National Centre for Vocational Education Research Ltd

Submission to the House of Representatives Inquiry into Vocational Education in Schools.

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1 VET in schools in the wider context

Vocational education and training in schools (VET in schools) is a relatively small component of the broader education and training system in Australia, and must be viewed in this wider context¹. Although there have been recent significant developments in the definition, funding and delivery of VET-in-schools programs, many of its objectives are not new. In fact, preparing young people for the world of work has been one among a range of the objectives of the secondary education system for many decades.

1a What is 'VET in schools'?

In 1999, the Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA) adopted a formal definition of VET in Schools. Under the MCEETYA definition, VET in Schools programs are recognised under the AQF and also contribute to the senior secondary certificate in the State or Territory. However, the broader concept, that of school students undertaking learning activities which assist them when they subsequently enter the workforce, and the associated educational practice, has changed over time.

Currently, there are a number of ways in which school students can undertake vocational education or acquire the knowledge and skills required for participation in the workforce. These include:

- Undertaking general education subjects which provide underpinning knowledge or generic skills. There is a growing body of research which indicates that employers value these skills very highly.
- Undertaking work experience or work placement with an employer, usually on an unpaid basis, or by undertaking paid casual or part-time employment outside school hours.
- Commencing a New Apprenticeship while still at school. Options for school-based New Apprenticeships came into effect from 1 January 1998, as part of the broader implementation of New Apprenticeships.
- Enrolling in a VET program offered by a VET provider independently of studies being undertaken at school. This option has always been available to those school students who have access to VET providers. It should be noted that not all programs offered by VET providers lead to qualifications which are recognised under the Australian Qualifications Framework (AQF), for example, subjects taken on a standalone basis or which are not components of a nationally recognised qualification.
- Participating in a VET in Schools program as part of the senior secondary certificate.

The key point is that the programs which are currently covered by the formal, MCEETYA definition of VET in Schools are a subset of the broader set of learning activities which school students undertake and assist in their transition to the workforce.

1b VET in schools and pathways

There are many pathways from compulsory schooling to employment. While the dominant pathways are from school to employment, or from school to post-secondary education and/or training to employment, many chop and change direction several times.

The key point regarding pathways is that participation in a VET in Schools program is not, in general, intended to direct students along particular pathways after leaving school. Indeed it is quite possible for academic students intending to proceed to higher education to undertake a VET in Schools program out of interest or to gain qualifications which will assist in obtaining part-time work while studying at university. It

¹ NCVER publications which describe the vocational education and training system in Australia, and its relationship to the secondary and higher education systems, are provided in the bibliography.

should be noted that these comments are less likely to apply to students who undertake a school-based New Apprenticship, as it is expected that the program will continue after the person leaves school.

1c Overall trends

Although complete information is not as yet available, the statistics we have are sufficient to allow the key trends over time to be quantified (Table 1).

From MCEETYA and ABS data, it is clear that the number and proportion of year 11 and 12 students undertaking a VET in Schools program has grown steadily since 1998. This trend is against a backdrop of reasonably steady retention rates in the same period, indicating that the shift towards VET in Schools programs is not being driven by changes in the upper secondary cohort.

The estimated number of young people (age up to 19 years) in the public VET system who are still at school follows a similar trend to that shown by the MCEETYA figures, although the numbers are lower because not all VET in Schools activity is as yet included in the national VET data collection (see section 4 below). Also, for the young VET students who are at school it is not as yet possible to disaggregate the figures into those doing a VET in Schools program and those studying in the public VET system for some other reason.

The VET in Schools pathway for young people needs to be put into broader perspective. Until 2000, the number of school leavers (i.e. young people who left school in the previous 12 months) studying with VET providers was more than double the number at VET providers while still at school. In 2001, however, the gap has narrowed considerably, suggesting that the VET-at-school pathway is increasing in importance relative to the more traditional school-to-VET pathway.

This shift is also reflected in the New Apprenticeship commencements for young people (i.e. up to 19 years), which grew from 62,600 in 1998 to 82,400 in 2001. Although the majority of those commencing are school leavers, the proportion has declined considerably, from 88% in 1998 to 52% in 2001. On the other hand, commencements among school students have grown rapidly since the introduction of New Apprenticeship arrangements at the beginning of 1998, from 1,500 in 1998 to 10,100 in 2001. New Apprenticships among school students represented 12% of the commencements by young people in 2001. It should be noted that the take-up of school-based New Apprenticeships varies significantly among the States and Territories.

If required, the NCVER can provide the Inquiry with a more detailed unpacking of some of the figures presented in Table 1. The NCVER's data sources and responsibilities in this area are outlined in Attachment 4.

	1998	1999	2000	2001
Relevant ABS and MCEETYA statistics				
1 Total young people aged 16-18 years	785,653	800,855	811,025	816,576
2 Total full-time students in years 11 & 12 (a)	390,911	402,429	404,212	411,535
3 Number doing VET in schools (b)	117,000	136,710	153,616	169,809
4 Proportion (3 as a percentage of 2)	30%	34%	38%	41%
5 Apparent retention rates to year 12 (d)	71.6	72.3	72.3	73.4
Statistics from the national VET provider collection				
6 Students in the public VET system – all ages	1,535,236	1,647,179	1,749,364	1,756,769
7 Students in the public VET system – age up to 19	334,948	366,147	392,841	(g) 434,898
8 School leavers in VET (c)	246,859	261,371	280,467	271,276
9 Proportion (8 as a percentage of 7)	74%	71%	71%	62%
Relevant New Apprenticeship statistics				
10 New Apprenticeships: in training – all ages (e)	216,861	255,182	294,893	325,135
11 New Apprenticeships: in training – age up to 19 (e)	66,114	75,287	81,045	82,501
12 NA commencements – all ages (f)	154,922	198,445	210,156	228,014
13 NA commencements – up to 19	62,612	75,770	77,657	82,367
14 NA commencements – school leavers (c)	54,951	52,482	47,547	42,804
15 Proportion (14 as percentage of 13)	88%	69%	61%	52%
16 NA commencements – school-based or at school (f)	1,466	3,624	5,312	10,144
17 Proportion (16 as percentage of 13)	2%	5%	7%	12%

Note (a): these figures are for all ages in years 11 and 12, full-time students only (source: ABS Schools 4221.0, 1998, 1999, 2000, 2001).

Note (b): source - Report of the MCEETYA Taskforce on Vocational Education and Training in Schools, VET in Schools Taskforce, July 2001.

Note (c): estimated figures for those up to 19 years of age, derived by distributing missing data on a pro rata basis. School leavers are defined as those who left school within the previous 12 months.

Note (d): retention from year 7/8 to year 12, for full-time students only (source: ABS Schools 4221.0, 1998, 1999, 2000, 2001).

Note (e): number in-training at 31 December of the year. In-training figures exclude New Apprentices who started and completed, cancelled or withdrew within the calendar year.

Note (f): all New Apprenticeship commencement figures are the total for the whole calendar year. New Apprenticeships reported as school based or at school are for those up to 19 years of age only.

Note (g): part of the increase from 2000 to 2001 is due to the inclusion, for the first time, of schools data from NSW and ACT in the national VET data collection. Schools data from Victoria and WA are not as yet included.

1d Major features of VET in schools in 2001

Some of the major features of VET undertaken by school students in 2001 can be seen in the statistics derived from the national collection of data from VET providers (Table 2).

The numbers of females and males undertaking VET while still at school are close to being equal. This contrasts with the pattern for school leavers, 54.7% of whom are male, and other young people, 59.7% of whom are male. The fact that traditional apprentices are more likely to be male accounts for part of this difference.

School students undertaking VET are more likely to live in rural or remote areas than other young students. The group least likely to live in rural and remote areas is young school leavers, where the proportion is 32.0%, in contrast to 38.6% for young people at school.

The distribution of students at school among the provider sectors, namely TAFE, community providers, private providers and schools, is very different from that for other groups. Although schools are the major providers of VET programs to students at school, accounting for 48.5% of the total, most of the remaining delivery is undertaken by the TAFE sector, usually on a sub-contracting basis. TAFE accounts for 45.4% of the students, with private Registered Training Organisations accounting for a further 4.6%. In some states, community providers which are also Registered Training Organisations are able to tender for the delivery of accredited VET programs to school students.

A majority of the programs undertaken by school students in VET are at AQF certificate I or II level. This contrasts with the programs undertaken by other young people, most of which are at AQF certificate III or higher level. In general, therefore, the VET programs undertaken by school students do not provide an equivalent alternative to mainstream upper secondary studies, since AQF certificate III is generally regarded as equivalent to the upper secondary certificate. Among school leavers, diploma and higher level programs are also important, being taken by 17.5% of this cohort.

The major fields of study for the VET courses undertaken by school students also differ from those of other student groups. As with the VET system as a whole, courses in business, administration or economics comprise the largest field of study, covering 25.0% of the students, whereas for other student groups it is five percentage points or more lower. Courses in services, hospitality and transportation are the second major field of study, with 21.5% of the students, although here the pattern is more consistent with that for other young people in VET. Science courses, which include information technology, are more important for students at school than for other students, with 11.8% in contrast to 8.1% overall. On the other hand, VET multi-field education, which includes many general education and preparatory courses, at 7.8% in contrast to 11.1% overall, is less important for school students than for other groups.

	At school	School leaver	Other young people	Students over 19 years	All students
Sex		Proportic	on of total stud	ents (%)	
Males	48.9	54.7	59.7	50.3	51.1
Females	51.1	45.3	40.3	49.7	48.9
Total	100.0	100.0	100.0	100.0	100.0
Place of residence					
Capital city or other metropolitan	61.3	67.0	64.6	63.2	63.5
Rural or remote	38.6	32.0	34.9	36.0	35.7
Overseas	0.1	1.0	0.4	0.8	0.8
Total	100.0	100.0	100.0	100.0	100.0
Provider sector					
TAFE or other government provider	45.4	87.5	83.3	77.2	73.7
Community provider	1.5	2.5	2.1	13.7	13.1
Private provider	4.6	9.3	14.6	9.0	9.1
School	48.5	0.7	0.1	0.1	4.1
AQF level of major course					
Certificate I/II	67.7	30.4	25.2	20.5	25.6
Certificate III/IV	11.3	39.4	36.2	33.8	32.6
Diploma & above	1.3	17.5	9.2	12.7	11.5
Non-AQF programs	19.6	12.7	29.4	32.9	30.3
Total	100.0	100.0	100.0	100.0	100.0
Field of study of major course					
Land & marine resources, animal husbandry	4.4	3.7	4.4	6.2	5.7
Architecture, building	4.5	7.3	11.2	4.5	5.1
Arts, humanities & social sciences	7.0	6.0	4.2	7.0	6.8
Business, administration, economics	25.0	20.0	17.8	19.4	19.5
Education	1.3	0.7	0.8	3.8	3.1
Engineering, surveying	9.9	15.5	19.8	11.0	11.6
Health, community services	4.9	7.6	6.1	10.0	8.9
Law, legal studies	0.1	0.9	0.6	0.7	0.6
Science (includes mathematics & IT)	11.8	7.1	4.8	7.9	8.1
Veterinary science, animal care	0.3	0.5	0.4	0.3	0.3
Services, hospitality, transportation	21.5	18.3	17.8	11.4	13.2
VET multi-field education	7.8	10.6	10.8	11.4	11.1
No major course or unknown	1.6	1.8	1.3	6.4	6.1
Total	100.0	100.0	100.0	100.0	100.0

Table 2: Breakdown of 2001 VET provider statistics by school status and other characteristics

Source: NCVER unpublished statistics.

With 28.0% of the cohort, programs in the business and clerical industry area are by far the most important for school students undertaking VET, and are much more important than for other student cohorts (Table 3). Similarly, programs in the tourism and hospitality area are also important for school students, at 18.8%, and this is also much higher than for other student cohorts. At 9.3%, general education programs also have some prominence among the industry areas for school students, but this is somewhat lower than the significance for other student cohorts. The remaining 43.9% of school students are spread fairly thinly across the other 16 industry areas.

ANTA industry group of major course (a)	At school	School leaver	Other young people	Students over 19 years	All students
		Proportic	on of total stud	ents (%)	
Arts, sport & recreation	4.6	5.7	3.2	3.2	3.4
Automotive	2.7	4.0	4.0	1.0	1.8
Building & construction	4.2	6.5	6.4	4.0	4.5
Health & education	4.8	6.6	5.1	8.8	7.8
Finance, insurance	0.1	1.0	0.9	1.8	1.5
Food processing	0.8	1.9	2.2	1.4	1.5
TCF & furnish	1.5	1.5	1.5	1.0	1.2
Communications	0.4	0.7	0.4	0.4	0.4
Engineering etc	4.7	5.6	4.4	3.5	3.9
Primary industry	4.5	4.1	4.4	6.0	5.5
Process manufacturing	0.0	0.0	0.1	0.3	0.2
Sales & personal services	7.2	6.9	6.5	2.9	4.0
Tourism/hospitality	18.8	11.8	8.1	4.9	6.9
Transport/storage	0.5	1.4	1.2	2.9	2.4
Utilities	0.8	3.6	2.5	2.0	2.0
Business & clerical	28.0	17.1	13.1	19.0	18.8
Computing	2.1	5.4	6.5	7.0	6.5
Science, technology	3.9	3.9	7.6	8.6	7.8
General education	9.3	10.5	13.2	14.9	13.9
Unknown	1.0	1.8	8.5	6.4	6.0
Total	100.0	100.0	100.0	100.0	100.0

Table 3: Breakdown of 2001 VET provider statistics by school status and industry

Note (a): VET courses are assigned to an industry area by mapping the expected occupational outcome to one of the 19 industry categories. The mapping used is determined by the Australian National Training Authority. Source: NCVER unpublished statistics.

2 Motivation for doing VET in schools

Although the available information is patchy, sufficient is known about reasons for undertaking a VET in Schools program to suggest that the reasons are more varied than might be expected. They include the value of VET in Schools as a career pathway, general interest, attraction to a mix of study and employment, and obtaining skills and qualifications which will help gain paid employment during post-secondary study.

One aspect of motivation about which relatively little is known to date is the extent to which schools counsel students to undertake a VET in Schools program or a school-based New Apprenticeship, and the characteristics of the students who are counselled in this direction.

In a recent study, Kilpatrick (2002, in press) has compared VET and non-VET school students in rural areas. She found that students were motivated to choose VET-in-schools courses (including VET in Schools programs as defined by MCEETYA) mainly for general interest or as a career pathway. Those students motivated by career showed distinctive educational outcomes, being less likely to finish year 12 yet more likely to go on to post-school education and training than other school VET students.

Smith and Wilson (2002) reported that students' motivation for undertaking a school-based New Apprenticeship was found to be primarily to gain the associated qualification or to gain specific experience in

an industry area. Some found the prospect of a mix of work and study attractive. A small group undertook school-based New Apprenticeships primarily to help get part-time work while at university. Generally the students had found out about school-based New Apprenticeships through school. This was particularly so for those who were working for Group Training Companies rather than directly for an employer. Exactly half of the school-based New Apprentices were working in retail or fast food, cafes and restaurants; and farming, forestry and mining accounted for almost 11%, perhaps reflecting the greater popularity of VET in Schools and school-based New Apprenticeships in non-metropolitan areas.

Those students undertaking school-based New Apprenticeships were found to be more likely than average to be living outside a capital city and less likely to aspire to immediate university entrance than other students. There was some evidence that they were drawn disproportionately from students of a lower socio-economic status. Most were trainees rather than traditional apprentices, undergoing shorter contracts of training and undertaking qualifications at Certificate II level.

3 Outcomes from VET in schools

This section provides relevant information from recent research undertaken by NCVER and summaries of research reports undertaken by or managed by NCVER on issues related to VET in Schools, including the situation which obtained before the recent, rapid growth in VET in Schools activity.

3a The situation in the mid-1990s

A joint NCVER/ACER study (Ball and Lamb, 1999 - Attachment 1) explored links between subjects taken in Year 12 and in further education and labour market outcomes, using data from the Longitudinal Surveys of Australian Youth. Students in the study were tracked to 21 years of age to establish the early post-school outcomes according to their senior secondary subject choices.

The research had some sobering implications for school-to-work transition at that time, noting that young people were facing quite adverse labour market conditions around the time covered by the study. With the exception of students who took agriculture-based subjects, students who studied a vocational education and technology curriculum in the early 1990s often struggled to make a successful transition to full-time employment during their teenage years. For those who did not obtain an apprenticeship the outlook was particularly bleak with employment outcomes similar to those achieved by early school leavers. Comparatively few students who took this curriculum continued with formal education after senior secondary school.

Some overall employer views were provided in a 1997 study undertaken by the NCVER on employer satisfaction with VET², which revealed that:

- 84% of employers said that there should be more work experience or work placements as part of VET; and
- 81% of employers said they should have more input into course content.

A longer term view of VET in Schools and other school VET programs was provided by Robinson, Ball and Misko (2001), an extract from which is provided in Attachment 2. The report noted that there has been 'an explosion in the take-up of VET-in-schools programs since their inception in the early 1990s', allowing students to achieve national qualifications or part qualifications while still at school. The authors considered that these programs, with their focus on workplace competencies, provide opportunities for students to prepare to enter the world of work, or specific occupations in industry. However, in addition to the benefits, there were still some issues that needed to be addressed, relating to:

² Source: Employer satisfaction with vocational education and training 1997: national report, NCVER.

- proliferation of programs without a careful analysis of labour-market opportunities,
- equitable access to a wide range of VET programs for all students regardless of school location, and
- the recognition of school-based VET studies on entry into higher education.

3b The current situation

Comprehensive information about the subjects and courses completed by students in VET in Schools programs, and completion rates, is not as yet available. However, some limited information is available from NCVER surveys and published research.

The results of the most recent Student Outcomes Survey show that around 7% of the graduates who completed a VET qualification in 2000 started their training while still attending secondary school. By contrast, 17% of the 2000 graduates started training as school leavers, that is, within a year after leaving secondary school.

School students in rural areas

For VET in schools students in rural areas, Kilpatrick found that work placements were a significant pathway to initial employment after leaving school, with about half of all work placement students offered employment or a New Apprenticeship by their work placement employer. As a consequence, however, work placement students were less likely to complete year 12. Also, at the time of the survey two or three years after leaving school, work placement students had the same employment outcomes as students who had not done work placements at school, suggesting that the major benefit lies in expediting their transition.

Some students undertook VET in schools where the objective is a pathway to local employment. This group was more likely to report that their school VET course had influenced their decision to continue with senior secondary school and helped improve their literacy and numeracy skills. They were also most likely to have been offered a New Apprenticeship from their work placement. School VET students who attended a school with this VET purpose and who also participated in a work placement were more likely to have stayed in their home community than those who did not do a work placement or who attended a school not having this VET purpose.

Other findings of note were:

- Those who did VET at school, in general, are no more likely to be currently employed than those who did not do VET at school.
- All 31 early school leavers in the study were employed.
- Of those school VET students currently working, 62% indicated that their job was in the same broad industry area as their school VET course. The industry area with the strongest link was human services, and with the weakest link, business and clerical.
- At the time of the survey, two to three years after they had left secondary school, 70% of respondents normally resided in a rural area, 10% in a remote area, and 20% had moved to a metropolitan area. Most students surveyed indicated their intention to live in a rural community at some stage in their working life, with school VET students more likely to intend to live in their home community, and in a rural or remote area more generally, than school non-VET students.

School based New Apprenticeships

Smith and Wilson (2002) have recently reported on a survey of 641 school-based New Apprenticeships in three States.

The number of hours spent at work differed very little from the average for normal part-time work for Australian school students. The average number of hours worked was 10.5 per week. More than half of the students worked extra hours in the school holidays and many undertook 'blocks' of off-the-job training in the

holidays, too. Some students undertook all their work outside school hours while others missed school time. This quite often created severe timetabling difficulties and many did not receive much help from their schools in resolving the difficulties. However, few students found it difficult to fit study in as well as work, in a more general sense.

Most students were very satisfied with their jobs although the degree of satisfaction varied with industry area. They were more likely than students in ordinary part-time jobs to enjoy their job, to have the close attention of a supervisor, to work with adults rather than other teenager , and to have higher levels of responsibility. The comparisons with ordinary part-time jobs were made on the basis of results from a previous study by the research team.

Off the job training was generally seen by the school-based New Apprentices to add to their learning, in both theoretical and practical ways. Most, however, preferred on-the-job to off-the-job training. Some students had complaints about their training providers. Schools scored lower than other training providers on some measures, as did distance and on-line learning. About a quarter of the school-based New Apprentices were undertaking fully on-the-job apprenticeships and traineeships. Retail and fast food were more likely to be fully on-the-job than other industry areas.

While the overall findings of the study were very positive, a number of areas of concern were identified. These included:

- The low number of hours worked when compared with the total number of hours normally involved in the completion of a traineeship or apprenticeship.
- The possible consequences for student well-being of spending school holidays catching up working hours or attending a training provider.
- The concentration of school-based New Apprenticeships in those industries which are also the most common site of ordinary part-time work.
- The evidence of poor quality of training provision by some Registered Training Organisations.
- Timetabling problems and the seeming unwillingness of some schools to offer solutions to them.

4 Resolving gaps in the data

Currently, much valuable information about VET in Schools activity and outcomes is contained in the summaries reported to the MCEETYA Transition from Schooling Taskforce or to the national collection of data from VET providers compiled by the NCVER. However, this information does have limitations.

While schools generally have good information about VET in Schools programs undertaken by their students, and the subject results, complete and consistent VET in Schools information are not available at State/Territory or national levels, neither in the data reported to the Transition from Schooling Taskforce nor to NCVER. Details of the gaps in the data, and their implications, are outlined in a paper presented to the November 2001 meeting of the National Training Statistics Committee (Attachment 5). In particular, the data are currently incomplete as they do not cover all States and Territories, not all subject enrolments, results and qualification completions are reported, and it is not possible to quantify accurately the extent to which VET in Schools activity is delivered by TAFE and other providers outside the schools sector. A degree of overlap between the school and TAFE data submitted by States and Territories also occurs, resulting in some double-counting of students who appear in both sets of data. It should be noted that since that report was compiled, VET in Schools data for 2001 were submitted to NCVER by two more States and Territories, bringing the total reporting to six.

At its November 2001 meeting, the National Training Statistics Committee agreed to investigate the feasibility of including all VET in Schools data in the national VET collection. At the same time, ANTA, the Transition from Schooling Taskforce and the Performance Measurement and Reporting Taskforce indicated a need to ensure that the data required for reporting on progress against key performance measures for VET in Schools were available. Consequently, a joint project was established and a report summarising the findings, with

recommendations to resolve the outstanding data collection issues, was presented to an ANTA national workshop on VET in Schools data collection in August 2002 (Attachment 6).

Following on from the national workshop, the Australasian Curriculum, Accreditation and Certification Authorities VET in Schools Working Group has agreed on working definitions for data elements where inconsistencies exist, and these will be considered formally by the National Training Statistics Committee and the MCEETYA Performance Measurement and Reporting Taskforce. It is expected that all States and Territories will have substantial compliance with the agreed definitions and reporting arrangements for the reporting of 2002 VETIS activity in 2003, and that full compliance will be achieved a year or two after that. Once in place, these arrangements will resolve the gaps which currently exist in the national VET in Schools data collections.

We note, finally, that the planned developments described above will provide complete information about VET in Schools activity, as defined by MCEETYA, but will not provide information about any other VET programs delivered by schools, which are the responsibility of State/Territory education authorities, nor by providers who are not part of the publicly-funded VET system. Regarding the latter activity, the National Training Statistics Committee has recently initiated a project which is intended eventually to provide information about all VET activity, not just that which occurs in the publicly-funded system.

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Attachment 1 Links between subjects taken in Year 12 and further education and labour market outcomes

This attachment provides research findings from a study that explored links between subjects taken in Year 12 and further education and labour market outcomes conducted by Katrina Ball (National Centre for Vocational Education research Ltd.) and Stephen Lamb (Australian Council for Educational Research).

It should be borne in mind that this study pre-dates the main changes that have since occurred with respect to vocational education and training in schools. Since this study, more articulation between schools and the vocational education and training sector has taken place along with the introduction of the Australian National Training Authority's VET-in-Schools funding. The study also refers more to 'vocational subjects' within the secondary school curriculum rather than vocational education and training sector subjects being undertaken by students whilst still at school.

Student destinations from vocational education in schools

One of the principal aims of school-based vocational courses is to assist students to make the transition from school to work or to further education and training. However little work has been done to monitor who is taking the programs and to assess the opportunities the programs are providing students in terms of access to further education and work. In fact there has been little effort at evaluation of the effectiveness of vocational programs nationally, although Polesel *et al.* (1999) found that the Victorian VET-in-schools program enhanced VCE studies for the characteristically diverse range of post-compulsory students and that outcomes for VET-in-schools students were improving over time. Misko (1999) reports that more destination studies of school-industry programs are needed before we can determine if this pathway is helping students make the transition from school to further training and work more easily.

Classifying vocational courses

About 12% of the national sample of over 3000 Year 12 students from the Australian Youth Survey³ participated in the vocational education and technology curriculum. Four different vocational subject combinations or courses of study were identified for the five-year period 1990 to 1994. They comprised:

- 1. Technical drawing, technology, general maths and computing.
- 2. Agriculture, craft, technology, general maths, health, and general science.
- 3. Typing, secretarial studies, general maths, home economics and applied computing.
- 4. Technical drawing, maths, industrial arts, and industrial technology.

Students were identified as having taken one of the above courses if they had chosen a minimum of three subjects from one of the four groups. Most studied four.

³ The *Australian Youth Survey* (AYS) is part of a program of longitudinal studies being undertaken by the Australian Council for Educational Research. The survey is designed to provide detailed information about gender, family socioeconomic and demographic background, education and training and labour market experiences for participants. For this study, those who joined the survey between 1990 and 1994 inclusive were tracked annually up to 1997 to explore the links between subjects taken in Year 12 and further education and labour market outcomes.

Pathways to further education and training

Students in the sample were tracked to 21 years of age to establish the early post-school outcomes of students according to their senior secondary subject choices.

In the year after completing Year 12, two-thirds of students who studied the technical drawing, technology, general maths and computing combination of subjects did not pursue any further education or training. By 21 years of age, half of the students who had studied these subjects still had not participated in any formal programs of study or training. This was lower than for students undertaking studies from most other parts of the Year 12 curriculum.

Many students doing a vocational education and technology course in school obtained an apprenticeship by age 21. The proportion of teenagers gaining an apprenticeship straight from school after studying a vocational education and technology course (except for secretarial studies) was double that of teenagers doing non-vocational courses in Year 12. Almost a third of Year 12 students who studied a combination of technical drawing, technology, general maths and computing, and a quarter of those who studied maths, industrial arts, industrial technology and technical drawing had commenced an apprenticeship by age 21.

Uptake of traineeships was also greater for Year 12 vocational education and technology students. Roughly 8% of those who had studied a technology-based course in Year 12 had taken up a traineeship by age 21. TAFE courses were also very important to these groups, with a further one in five students doing a technology-based course in their final school year entering a TAFE diploma or certificate course (other than an apprenticeship or traineeship).

Students who chose the agriculture-based subjects in Year 12 were less likely to have taken up an apprenticeship (one in five) or another TAFE course (14%) by age 21. However, 12% of this group had taken up a traineeship by this age.

For those students who took secretarial studies, 6% entered an apprenticeship, 9% commenced a traineeship, and 15% enrolled in some other TAFE course straight from school.

Employment experiences

It perhaps comes as no surprise that students who undertook a vocational education and technology-based course were also much more likely to attempt to make a direct entry to the labour force after leaving school.

In this their experiences were varied. For instance more than 20% of teenagers who entered the labour force straight from school after studying the combination of subjects comprising technical drawing, technology, general maths and computing, or the combination of maths, industrial arts, industrial technology and technical drawing were unemployed one year after leaving school. This was high compared to those studying other subject combinations.

At 21 years of age, students from the Year 12 technology courses displayed a relatively high rate of unemployment with one in ten unemployed. In fact this unemployment rate was similar to the rate for early school leavers.

Relatively positive employment outcomes were achieved by people who studied the agriculture-based subjects with less than one in ten students unemployed a year after leaving school and less than 3% unemployed at age 21. Unlike many others, members of this group were likely to secure full-time employment while still a teenager.

Along with early school leavers, young people who studied secretarial-based subjects had a greater likelihood of having experienced a number of spells of unemployment by 19 years of age compared with those who studied other subjects. They also tended to spend longer periods of time unemployed. This was also the situation for teenagers who had taken technology-based subjects.

Conclusions

The research has some sobering implications for school-to-work transition. With the exception of students who took agriculture-based subjects, students who studied a vocational education and technology curriculum in the early 1990s often struggled to make a successful transition to full-time employment during their teenage years. For those who did not obtain an apprenticeship the outlook was particularly bleak with employment outcomes similar to those achieved by early school leavers. Comparatively few students who took this curriculum continued with formal education after senior secondary school.

Attachment 2 School to work transition

"Methods of strengthening effective transition from school to the labour market in Australia", by Robinson, C., Ball, K. and Misko, J. Paper presented at the International Experts Meeting on Labour Market Changes and Human Resources Development Strategies in the Knowledge-Based Society, KRIVET, Seoul, 29 August 2001

The following excerpt from the paper discussed the outcomes from school-based vocational programs in the early 1990s and the initial outcomes from VET-in-Schools programs delivered in the late 1990s. The findings from this work must be treated with some caution as changes have been made to VET-in-Schools arrangements since the study was undertaken.

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SCHOOL RETENTION RATES

There have been major changes to retention rates in the final years of secondary schooling and a growth in school completion. Apparent retention rates of students in years 10, 11 and 12 are shown in table 2.

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Year of education	1967	1970	1973	1976	1979	1982	1985	1988	1991	1994	1997	2000
year 10	88.3	95.2	95.6	97.9	94.8	98.8	98.8	99.1	98.8	96.7	97.2	97.6
year 11	36.1	43.9	48.4	52	53	57.4	66.7	71	86	85.3	84.4	85.3
year 12	22.7	29.3	33.1	34.9	34.7	36.3	46.4	57.6	71.3	74.6	71.8	72.3

 Table 2: Apparent retention rates of students to years 10, 11 and 12

Source: ABS 'Schools Australia' Catalogue 4221.0 (1997, 1994, 2000); DEET (1991)

There has been a gradual increase in school retention rates in Australia for years 10, 11 and 12 since the mid 1960s when less than a quarter of all school students remained at school to complete year 12. At the start of the 1980s, just over a third of students completed senior secondary school. In contrast, now (2000), only about 2 per cent of all school students do not remain at school to complete year 10; 15 per cent do not complete year 11 and just over a quarter do not complete year 12. In addition, many of those who do not remain at school to complete year 12 are engaged in other forms of education and training. It is estimated that about 13 per cent of students do not complete year 12 or engage in some other form of education and training (Ball and Lamb [2001]). Many students are employed part-time while they are completing school.

THE SENIOR SECONDARY SCHOOL CURRICULUM IN THE EARLY 1990S

With the senior secondary years transformed into a mass system, the post compulsory curriculum came under considerable scrutiny by educational researchers and policymakers. Senior secondary students had become a diverse group with a range of education needs and schools were facing the challenge of having to both accommodate larger numbers of students while responding to broad differences in student needs and aptitudes. In the past, when school retention rates were relatively low most students who completed senior secondary school were aiming to go to university. The senior secondary school curriculum comprised mainly academic subjects to meet their needs. Nowadays, senior secondary school students are a heterogeneous group and the main issue has been to provide a curriculum that allows all groups of school students to make the best use of the post compulsory years of school. In response to the different needs of students most school systems by the early 1990s had offered an expanded range of subjects. However there is evidence to suggest that the subject choices at this time were not adequately preparing those students who did not progress to university either for entering the labour market or for post school vocational education and training. The outcomes for students who studied a predominantly vocational education and technology based set of subjects were of particular concern.

Ball and Lamb (2000) classified the main subject groupings taken by senior secondary students in the early 1990s (1990 to 1994) according to eight broad fields of study; arts and humanities, business studies, business studies and humanities, business studies and humanities, business studies and sciences, sciences and maths, sciences and humanities, health sciences and physical education and vocational education and technology. The study was based on data from the Australian Youth Survey, a national longitudinal database with detailed information about gender, family socio-economic and demographic background, education and training and labour market experiences for participants. Students in the sample were tracked to 21 years of age to establish the early post school outcomes of students according to their senior secondary choices.

About 12 per cent of the national sample of over 3000 Year 12 students from the Australian Youth Survey participated in the vocational education and technology curriculum. Four different vocational subject combinations or courses of study were identified for the five-year period, 1990 to 1994. They comprised:

- technical drawing, technology, general maths and computing;
- agriculture, craft, technology, general maths, health, and general science;
- typing, secretarial studies, general maths, home economics and applied computing; and
- maths, industrial arts, industrial technology and technical drawing.

By 21 years of age, half of the students who had studied these subjects still had not participated in any formal programs of study or training. This was lower than for students undertaking studies from most other parts of the Year 12 curriculum.

Many students doing a vocational education and technology course in school obtained an apprenticeship by age 21. The proportion of teenagers gaining an apprenticeship straight from school after studying a vocational education and technology course (except for secretarial studies) was double that of teenagers doing non-vocational courses in Year 12. Students who undertook a vocational education and technology-based course rather than courses involving subjects from other parts of the Year 12 curriculum were much more likely to attempt to make a direct entry to the labour force after leaving school rather than pursue further study and training.

Their experiences were varied. More than one in five teenagers who entered the labour force straight from school after studying the combination of subjects comprising technical drawing, technology, general maths and computing, or the combination of maths, industrial arts, industrial technology and technical drawing were unemployed one year after leaving school. This was high compared to those studying other subject combinations.

At 21 years of age, students from the Year 12 technology courses displayed a relatively high rate of unemployment with one in ten unemployed. This unemployment rate was similar to the rate for early school leavers.

Relatively positive employment outcomes were achieved by people who studied the agriculture-based subjects with less than one in ten students unemployed a year after leaving school and less than 3 per cent unemployed at age 21. Unlike many others, members of this group were likely to secure full-time employment while still a teenager.

Along with early school leavers, young people who studied secretarial-based subjects had a greater likelihood of having experienced a number of spells of unemployment by 19 years of age compared with those who studied other subjects. They also tended to spend longer periods of time unemployed. This was also the situation for teenagers who had taken technology-based subjects.

With the exception of students who took agriculture-based subjects, students who studied a vocational education and technology curriculum in the early 1990s often struggled to make a successful transition to full-time employment during their teenage years. For those who did not obtain an apprenticeship the outlook was particularly bleak with employment outcomes similar to those achieved by early school leavers. Comparatively few students who took this curriculum continued with formal education after senior secondary school.

REFORM OF THE SCHOOL VOCATIONAL EDUCATION AND TRAINING CURRICULUM

The school-based vocational education and training curriculum of the early 1990s was clearly not preparing students adequately for the workforce. The curriculum was not focussed on the needs of employers or industry and was not providing students with the work experience or skills that would secure them a place in the workforce direct from school. In addition the curriculum was not proving students the opportunity for seamless entry to the post-school vocational education and training system. With the exception of students who were able to secure an apprenticeship on leaving school few students who had studied a vocational education and technology curriculum at school continued with formal education after school. *VET-in-schools* programs were introduced in the mid-1990s in response to the need to provide a meaningful pathway for those students who were not university bound and still at school. Comprising a variety of offerings these programs were focussed on providing students with opportunities to acquire industry-specific and nationally recognised qualifications, and work or occupationally specific skills in their final years of schooling.

Today *VET-in-schools* programs comprise a comprehensive array of VET offerings with secondary schools, within and between State jurisdictions, responding to the needs of their students in ways that take advantage of the schools' particular geographical, labour market and industry environments. However, just five industry areas tend to account for about 80% of all enrolments. These are business and clerical, general education and training, tourism and hospitality, computing, engineering and mining. In addition there are also substantial numbers of students involved in industry specific programs like building and construction, community services and health, and automotive.

In addition, to completing subjects for their senior secondary school certificate secondary school students may undertake *Vet* subjects which are 'embedded' into the existing school curriculum, or offered as stand alone programs. They are also able to undertake school-based part-time apprenticeships and traineeships. However, the majority of students are engaged in 'embedded VET' programs.

Embedded VET programs

Embedded VET programs refer to training options whereby the existing VET curriculum is linked to a broad range of VET certificates, modules or units of competence. It may or may not be aligned with the National Training Packages. Embedded VET allows students to acquire VET qualifications or part qualifications in addition to their senior secondary school certificate. In 1999 there were well over 100,000 students undertaking VET within a senior certificate at school. These details are provided in table 3.

Stand alone programs

Stand alone programs comprise pathways whereby students are able to undertake VET modules from industry-endorsed *National Training Packages.* These pathways provide opportunities for students to complete AQF qualifications, generally at the certificate I, II or III levels. These programs can be delivered by a TAFE or other non-school RTO or by the school itself if it is registered to provide those programs. Table 4 provides details on the number of students involved in stand-alone VET programs either undertaken at a TAFE institute, a campus of a TAFE institute or a school campus.

State/Territory	Students undertaking VET within a senior secondary certificate at school		Total Year 1	1 and 12 students	Students in VET-in- Schools programs as a proportion of total
	No ('000)	Proportion of Australian total (%)	No ('000)	Proportion of Australian total (%)	Year 11 and 12 in each jurisdiction (%)
Queensland	41.1	36.2	83.3	20.7	49.3
New South Wales ^(a)	23.0	20.2	123.1	30.6	18.7
Victoria	13.6	12.0	100.6	25.0	13.5
Western Australia	8.8	7.7	42.3	10.5	20.8
South Australia	18.5	16.3	30.4	7.6	60.9
Tasmania	2.6	2.3	10.5	2.6	24.8
Northern Territory	1.5	1.3	2.8	0.7	53.6
Australian Capital Territory	4.5	4.0	9.4	2.3	47.9
Australia	113.6	100.0	402.4	100.0	28.2

 Table 3: Students in VET-in-Schools programs undertaking vocational education within their senior secondary certificate provided at a school, 1999

^(a)Excludes secondary students enrolled at TAFE in the NSW Joint Schools TAFE initiative who do senior secondary education and some VET subjects all in TAFE which are another 22 800 students

Source: MCEETYA (2000); ABS 'Labour Force' Catalogue 6203.0 (2000)

State/Territory	Still at school enrolled in TAFE and attending at a TAFE campus or a TAFE institute		attending at a school		and still at	olled in TAFE school or at a 'campus'	Students still at school or at a school 'campus' of TAFE as a % of all TAFE students
	No.	Proportion (%)	No.	Proportion (%)	No.	Proportion (%)	(%)
Queensland	7409	13.3	17549	45.8	24958	26.5	10.3
New South Wales	31170	55.8	0	0.0	31170	33.1	7.8
Victoria	9162	16.4	20072	52.4	29234	31.0	9.0
Western Australia	1983	3.5	277	0.7	2260	2.4	1.8
South Australia	4322	7.7	0	0.0	4322	4.6	4.9
Tasmania	679	1.2	0	0.0	679	0.7	2.7
Northern Territory	830	1.5	402	1.1	1232	1.3	9.0
Australian Capital Territory	316	0.6	0	0.0	316	0.3	2.3
Total	55871	100.0	38300	100.0	94171	100.0	7.6

Table 4: Students who are still at school and enrolled in TAFE and students enrolled in TAFE and attending a school campus of TAFE by State/Territory, 1999

Source: NCVER unpublished data

Part-time school apprenticeships and traineeships

Part-time school-based apprenticeships and traineeships in which students are engaged in paid work, allow students to complete or partially complete a nationally recognised VET qualification and their senior secondary school certificate while they are still at school. By June 2000 there were around 6 200 school-based apprenticeships and traineeships in Australia as a whole. The State of Queensland is leading the way nationally with almost 54% of all school-based apprenticeships and traineeships in Australia are provided in table 5.

Year at 30 June	No. in	Queensland as a proportion of all school-		
	Queensland	Australia	based apprenticeships in Australia (%)	
1996	3	222	1.3	
1997	16	336	4.8	
1998	344	1181	29.1	
1999	1696	3342	50.7	
2000	3269	6119	53.4	

 Table 5: The number of school-based apprenticeships and traineeships, 1996–2000

Source: NCVER unpublished data

Students in school-based part-time apprenticeships and traineeships are employed either directly by an employer, or by a group training company. Where there is direct employment by an employer the employer is responsible for all the costs associated with the trainee (for example, trainee wages, holiday pay, sick pay, superannuation etc.) Where employment is with a group training company the group training company takes care of all employment-related costs, and hires the trainee out to host employers for a fee. The group training company is responsible for coordinating the off-the-job training (undertaken with a registered training organisation), the host employer is responsible for providing the on-the-job training and experience.

Industry linkages

The Australian VET system is predicated on the existence of firm linkages with industry. The formal linkages are provided in part by industry-endorsed National Training Packages. Informal linkages are those arrangements that schools have evolved to enable the implementation of programs within their particular environments.

National training packages

National Training Packages, specify the competencies, standards, qualifications and assessment guidelines that apply to a certain industry. Developed by industry training and advisory boards, they provide direct guidelines for the development of workplace competencies. These packages were first mooted as ways to further customise training to enterprise and industry needs, when a review of the training system in 1994 (Allen 1994) found that training providers were not embracing reforms to the training system.

Although these packages are still in their infancy, providers are already finding that they do not suit all types of students in the VET system. There is a particular concern that with their focus on workplace competencies, they may not be suitable for students who have no prior experience of work and are on institutional pathways (Misko 2001).

School clusters

Although not all school-based VET programs require students to obtain specific workplace experience if skills can be acquired within the school setting, a significant number of students are involved in industry work placements. Schools have evolved cluster arrangements which enable them to combine with other schools to provide programs or to pay for the services of a vocational coordinator responsible for locating and negotiating work placements with industry.

The Enterprise and Career Education Foundation (ECEF) provides government funds to schools who are involved in these cluster arrangements and for school-industry programs which involve students spending time in structured training in industry work placements. Analysis of ECEF data indicates that by 2000 the number of students who had undertaken a program which included a work placement in industry had increased to just over 80 000. Over 100 000 students were estimated to be involved in such programs by the end of 2001 (McIntyre and Pithers 2001).

Partnerships with other providers

In trying to help students make the transition to work through appropriate industry-specific training, schools have teamed up with other providers (TAFE and other VET registered training providers) to deliver courses which will lead to AQF qualifications. This means that students may access courses provided by lecturers from these other providers, either at school or at TAFE or other provider venues. Schools may also decide to deliver the program themselves by using the RTO status of other providers like TAFE. In these cases school teachers and lecturers work together to identify, deliver and assess the competencies.

Informal partnerships are also developed whereby resources and facilities are shared. For example, schools will make use of the commercial kitchens of neighbouring TAFE or other VET providers for the delivery of hospitality programs.

Outcomes for students in VET-in-schools programs

As the growth in the number of students involved in VET-in schools programs nationally has only occurred in the last few years it is still too early to conduct meaningful national longitudinal studies on the further education and training and labour market destinations of students who have taken these programs. However, some initial evaluations have been undertaken of the programs by state jurisdictions who were early to introduce the programs into their states' curriculum and by the Education and Career Education Foundation (ECEF) who sponsored some of the programs.

Polesel et al (1999) report on the destinations of 1997 year 12 students in their second year out of school who studied VET in schools programs in Victoria. More than half of the students who took these programs were still studying, including those in apprenticeships and one in five were in full-time work.

Misko and Slack (2001) report on a national school leaver destination study of students who had participated in structured workplace learning programs supported by the Enterprise and Career Education Foundation. The sample represented about 15 per cent of 1999 school leavers who participated in structured workplace learning and reports on the initial post-school destinations of survey respondents.

The results of the survey for those students who completed year 12 and participated in a structured workplace learning program suggest that about two in five students were in full time work; one in ten students were in part-time work; just over a third were in full time study and less than one in ten (7.5 per cent) were unemployed. However, there were differences in post-school outcomes depending on the particular vocational course studied at school. More than half of the students taking building and construction, automotive, metal and engineering and light manufacturing progressed into full-time employment and more than half of these students who were in employment had secured an apprenticeship. However, students who entered the labour market directly from school and who studied community services and health programs, information technology, art and entertainment and retail had relatively high unemployment rates.

Benefits and concerns

There has been an explosion in the take-up of VET-in-schools programs since their inception in the early 1990s. This includes programs which result in students achieving national qualifications or part qualifications while they are still at school. In addition, these programs with their focus on workplace competencies provide opportunities for students to prepare to enter the world of work, or specific occupations in industry. If they are in a school-based apprenticeship or traineeship it means that once they leave school they have already completed part of the requirements.

However, there are still some issues that need to be addressed. These issues relate to the:

- proliferation of programs without a careful analysis of labour-market opportunities,
- access and equity to a wide range of VET programs for all students regardless of school location
- the recognition of school-based VET studies on entry into further education

Attachment 3 Summary of key findings from Kilpatrick (NCVER,2002y)

Many of the outcomes of participation in school VET for rural students are similar to the outcomes for school VET students identified in other research studies, in terms of employment and further education and training.

Aspects of school VET

School VET student motivation

- Students were motivated to choose VET-in-schools courses mainly for general interest or as a career pathway.
- Those students motivated by career when they undertook school VET courses showed distinctive educational outcomes being less likely to finish Year 12 yet more likely to go on to post school education and training than other school VET students.

Purpose of school VET program

• School VET students in a cluster with the purpose *pathway to local employment* were more likely to report that their school VET course had influenced their decision to continue with senior secondary school and helped improve their literacy and numeracy skills. They were also most likely to have been offered an apprenticeship/traineeship from their work placement. School VET students who attended a school with this VET purpose and who also participated in a work placement who were more likely to have stayed in their home community than those who did not do a work placement or those who attended a school not having this VET purpose.

School VET course with work placement

- Over half of all school VET respondents in this study participated in a work placement. Completion of a work placement appeared to be a pathway to initial employment on leaving school, in that about half of all work placement students were offered employment, or an apprenticeship or traineeship, by their work placement employer. Females were more likely to receive offers of employment from their work placement and males were more likely to receive offers of an apprenticeship/ traineeship. Consequently, work placement students were less likely to have completed year 12 than other school VET students, as about a third of those who were offered a job or apprenticeship/ traineeship while at school left.
- Despite half of the work placement students receiving an offer from their 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. However, students who did a work placement as part of their school VET course were more likely than other school VET students to have obtained employment in the same industry area as their school VET study.
- Having a casual job while at school appeared to convey an advantage to female work placement students both in terms of being offered employment from their work placement and in terms of current employment.
- Work placement students had similar levels of agreement about almost all the general and specific job skills gained from their work placement as all school VET students did about the general and specific job skills gained from their senior school years. The main exception was 'collecting and analysing information' where work placement students were less likely to agree they had gained this skill from their work placement than school VET students overall were for their senior school years.

Education and training outcomes

• 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. More school VET

than school non-VET participants agreed that school helped them in developing specific, job-related skills, and in using IT and new forms of technology. These outcomes are consistent with the practical emphasis of school VET courses. Female school VET students in particular reported benefits from learning to use IT and new forms of technology. School VET participants were also more positive about the influence of school in developing new ideas than school non-VET participants.

- School VET students were 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. This difference held true between school VET and non-VET students who intend to live in a rural area.
- School VET females' post school education and training participation pattern was more similar to that of males (VET and non-VET) than to that of female non-VET respondents
- Over one third of all respondents had commenced an apprenticeship or traineeship since leaving school. Regardless of whether they did school VET or not, far more males than females went onto apprenticeships. There was also a gender difference in choice of apprenticeship and traineeship fields, with males principally in the area of technology and trades, followed by primary industry and human services while females mainly chose business and clerical and human services. School VET students were no more likely to enter apprenticeships/traineeships after leaving school than school non-VET students.
- There were clear gender differences in the choice of school VET courses. Females were more likely to choose business and clerical and work skills courses. Males were more likely to choose technology and trades and primary industry courses. Business and clerical school VET students were the most likely and Primary industry the least likely to continue with post school education and training.
- Over half of the post school education and training courses undertaken were in the same broad industry area as the school VET course. Seventy percent of apprenticeships and traineeships undertaken were in the same broad industry area as the school VET course. For those students who did a school VET course in technology and trades and human services, there is a strong link with post school education and training in the same area. For technology and trades this link is especially through males going onto apprenticeships and traineeships.
- Of respondents who indicated their further education and training was related to their school VET course, one third had received advanced standing or credit for the school VET course. Those most likely to receive credit had undertaken school VET study in human services (mainly tourism and hospitality); those least likely to gain credit had studied in the business and clerical, and work skills, areas. Students who had done school-based apprenticeships are no more likely than all school VET students to obtain advanced standing or credit.

Employment outcomes

- 89% of all respondents were employed at the time of the survey. School VET students in general are no more likely to be currently employed than school non-VET students. All 31 early school leavers were employed.
- Male respondents were more likely to be involved in full time employment than female respondents, in line with national labour force figures for this age group, and school VET students were more likely to be involved in full time employment than school non-VET students.
- Male students were no more likely to have a current job in a rural area than female students, and this similarity held true for school VET and school non-VET students.
- All those (school VET and non school VET) currently employed in the broad industry area of technology and trades were more likely to be employed full time and were more likely to be male. In contrast those employed in the human services area were more likely to be employed on a casual basis and more likely to be female. These findings are consistent with traditional gender choices.
- Of those school VET students currently working, 62% indicated that their job was in the same broad industry area as their school VET course. The industry area with the strongest link was human services, and with the weakest link, business and clerical.

• Participation in an industry specific school VET course, as opposed to a work skills course, gave females but not males an advantage in terms of current employment.

Community outcomes

- At the time of the survey, two to three years after they had left secondary school, 70% of respondents normally resided in a rural area, 10% in a remote area, and 20% in a metropolitan area.
- Most students surveyed indicated their intention to live in a rural community at some stage in their working life, with school VET students more likely to intend to live in their home community, and in a rural or remote area more generally, than school non-VET students. In particular, female school VET students are far more likely to remain in the locality where they attended school and in a rural or remote area than female school non-VET students, and school VET males were more likely to reside in a remote area than school non-VET males. Of all groups (male and female school VET, and male and female school non-VET), the female school non-VET group was the least likely to intend to remain in the locality where they had attended school. However, a comparison of current postcode locality with their school postcode locality shows that male school VET students were just as likely to move after leaving school as female school non-VET students.
- School VET respondents who intend to live in a rural area during their working life are more likely to have studied a school VET course in technology and trades, primary industry or work skills than business and clerical or human services.
- A significantly higher percentage of school non-VET students were involved in community activities while at school than school VET students. In particular, significantly more school non-VET males took part in community activities while at school than school VET males. From the findings there appears to be no significant relationship between respondents' community involvement at school and whether or not they remained in, or returned to live in, rural communities.
- Only 18% of school VET respondents agreed their school VET courses helped them feel closer to or more involved in their communities.
- School VET students are no more likely than school non-VET students to be *currently* involved in community activities.
- Those students who moved to metropolitan areas were less likely to have any current community involvement than those who were living in rural or remote areas. The loss of community connectedness associated with this move is similar for school VET and non-VET students but particularly significant for school VET males.

Conclusions

This section will present conclusions related to the research questions. The following section provides a combined response to research questions 1, 2 and 3.

- In rural schools, how do the outcomes of participation in VET-in-schools programs differ from the outcomes of non participation in VET school programs, in terms of:
 - education and training,
 - further employment, and
 - youth retention?

The findings suggest that the many of the outcomes of participation in school VET for rural students are similar to the outcomes for school VET students identified in other research studies, in terms of further education and training and employment. When the findings for school VET students are compared with the findings from short term destination surveys, our survey shows an increase in employment and further education and training rates for students some three years out of school. This suggests that immediate post school destination studies present a limited picture of the post school experiences re education and training, and employment. An interesting difference between our study and other school VET studies was in the area of post school apprenticeships and traineeships, where there was very little difference in the uptake rate between rural school VET and school non-VET students. This suggests that

apprenticeships in rural communities may still be accessed largely through family connections and networks, rather than as a result of school VET study.

Interestingly, there were fewer instances of school VET participation influencing the engagement and retention of rural youth in their communities, than the researchers had expected. However, there are some indications that school VET in rural areas does make a positive difference in terms of employment for early leavers, and in terms of retention in the community for female school VET students.

The next section provides a response to research question 4:

• What are the features of VET-in-schools programs delivered in rural schools that influence young people's destinations in relation to post-VET study, employment, and remaining in their local communities?

The features of school VET courses investigated in this study include the course industry area, whether or not students participated in a work placement, and the school's purpose for providing the VET course.

The school VET industry area appeared to have a strong impact on the chosen field of post school education and training and employment, with the majority of those who participated in a specific school VET industry area going on to further training and work in that area. The industry areas with the strongest links were technology and trades and human services, with the technology and trade linkage mainly being for males and through apprenticeships. Human services was the most successful area in terms of gaining recognition for school VET studies.

It appears from this study that work placement provide a useful initial pathway to employment and training yet this effect may dissipate with time. Although about half of all work placement students were offered employment from their employer, they were no more likely than other school VET students to be employed or have commenced an apprenticeship two to three years after leaving school. Work placements made a difference in terms of feeling closer to and more involved in their community for female but not male students. However this community closeness outcome had no discernable effect on female work placement students' intentions of remaining in or returning to that community.

The school VET purpose *pathway to local employment* appeared to be largely successful in terms retaining students who otherwise may have left school early and improving their perceptions of their literacy and numeracy skills. It also provided for work placement students a pathway to local apprenticeships and a greater incidence of still living in the community two to three years later. The other school VET purposes were less marked in their outcomes.

Implications

...for practice

• Girls need to be encouraged to consider areas of school VET study that lead to career paths (full-time work) in rural areas (e.g. primary industries, engineering).

Who should implement? Women in Agriculture groups should go into schools to raise awareness amongst female students. VET teachers and careers advisors in rural schools need to raise awareness of opportunities for female students.

...for further research

• More longitudinal studies of post school outcomes for all rural students (school VET and non school VET) are needed, to capture those not represented adequately in our survey (e.g. early school leavers). These studies will need to use different methodologies, as questionnaires tend to favour those with higher literacy levels.

...for policy

• Investigation needs to be conducted into a more holistic measurement framework/indicators of the outcomes of school VET programs, particularly in rural areas. These indicators will include individual

as well as community outcomes, and will look beyond the further education and training, and employment outcomes, that have featured in much school VET research to date.

Attachment 4 Data collection and reporting

Further background information is provided here on the role of the NCVER in collecting data on the vocational education and training sector, and the data collections managed and developed by the NCVER.

NCVER's current responsibilities in the statistical area began in 1994 with the implementation of new data collection arrangements for apprenticeships and traineeships, VET providers in receipt of public funds and state/territory financial data. The new data collection arrangements involved the development and implementation of the Australian Vocational Education and Training Management Information and Statistical Standard (AVETMISS) and superseded earlier arrangements for apprenticeships and the TAFE sector which had been instituted by DEETYA and its predecessor.

The new data collection arrangements under the AVETMIS Standard brought about significant advances in the information available about VET in Australia by:

- Increasing the range of data elements included in the collections, including information about the outputs and outcomes of VET activity.
- Providing for data collection at the level of individual persons and programs.
- Implementing agreed national standards for all demographic and classification variables.
- Promoting consistency with other sources of information about education or training in Australia, particularly the Australian Bureau of Statistics and DEST.
- Clearly defining the scope of the collections (see below).

Issues of scope in the collections were addressed through the following arrangements:

- The collection of data relating to contracts of training encompassed both apprenticeships and traineeships, and applied the same data standards to both.
- The collection of data from VET providers underwent a planned expansion in scope, beginning with TAFE and other government providers in 1994, community providers in 1995, and private providers in receipt of government funds in 1996.
- A project to resolve scope issues arising from the development of VET in schools, which is currently underway (Appendix 2). The proposed strategy to resolve data collection issues will be considered by the December 2002 meeting of the National Training Statistics Committee.
- An agreement that the financial data collection would relate to the VET operations of state/territory training authorities, and ANTA, and that accrual-based reporting would be adopted in line with modern accounting practice.

Much of the information required by users is published in regular, standard publications which are distributed free of charge to all major stakeholders. Additional information from the collections is available, on request and at cost, to any interested party subject to the NTSC protocols on the ethical release and use of information.

Attachment 5 Paper presented to the November 2001 meeting of the National Training Statistics Committee

30 November, 2001

Agenda Item:

Melbourne

Proposal for resolving reporting and scope issues relating to VET-in-schools activity in the national collection of data from VET providers

PURPOSE

1. To agree on a strategy which will resolve a number of issues of reporting and scope which have arisen in relation to VET-in-schools activity.

BACKGROUND

- 2. See attached discussion paper .
- 3. The recommendations below are designed to promote consistency, accuracy and completeness in the reporting of VET activity in the public VET system.

PROPOSAL

- 4. That the National Training Statistics Committee:
- Agree to the principle that the national collection of data from VET providers should include all VET-in-schools activity, regardless of the education or training sector in which it is delivered.
- Initiate consultations with relevant bodies (e.g. state training authorities and upper secondary assessment authorities) to establish the logistics and a timetable for implementing the revised collection scope.
- Support the principle that all data collection relating to VET in schools should be made under the AVETMIS Standard, and that different provider sectors should arrange, wherever possible, to use common identifiers for VET-in-schools students, courses and subjects.

Reporting of VET-in-schools activity

Background

Since the national collection of data⁴ from VET providers began in 1995 (for the 1994 calendar year) there has been a planned expansion in the scope of the collection to encompass all providers in the public VET system together with any other activity which is funded from government recurrent or specific-purpose allocations for VET. The rationale and principles for the collection were formalised in the national VET information strategy for 1998 to 2001, which was prepared on behalf of NACVETS (now renamed the National Training Ttatistics Committee) and subsequently adopted by ANTA CEOs and the ANTA Board.

Since the national strategy was prepared, formal arrangements for VET-in-schools delivery have been agreed and implemented in all states and territories, assisted by some initial funding from ANTA. The resultant expansion of VET-in-schools activity has created a scope problem for the national collection of data from VET providers which now needs to be resolved.

The national strategy recognises that data collections need to accommodate changing priorities and directions. Consequently, the AVETMIS Standard, which underpins the national collection of data from VET providers, is reviewed regularly to ensure that it meets the evolving information requirements of the sector. It should be noted, at this stage, that the AVETMIS Standard includes an 'at school' flag, which allows school students enrolling with VET providers to be identified. However, this flag is based on a question on the enrolment form ('Are you still attending secondary school?') and is independent of whether the student is involved in a VET-in-schools program.

It is important to recognise that school students can undertake VET in two different ways:

- By enrolling in subjects or a course delivered by a VET provider (referred to here and in NCVER publications as 'school students undertaking VET'). This activity is generally funded from government allocations for VET, although some students undoubtedly enrol on a fee-for-service basis with private providers.
- By undertaking VET subjects as part of their secondary school program (referred to here as 'VET in schools'). This activity is generally funded from government allocations for secondary schooling, supplemented by fees paid by parents, and from ANTA VET-in-schools allocations. It includes activity associated with school-based apprenticeships and traineeships. VET-in-schools programs generally count towards the requirements for the upper secondary education certificate in each state and territory (HSC, VCE, SACE etc).

At the present time, the national collection of data from VET providers includes all activity for school students enrolled in the public VET system but only some of the VET-in-schools activity. The relationship between funding and activity is shown in the diagram below, with the shading indicating which activity is currently included in the national collection of data from VET providers.

⁴ In this paper the terms 'data' and 'statistics' will be used with their strict meanings, and the term 'information' will be used to refer collectively to both. 'Data' refers to units of information (e.g. details of an individual student or a specific subject or course enrolment). 'Statistics', on the other hand, are summary pieces of numerical information derived from data. The distinction is important in the present context because some information sources capture statistics only (the DETYA and MCEETYA collections), whereas others (such as the NCVER data collections) are based on unit-record data.

	Source of funding			
Type of VET activity	Government allocations for VET	Government allocations for secondary schooling		
School students undertaking VET with public VET providers	Yes	No		
School students undertaking VET with private providers	No	Unknown		
VET-in-schools delivered in the secondary education system	Some	Yes		

Key to shading:

Activity wholly included in the national collection of data from VET providers
 Activity partially included in the national collection of data from VET providers
 Activity not included in the national collection of data from VET providers

The situation is complicated by the fact that some states and territories, namely Queensland, South Australia, Tasmania and Northern Territory, have made arrangements to include their VET-in-schools activity in the national collection of data from VET providers, although there is no formal requirement for this under current agreements. In NSW, where the Joint Secondary School TAFE (JSST) program operates, JSST subjects undertaken with TAFE are included in the collection, but as in the other three states, the situation regarding activity undertaken wholly within the secondary school system is unknown. A further complication arises in Victoria, where general education subjects which are part of the VCE continue to be delivered by some TAFE institutes and as a result are reported in the national collection, whereas this practice has been discontinued in other states and territories.

Information collection and reporting

At the present time, information about VET-in-schools activity is reported to three different sources:

- Summary statistics, including all VET-in-schools-activity, are reported to the DETYA schools collection via state education authorities. However, VET-in-schools activity is not separately reported or identifiable in these statistics.
- Summary statistics covering all VET-in-schools activity, regardless of funding source, are reported to the secretariat set up by MCEETYA. These statistics cover all students engaged in VET-in-schools activity but need not include all school students undertaking VET in the public VET system. Wherever possible, the statistics are reported in a manner which is consistent with the AVETMIS Standard. Regular reports are published.
- Unit-record data covering VET-in-schools activity, where this is funded by state training authorites or ANTA specific-pupose funds, are reported by some jurisdictions to the national VET data collection. These data cover all students undertaking VET in the public VET system but do not include all students who are engaged in VET-in-schools activity.
- Within states and territories, unit-record data covering VET-in-schools activity are reported by schools to the upper secondary assessment authority. This is the primary source of the statistics collected by MCEETYA, but is also used for other reports at state/territory level.

Clearly, it is not possible to unpack the information in these collections to report separately on VET in schools, school students undertaking VET and mainstream general education.

Consequences of the present situation

From the point of view of stakeholders in the VET system, the major consequence of the present situation is that it is not possible to report total publicly-funded VET activity, including VET in schools, nor is it possible to separate out VET-in-schools activity to allow total VET activity to be reported without the VET-in-schools component.

While the impact of this limitation on reported total levels of VET activity is minor, it becomes more material when VET activity for specific student segments (e.g. students 15 to 19 years of age), or at state/territory level, is reported. For example, the proportion of students reported as being 'at school' varies among states and territories from under 2% to over 11%. Most of this variation is an artifact of the current reporting arrangements rather than a reflection of real differences.

A further consequence is that reported student numbers for the public VET system are overstated slightly for those states and territories which submit VET-in-schools data.. This occurs because many of the students in these data are included in both the TAFE and school data submissions, and the NCVER does not have a means of netting students onto a single identifier when reports are being prepared. It should be noted that statistics for subject enrolments and annual hours are less affected by this limitation.

These difficulties could be resolved, and the utility of NCVER reports enhanced, if the national collection of data from VET providers were formally expanded to include all VET-in-schools activity, and efforts were made to use a common student identifier for both the TAFE and school enrolments of VET-in-schools students, as is already the case in at least one jurisdiction.

Other key points

Although some jurisdictions (Queensland, South Australia, Tasmania and Northern Territory) have made arrangements, voluntarily, to include their VET-in-schools activity in the national collection of data from VET providers, the agreements which underpin the national VET collection do not automatically encompass this activity because much of it is funded from education rather than from VET allocations. Thus any collection of these data would require specific agreement from the four jurisdictions which currently do not report their VET-in-schools activity to NCVER. Such agreements would necessarily involve the upper secondary assessment authorities, which hold most of the relevant data, and the three major secondary education sectors (government, Catholic and independent) within each jurisdiction.

Recommendations

The following recommendations are designed to promote consistency, accuracy and completeness in the reporting of VET activity in the public VET system.

- The national collection of data from VET providers should include all VET-in-schools activity, regardless of the education or training sector in which it is delivered.
- Consultations with relevant bodies (e.g. state training authorities and upper secondary assessment authorities) should be held to establish the logistics and a timetable for implementing the revised collection scope.
- All data collection should be made under the AVETMIS Standard, and provider sectors should arrange, wherever possible, to use common identifiers for VET-in-schools students, courses and subjects.

Attachment 6 Report presented to the ANTA national workshop on VET-in-schools data collection, August 2002

Report on the capacity of States and Territories to report VET in schools data which more fully comply with AVETMISS

1 Introduction

In the mid-1990s, States, Territories and the Commonwealth actively promoted VET in schools (VETIS) as a pathway to improve the transition of young people from school to post-school activities. Specific-purpose funding for VETIS has been provided by ANTA and is supplemented by State and Territory allocations. VETIS has become an important alternative to more traditional pathways.

In 1999, the Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA) formalised the definition of VETIS, resolved that key performance measures (KPMs) for VETIS should be reported and that the data used for this reporting should comply with the national data standard for VET (i.e. AVETMISS). Since that time, States and Territories have progressively developed their data collection and reporting capability for VETIS, and considerable advances have been made. However, some residual problems do require attention.

The National Centre for Vocational Education Research (NCVER) has been requested to report on the capacity of States and Territories to provide data which comply with the national data standard for VET (AVETMISS) to support the reporting of MCEETYA key performance measures for VETIS. The findings have been considered, in the first instance, by a one-off working party consisting of representatives of ANTA, PMRT, TST, ACACA, NTSC and NCVER⁵.

Currently, States and Territories provide an annual summary of VETIS activity to the TST. At the same time, a considerable amount of VETIS activity is included in the national collection of data from VET providers compiled by the NCVER. However, at the present time this information does not include all VETIS students and, like the information reported to the TST, there is some variation in coverage and definitions among jurisdictions. Furthermore, in the national VET collection, it is not always possible to separately distinguish VETIS activity from other VET undertaken by school students.

As a result of the current situation, there are two underlying issues, which are addressed in this report:

- The need for data which comply more fully with AVETMISS to support reporting and progress against the KPMs for VETIS agreed by MCEETYA.
- The need to resolve the scope issues which have arisen from the inclusion of VETIS data in the national collection of VET data.

In accordance with the procedure agreed by the working party, consultations have been held with all States and Territories and a data collection proforma, which provided the framework for the consultations and for this report, has been completed. The consultations were coordinated by the PMRT representative in each jurisdiction, and involved representatives of the ACACA agency, the state training authority and school education authorities. In some instances, the consultations also involved representatives from the Catholic and independent school systems.

⁵ To avoid overburdening the discussion with numerous extended names, all acronyms and abbreviations used in this report and in the individual State/Territory summaries are listed in the final table.

2 Summary of findings

The findings from the consultations are summarised in Table 1. Some enhancements to systems and processes are needed before jurisdictions are in a position to report all VETIS to the full AVETMIS Standard. However, fewer enhancements would be needed to report on the subset of data elements in AVETMISS which are relevant to VETIS KPMs. About half the jurisdictions have systems in place which would allow fully compliant data to be reported with relatively minor modifications to existing rules and procedures and appropriate in-service training for those school staff who submit data to ACACA agencies.

However, a more fundamental issue is the fact that working definitions which are consistent and comparable among jurisdictions will need to be worked out. Without these, jurisdictions will be unable to refine or implement systems and procedures which deliver consistent and comparable data. Some of the major items requiring working definitions are:

- What defines a 'VETIS enrolment', particularly where VET is embedded in general education subjects?
- What defines a 'VETIS student', particularly where the VET being undertaken is embedded in general education subjects?
- School-based new apprentices: are they a separate group or should they be included in the VETIS cohort?
- What defines 'students enrolled in courses leading to the senior secondary certificate', since the requirements for the senior secondary certificate vary enormously among jurisdictions?

The consultations have also established that, in some jurisdictions, there is considerable overlap in the VETIS data held by ACACA agencies and VET providers, who are required to report to the national VET database. Furthermore, the current AVETMIS Standard does not include indicators which allow VETIS activity in the national VET collection to be clearly identified. Such indicators will be needed if data from the ACACA agencies are to become the authoritative source of VETIS data (the only practical solution, as proposed in section 3, below).

3 Other findings and issues

During the consultations, a range of issues relevant to reporting VETIS data to support the MCEETYA KPMs were explored with State/Territory representatives. A general summary of these is provided in Table 2.

From these findings, it is clear that the principal reason for the variation in State/Territory capacity to report data to support VETIS KPM reporting is the current variation in systems and processes. This variation is understandable, as the statutory responsibilities of the upper secondary assessment authorities, who are the main holders of VETIS data, do not encompass the full set of information required for MCEETYA KPM reporting. It should be noted at this point that, while it is not suggested that jurisdictions need to follow the same systems and processes, they do need to have arrangements which ensure that the end-data have effectively the same scope, based on the same or equivalent definitions.

Applying the AVETMIS Standard, with consistent working definitions as noted in section 2, to the VETIS data submitted by ACACA agencies, will resolve most of the residual issues. However, because of outsourcing and related arrangements, this would also set up overlap and duplication with VETIS data in the national VET collection. Consequently, some changes to AVETMISS and the associated collection arrangements would be needed to address this. A 'package' of recommendations which could achieve all these goals is outlined in section 4.

Data required	Summary
KPM 1 numerator: no. of students undertaking New Apprenticeships	Figure is available but may require refinement to ensure greater accuracy in some jurisdictions. An issue to resolve is: - should SBNAs be included in the numerator for the calculation of KPMs 2 and 3?
KPM 2 numerator: no. of students enrolled in VET-in- schools programs leading to a senior secondary certificate KPM 3 numerator: annual student contact hours delivered through VET-in-schools programs	There are refinements needed in most jurisdictions. These could be resolved by: - refining & clarifying the MCEETYA definition of a VETIS & an upper secondary student - implementing an up-front enrolment system in each jurisdiction - implementing systems which ensure that all enrolments where the student participates are captured, and 'no starts' are excluded. Scope issues in the national VET collection as they relate to VETIS KPM data could be resolved by: - adding a VETIS funding source value and/or a VETIS student flag to the AVETMIS Standard.
KPM 4 numerator: no. of students who have completed a VET qualification by the highest AQF level attained KPM 5 numerator: student contact hours completed through VET-in-schools programs	Available from the ACACA agency in most jurisdictions as reporting results & qualifications is part of their core business. However, problems can arise where VETIS delivery has been outsourced to a non-school RTO
KPM 1 & 2 denominator: no. of students enrolled in courses leading to the senior secondary certificate KPM 3-5 denominator: no. of students undertaking a VET- in-schools program	Some difficulties with definition and comparability arise across jurisdictions because of: - considerable variations in senior secondary certificate requirements - embedding of VET units of competency in general education subjects - the fact that the concept of an 'enrolment' is not as well- established in schools as it is in VET or higher education - differing proportions of full-time & part-time students
Socio-economic status and disadvantage	Generally not available
Language background, culture & ethnicity	Generally not available
Geographic location	Available if postcode or school location is regarded as sufficient, otherwise not
Disability	Generally not available
Indigenous status	Generally available
Age	Generally available
Sex	Generally available

Table 1: Current capacity to meet VET-in-schools KPM data requirements

Table 2: Summary	of VETIS data	reporting issues 1	raised with States a	nd Territories
Table 2. Summary		reporting issues i	and a min dates a	nu rennomes

Issues	Summary
Process for capturing enrolments & results in senior secondary subjects in the state (including agencies involved, scope, use of enrolment forms etc)?	Varies from on-line & electronic enrolment systems to paper-based enrolments. Some jurisdictions have up-front enrolment systems which capture enrolments early in year 11 or 12, while others only capture enrolments at a much later stage and may not include students who have left school in the meantime.
Enrolments: does your state/territory have an enrolment system which records details of all subjects (including VET modules or units of competency) actually started by each student?	No jurisdiction has this capacity completely at the present time, though several are close.
What is the process for capturing information about VET in Schools activity by upper secondary students (including agencies involved, scope etc)?	Varies considerably, including, in at least one jurisdiction, outsourcing of most VETIS to non-school RTOs with eventual reporting back to the school.
Existing scope: exactly which students are included in the VET in Schools data currently included in the national collection of data from VET providers submitted to the NCVER?	Varies from a minority to practically all.
AVETMISS compliance: how is this achieved for the VET in Schools data currently included in the national collection data submitted to the NCVER?	Some jurisdictions have mounted specific projects to ensure that data which comply with AVETMISS are reported for VETIS activity. Others have yet to move in this direction, and compliance is coincidental rather than intended.
Dual sector students: can your state/territory identify students who are enrolled with non-school providers such as TAFE? If so, can the board report the TAFE student identifier?	RTOs and schools generally know which students are enrolled in more than one provider sector, but in general this information is not reported to the ACACA agency or the state training authority.
School-based New Apprentices: can your state/territory identify school-based apprentices? If so, can it report the state New Apprenticeship identifier?	In most jurisdictions, identification is clear-cut. However, only some can report the state New Apprenticeship identifier.
Level of schooling (i.e. year 12, 11, 10): could the board report this for students who are undertaking VET in Schools?	Generally available if required, usually by inference.
Do you collect data for ungraded students who are undertaking VET in Schools?	Most work experience now undertaken by VETIS students is accredited & under the AQF. This issue is not now material to VETIS KPM reporting.
Are there issues or problems with the notion of 'level of schooling' in your state (e.g. 'year 13' students, lifetime certificate provisions)?	Yes. Most jurisdictions have no age limits & allow upper secondary studies to be spread over more than 2 years. All jurisdictions have some pre-year 11 students doing upper secondary subjects. Home-based schooling may be an issue in at least one jurisdiction.
AQF qualifications: how are the AQF qualifications completed by VET in Schools students issued (when, by whom etc) & is this recorded by the board?	In most cases by the ACACA agency, in some cases qualifications are issued by the RTO, which may be a VET provider other than the school.
What links at unit-record level exist between the board, schools, VET providers or the state apprentice/ trainee database?	Generally very few.
Does the state/ territory currently submit data to the national VET collection.	In 2001, 6 of the 8 jurisdictions reported VETIS activity to the national VET collection as a separate 'schools' collection, while in the other 2, a significant amount of VETIS data is included in the collections from TAFE and other providers in receipt of government funds.

Issues	Summary
Other issues	The consultations raised a variety of related issues, including:
	- the cost of system changes in some States and Territories
	- need to 'quarantine' ACACA agency VETIS data to avoid double counting
	- need for working definitions to allow VETIS KPMs to be operationalised
	- should all AVETMISS data elements be collected, as some are not relevant to VETIS KPMS?
	- 2-year subjects in some jurisdictions
	- need for in-service training of school staff to ensure improved compliance with AVETMISS
	- the impact of funding arrangements, outsourcing etc on VETIS reporting capability
	- differences in philosophy & approach in schools compared with VET.

4 Suggested strategy for resolving the issues

In Table 3, a strategy and recommendations are outlined which would allow complete and consistent reporting of VETIS for KPMs and other purposes (e.g. system management and research), and would also allow national VET activity to be reported net of VETIS, or with VETIS shown as an unambiguous separate line item, as required. A particular advantage of such an arrangement is that it would allow the contribution which non-school providers in the public VET system make to the delivery of VETIS to be described and quantified (e.g. in the context of monitoring delivery under the ANTA agreement).

In all jurisdictions, some changes to systems and/or processes will need to occur (in some cases these are already underway). The most critical change is whether 'enrolments' (as defined in VET) are recorded, as opposed to end results. In some jurisdictions, this could be achieved through relatively minor changes to processes within existing systems, whereas in others, somewhat more substantial changes in systems and processes would be needed.

In short, sitting behind the broad elements of the strategy outlined in Table 3 is a larger set of actions which, depending on the State or Territory, will need to be undertaken to ensure that enhanced data, which are needed for VETIS KPM reporting and to resolve the scope issues which have arisen in the national VET collection, are available.

Table 3: Suggested strategy for resolving VETIS KPM data issues, and agencies responsible

Element of the strategy	Responsible agencies	Suggested time frame
Formulation of working definitions (for a VETIS enrolment, VETIS student, upper secondary student etc) which can be applied by all jurisdictions and result in comparable data.	ACACA VETIS Taskforce, TST and PMRT with advice from NCVER	By Dec 2002
All State/Territory ACACA agencies to report complete VETIS data which comply with AVETMISS, either fully, or on those data elements which are material to VETIS KPM reporting, as the single authoritative source of VETIS information for each State/Territory.	ACACA agencies, ANTA, PMRT	By March 2004, for 2003 VETIS activity
Public VET providers to continue to report VETIS activity to the national VET collection, with the inclusion of additional 'flags' (a VETIS student flag and a funding source flag) which allow VETIS students and enrolments to be identified.	NTSC on advice from NCVER	As part of Release 6.0 of AVETMISS

Table 4: Acronymns and abbreviations	used in the report
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Abbreviation	Full name	Description
ACACA	Australasian Curriculum, Assessment and Certification Authorities	A body comprising all State/Territory and New Zealand upper secondary curriculum, assessment and certification bodies
ANTA	Australian National Training Authority	
AQF	Australian Qualifications Framework	Single, national qualifications framework spanning all post-compulsory education or training
AVETMISS	Australian Vocational Education and Training Management Information and Statistical Standard	National data standard for VET provider, New Apprenticeship and financial data
BSSS	ACT Board of Senior Secondary Studies	The upper secondary curriculum & assessment authority for the ACT.
CBASS		Data management system currently used by NT schools, to be replaced by SAMS.
CEO	Catholic Education Office	State/Territory office responsible for Catholic school education
CIT	Canberra Institute of Technology	The major provider of vocational education & training in the ACT.
DELTA	Departmental Entry Level Training Administration	New Apprenticeship management information system used in Queensland, Victoria, ACT & Tasmania.
DATEX		Web-based enrolment system being developed by SSABSA.
DUX		Software system used by Catholic schools in SA (very similar to EDSAS).
ED	Education Department	Shorthand for the government department responsible for school education in a State or Territory
EDSAS	Education Department School Administration System	Software system used by government schools in SA.
EQ	Education Queensland	The State department responsible for education in Queensland
FTE	Full-time equivalent	Standard measurement unit used in higher education.
ISB	Independent Schools Board	The peak body representing independent schools in SA
IVETS	Integrated (?) Vocational Education and Training System	New Apprenticeship management information system used in NSW.
MCEETYA	Ministerial Council for Employment, Education, Training and Youth Affairs	National body of State/Territory & Commonwealth ministers responsible for employment, education, training & youth affairs.
NA	New Apprenticeship	Scheme which came into effect on 1 January 1998, replacing traineeships & traditional apprenticeships.

NCVER	National Centre for Vocational Education Research Ltd	The agency contracted by ANTA to manage the national collections of VET data
NORVETS		New Apprenticeship management information system used in NT.
NTSC	National Training Statistics Committee	A committee, reporting to the ANTA Board, with responsibility for the maintenance & development of national VET statistics, reporting arrangements, standards etc.
OPCET	Office of Post Compulsory Education and Training	State training authority in Tasmania
OTTE	Office of Training and Tertiary Education	A division of the Victoria Department of Education, Employment and Training
OVET	Office of Vocational Education and Training	The VET division of Dept of Employment, Further Education & Small Business in SA
PMRT	Performance Measurement and Reporting Taskforce	A MCEETYA taskforce set up to oversee, among other things, the development & reporting of key performance measures.
QCE	Queensland Certificate of Education	Upper secondary certificate in Queensland, issued to students who have successfully completed any subjects or UoCs.
QSA	Queensland Studies Authority	Statutory authority amalgamating Qld Board of Senior Secondary School Studies, Tertiary Entry Procedures Authority &
RTO	Registered Training Organisation	A training provider registered with a state training authority according to Australian Quality Training Framework requirements
RTP	Registered Training Provider	A training provider registered with the Western Australian Curriculum Council in accordance with Australian Quality Training Framework requirements
SACE	South Australia Certificate of Education	Upper secondary certificate in SA, issued to students meeting stage 1 & 2 subject grade requirements, satisfy the curriculum pattern & satisfactorily completing the writing-based literacy assessment.
SAMS	School Administration and Management System	New data management system being developed for NT schools, to replace CBASS.
SBNA	School-based New Apprenticeship	A particular kind of New Apprenticeship designed to be undertaken in parallel with upper secondary study at school
SDCS	Senior Data Capture System	System used by schools & QSA in Qld to record & report student details & results
SIS	School Information System	New enrolment system being developed for use by government schools in WA, similar to the new SAMS system for NT
SMS	Student Management System	Management information system for TAFE institutes in SA (modified version also used in WA)
SSABSA	Senior Secondary Assessment Board of South Australia	Upper secondary curriculum, assessment and certification authority in SA

SWBL	Structured Work Based Learning	Name used by the Western Australia Curriculum Council
TAE	Training and Adult Education	The government agency with overall responsibility for VET in the ACT.
TASSAB	Tasmania Secondary Assessment Board	Upper secondary curriculum, assessment and certification authority in Tasmania
TCE	Tasmania Certificate of Education	Upper secondary certificate in Tasmania, issued to students who have successfully completed any subjects or UoCs.
TST	Transition from Schooling Taskforce	A taskforce set up by MCEETYA to provide direction & advice regarding the transition from school to post-school, particularly for young people (formerly known as the VET in Schools Taskforce).
UoC	Unit of Competency	The basic building blocks of national training package qualifications
VASS	VCE Administration System in Schools	Information system used in Victoria by all VCE providers (compulsory)
VCAA	Victoria Curriculum and Assessment Authority	Upper secondary assessment and certification authority in Victoria
VCE	Victoria Certificate of Education	Upper secondary certificate in Victoria, issued to students who meet the specified VCAA requirements.
VENUS		Software system for New Apprenticeships used in SA (replaced CoTIS)
VETIS	Vocational education and training in schools	Defined by MCEETYA as VET which is recognised under the AQF & undertaken as part of the senior secondary certificate
VTAC	Victoria Tertiary Admissions Centre	Body set up to receive & process applications for places in higher education courses, and some VET courses, in Victoria
WACC	Western Australia Curriculum Council	Upper secondary assessment and certification authority in Western Australia
WACE	Western Australia Certificate of Education	Upper secondary certificate for students in Western Australia
WADTE	Western Australia Department of Training and Employment	State training authority in Western Australia