment in different occupations. TAFE graduates had higher employment outcomes in the first six months after graduation than their university counterparts and were employed in a broader range of occupations and industries.⁶⁸
- 9.74 The results on earnings indicate that generally, longer education and training leads to high earning occupations with higher skill levels, paying more than those with lower skill requirements. In 2000, a TAFE graduate's first full-time job earned \$494 on average per week, while university graduates earned \$659 on average per week.⁶⁹
- 9.75 There is thus a mixed message of VET graduates being more broadly employed in a range of industries and occupations, but with lower earnings in their first year following graduation. However, given the longer educational requirements for the completion of university qualifications and the costs of the Higher Education Contribution Scheme, there are some benefits in the shorter term for VET graduates. Further research needs to be done on the longer term situation.
- 9.76 Looking specifically at apprenticeships, full-time employment rates are more favourable than any other group with qualifications and well above those with no post-school qualification. The apprenticeship group was also the most likely to be self employed. The table over provides a summary of the findings.

⁶⁸ NCVER, 2001, *Statistics 2000. TAFE and university graduates: At a glance*, Conclusion, p. 1, <www.ncver.edu.au/statistics/aag/tafeuni00/graduate.htm>.

⁶⁹ NCVER, 2001, *Statistics 2000. TAFE and university graduates: At a glance*, Graduate earnings, p. 1, www.ncver.edu.au/statistics/aag/tafeuni00/graduate.htm.

NCVER, 2001, Australian apprenticeships: research at a glance. The outcomes from apprenticeships, traineeships and new apprenticeships, p. 4.

Table 9.1 Employment and average full-time earnings outcomes for people with different qualifications, 2000

Measure	Highest level of post-school qualification held						
	Higher degree and post- graduate diploma	Bachelor degree	Diploma and associate diploma	Apprentice and other skills vocational qual'n	Basic vocational qual'n	No post school qual'n	Total working- age population 15–64 years
Probability of having a job	86.9	85.3	78.2	83.1	73.7	63.6	69.8
Proportion who are:	of employed						
Employed full time (%)	82.5	81.0	74.0	89.0	70.0	68.0	73.9
Self- employed (%)	8.7	9.0	10.0	20.9	11.6	12.9	12.9
Unem- ployment rate (%)	2.9	3.0	5.0	4.1	7.2	8.5	6.8
Average annual earnings (\$ pa.)	70 000	58 500	50 000	43 500	36 500	37 500	45 000

Source NCVER, 2001, Australian apprenticeships: research at a glance. The outcomes from apprenticeships, traineeships and new apprenticeships, Table 11, pp. 4-5.

- 9.77 This information demonstrates the employment benefits of post-school qualifications, both vocational and university. Another consideration is that these outcomes are based on the successful completion of qualifications. When considering potential pathways the interest and capability of the student is of prime importance. The experience of failure at school impacts significantly on choices that students make in completing school or applying for TAFE or university programs.⁷¹
- 9.78 Of those students who are offered and accept a place at university, approximately 16 per cent drop out within twelve months.⁷² Reviewing the transition of school leavers to university, Deakin University found that the largest dropout occurs early in the first semester, that those dropping out were ill-prepared for university study, finding it difficult to adapt to the independent learning style and did not know what was expected of them

⁷¹ Mrs Carole Frost, Chief Executive Officer, Northern Territory Chamber of Commerce and Industry, *Transcript of Evidence*, 28 April 2003, Darwin, p. 480; Mr Robert Taylor, Network Executive Officer, EE-Oz Training Standard, *Transcript of Evidence*, 26 February 2003, Sydney, p. 124.

⁷² The Australian, 15 December 2003, 'First-year blues for uni dropout'.

in their assignments.⁷³ Recognition of the difficulty of transition has been identified by the university sector, which is beginning to address the problem with strategies such as peer mentoring programs, orientation, encouraging independent learning skills and greater links between schools and universities.⁷⁴

9.79 The need to adapt in the transition is an issue for all students, but if a more supportive environment would assist the student to adjust, then an alternative learning experience, such as a VET qualification that could lead to a degree program, may be a more appropriate pathway. The importance of career counselling to engage students in realistic choices is a major step in encouraging the successful completion of a qualification. However, the pressures from many quarters of society for commencing university rather than selecting VET qualifications work against the positives that the VET system offers. ⁷⁵

Victorian outcomes

9.80 As an example of state research on outcomes the Victorian Department of Education and Training has funded the Educational Outcomes Research Unit at the University of Melbourne to undertake post-completion research. This research is part of an ongoing study into the implementation of the VET in Schools programs of Year 12 students and their post-school destinations. ⁷⁶ As an overview of their findings they report that:

The range of positive outcomes achieved by students over the past few years is evidence that VET in the VCE has become an important and successful pathway for many students. ⁷⁷

9.81 There has been considerable debate about the focus of VET in Schools, with some suggesting that it is more suitable for lower achieving students and those from lower socio-economic backgrounds. The Victorian research into transitions compared study and labour market destinations of VET in Schools students and non-VET students who were in Year 12 in 2000. The research found that there were benefits for VET in Schools students across all levels of achievement.

⁷³ The Age, 2 March 2003, 'Why first uni days vital'.

⁷⁴ DETYA, 1999, Transition from secondary to tertiary: A performance study. Report No. 36, Canberra, http://www.detya.gov.au/archive/highered/eippubs/eip98-20/executivesummary.htm; DETYA, 2000, Trends in the first year experience in Australian Universities; Report 00/06, p. 62, http://www.dest.gov.au/archive/highered/eippubs/eip00_6/fye.pdf.

⁷⁵ Teese, R, 2000, 'Post-compulsory education and training: some recent research findings and their policy implications', *The Australia Education Researcher*, Vol 27, pp. 49-57.

⁷⁶ Victorian Government, Submission No. 86, pp. 12-13.

⁷⁷ Educational Outcomes Research Unit, 2002, *Transitions from the VET in Schools Program the 2000* Year 12 cohort. Victorian Department of Education and Training, p. 41.

9.82 VET in Schools graduates are more likely to be employed, and less likely to be unemployed. Supporting this positive labour market outcome, the rates of transition to tertiary education are nearly comparable with those of non-VET students, who are more likely to go to university. VET in Schools students are more likely to go to TAFE, ⁷⁸ so this largely compensates for the lower rates of transition to university.

Overview of outcomes

- 9.83 An overview of the outcomes of nine years of ECEF (formerly the Australian Student Traineeship Foundation) operation from 1994 to 2003, highlights the achievements of the organisation in combination with the many employer, school, government and community organisations including:
 - the involvement of over 50,000 employers in school-based vocational education programs, through increased numbers of students participating in workplace learning;
 - a 6.5 per cent fall in the number of Indigenous students unemployed after participating in ECEF supported programs; and
 - an increase in the number of students with disabilities in supported work placements, and improvements in study and employment outcomes.⁷⁹
- 9.84 The Victorian example provides useful information for the state. However, there are concerns expressed at the difficulty in tracking students between education and employment sectors. These difficulties have been identified nationally at the post-compulsory level, in the transition from schooling to vocational education and training, and the transition from VET to higher education. Recommendations from NCVER include maximising the consistency of data fields in each collection, reporting all forms of participation in education and training and exploring the potential for a unique student identifier which is portable across all sectors.⁸⁰
- 9.85 Nationally, it is important to monitor participation and outcomes of those who do participate and those who do not participate in VET in Schools and other vocational education programs, to ensure that comparisons can

⁷⁸ Victorian Government, *Submission No. 86*, p. 14; see also *Transitions from the VET in Schools Program the 2000 Year 12 cohort*, p. 20.

⁷⁹ DEST, 2003, the ECEF contribution: reshaping Australian Schooling, http://www.ecef.com.au/web/Files.nsf/files/legacydocweb.pdf\$FILE/legacydocweb.pdf>.

NCVER, Problem of data collections – Mapping and tracking: data collection for monitoring postcompulsory education and training, NCVER Project 8028, p. 3.

be made.⁸¹ The DEST submission includes a summary of areas for further research including:

- identifying the reasons students take up VET in Schools:
 - ⇒ While VET subjects have appeal for a range of students, different students are likely to take up VET courses for different reasons. Anecdotal evidence suggests that different students undertake VET subjects for varying reasons;
- the impact on the amount and type of VET studies:
 - ⇒ The ACER data compares those students who undertook VET studies in either Years 11 or 12 with those who studied VET in both Years 11 and 12. While this provides some important findings, more information is needed on the specific amounts of VET undertaken, in conjunction with the type of learning, and how this impacts on future destinations.
- the impact of VET in Schools courses on retention to Year 12:
 - ⇒ Currently there is little known about the direct relationship between VET in Schools programs and whether this can play an important role in keeping potential early school leavers at school.⁸²

Summary

- 9.86 This chapter has reviewed issues of improving the access to and effectiveness of vocational education in schools for students with particular needs. In particular, students with disabilities, students at risk of leaving school and Indigenous students have been considered. Common themes of the need for earlier and individual support have emerged. The role of external providers was also examined, with the Committee supporting the claim that additional support needs to be provided to assist in transition management, especially for those students with special needs.
- 9.87 The role of part-time work is generally seen as beneficial, but for some students over-commitment may impact negatively on their participation in senior schooling. Early outcome data indicates that vocational education in schools may assist in improving post-school outcomes. However, the provision of this needs to occur earlier to engage students who may consider leaving school early.

Fullarton, S, 2001, *VET in Schools: Participation and Pathways*, LSAY Research Report No. 21, ACER, p. 55.

⁸² DEST, Submission No. 75, pp. 63-64.

9.88 In general there is an urgent need for more data on the outcomes of vocational education in schools, rather than just participation. Specifically, further research is required to assist in identifying national outcomes to address the following questions:

- What evidence is there that there are more options for a greater range of students in the last ten years?
- Has the provision of vocational education led to improving the equity of outcomes to address the diversity of students coming into school?
- Has the increased provision of vocational education provided more opportunities for all students?

Recommendation 41

The Committee recommends that research be conducted at a national level into immediate and longer term post-school outcomes of students to better evaluate the effectiveness of VET in assisting students into career pathways.