



Recognising the total vocational education and training effort

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This paper discusses the National Centre for Vocational Education and Training (NCVER)'s move to expand its national statistics collection to capture data relating to Australia's total vocational education and training (VET) activity. It looks at what data is currently being collected and details the significant gap in information relating to privately funded VET activity. A major argument for expanding the NCVER collection is that privately funded VET activity is substantial and governments should have access to information on the whole sector when designing policies and allocating resources. The paper suggests principles which should govern the collection if it were to be expanded and options as to how this may be achieved.

My organisation, the National Centre for Vocational Education Research, collects a huge amount of information about the public Vocational Education and Training sector. The data collections cover some of the private sector, but not in a way to give us a firm handle on the whole sector. Remedying this situation is the subject of this paper.

Education is an important business. In stark economic terms, the education industry contributes around \$29 billion to the economy each year. According to the Australian Bureau of Statistics, over 650,000 people are employed in the industry. Education exports are of the order \$4.2 billion per year.¹ The education industry is also one that is a shared responsibility—between the Commonwealth and states/territories, and between the government and private sectors.

The education industry, though, is more important than its contribution in direct national accounting terms. Its whole rationale is that it enables individuals to lead better lives. There is a clear payoff in employment terms to education. The better educated tend to have more secure employment and better paying jobs. There are also other benefits to individuals; benefits such as better health and richer lives in a social sense. Benefits are both public and private. Many benefits are of a private nature, but there are benefits to the economy and society as a whole that go beyond private benefits. It is for these reasons that governments are involved in education. However, education is such an important part of our society that individuals are not willing to allow governments to be sole suppliers. And indeed governments have been of the view that educational needs are best served with a variety of providers. The private sector is particularly well represented in the school and vocational education and training sectors, but less so in higher education (although universities seem to be evolving into entities that have both private and public attributes). While the education industry can be characterised as having both government and private components, the government influence is pervasive. As well as there being government providers at all levels, governments regulate the industry extensively, provide subsidies widely and provide income support for eligible students irrespective of the institution they attend. No teaching institution in the accredited sector is independent of government influence at some level.

My major interest is from a research and statistics point of view. Looking at the education industry as a whole, the school sector is particularly well covered, no doubt reflecting the fact that schooling, at least to age 15 or thereabouts, is compulsory. Similarly the higher education sector is pretty well covered. This reflects the dominance of the government funded universities. There is some private provision of higher education, but this is small in numerical terms. By contrast, data on the Vocational Education and Training sector is, not to put too fine a point on it, a bit patchy.

The structure of the paper is as follows. In the next section, I describe the various statistical collections that collect data on vocational education and training, and what they cover and do not cover. I provide some data from each of these collections to give some context. Section 2 concentrates on the gaps that have been exposed and then makes the case for expanding the collections. My view is that the Australian Bureau of Statistics surveys do not provide sufficient coverage and that the NCVET collections need to be expanded to cover 'total VET effort'. Section 3 discusses a number of principles that, I argue, should govern any expansion to the NCVET collections. The gist of these principles is 'fit for purpose' and 'cost effective'. Next I canvass a range of options that are faithful to these principles. Any comments on either the principles or the options are most welcome. My conclusions make the final section of the paper.

¹ The sources for these figures are: Australian Bureau of Statistics 5220.0, Australian National Accounts state estimates, total factor income by industry and principal components (current prices) 2001-02; Australian Bureau of Statistics 6205.0 Labour Force, February 2003; IDP Education Australia

1. Current collections

In this section, I describe the NCVER collections and the Australian Bureau of Statistics collections that collect data on vocational education and training.

The NCVER collections comprise:

- ♣ *Students and courses*
- ♣ *Financial Statements*
- ♣ *Non-vocational and Community-based Education and Training*
- ♣ *Apprentices and Trainees.*

Table 1 shows the scope and coverage of these collections.

Boxes 1 to 4 provide some indicative information for each of the collections.

The NCVER collections have developed historically, driven by the need for public accountability of government funds spent on the VET sector. The major points to note are:

- ♣ The *Students and courses* collection covers both accredited VET (that is, education and training leading to an AQF award) and non-accredited VET (that is other study with a vocational intent). Non-accredited VET includes things like secondary education, non-award courses, and bridging programs
- ♣ privately funded courses at government providers (more or less the TAFEs) are covered
- ♣ VET provision overseas is excluded
- ♣ not all government funded courses are covered. For example, Department of Defence VET purchased from private Registered Training Organisation would not be covered. Another example is courses purchased on job seekers behalf by the Job Network.
- ♣ Non state training authority funded courses delivered by non-government Registered Training Organisations are not covered.
- ♣ the collection from community providers is piecemeal, with the collection reflecting State administrative arrangements. The collection basically covers New South Wales, Victoria, Tasmania and South Australia where adult and community education is managed to some extent by the State education departments.
- ♣ the financial data reflects state training authority budgets rather than providing a full picture of revenues and expenditures for either the government or private providers
- ♣ the apprentice and trainee collection is the cleanest collection, because it is based on contracts that feed into the statistical collection (even here there are some difficulties with getting information on withdrawals and completions).

Table 1: Methodology, scope and coverage of NCVET collections

	Methodology	Scope	Coverage
<i>Students and courses</i>	Administrative collection	Information on students, their characteristics, courses studied. Student characteristics include sex, age, location, country of birth, disability status, whether Indigenous, language spoken at home, employment status, prior education qualifications, highest school level Course information includes subjects enrolled, AQF level, field of education, subjects successfully completed, nominal hours taught, funding source	VET delivered by government providers and community providers [#] . State training authority funded VET, delivered by private providers. VET delivered as part of a senior secondary certificate.
<i>Financial Statements</i>	Accrual-based statements prepared by the state training authorities and ANTA	Revenues and expenses, assets and liabilities and cash flows	VET provision funded wholly or in part by the main VET training authority in each state and territory, other public VET organisations and ANTA.
<i>Non-vocational and Community-based Education and Training</i>	Administrative collection	Students, subject enrolments and annual hours. Student characteristics include age, sex, region, educational background. Course information includes delivery type (e.g. online/campus), field of study, AQF level for the vocational component, course outcome (successful/unsuccessful/completed/not completed).	All educational and training activity (including VET) delivered by community organisations that provide learning opportunities for adults. Non vocational education and training delivered by TAFEs and other government VET providers [#]
<i>Apprentices and Trainees</i>	Administrative collection. Quarterly figures are estimated because of reporting lags	Information on individuals and nature of training. Characteristics of individuals include sex, age, whether an existing worker Nature of training includes occupation, AQF level, duration, whether full-time, completion and withdrawal, some employer details.	Persons who undertook vocational training through a contract of training arrangements

[#] Community providers in States in which there is a centrally organised system

Box 1: Students and courses (2002)

1 690 100	students
872 200	males
812 900	females
12 514 100	subject enrolments (359.5 million hours of training)
6 544 800	male subject enrolments (185.7 million hours of training)
5 953 400	female subject enrolments (173.5 million hours of training)

Box 2: Financial statements of the public VET sector (2001)

- Total recurrent expenditure \$4 358 million
- Recurrent revenues totalled \$4 139 million
- Revenues from the Commonwealth government showed largest relative growth, up 9.3% over 2000
- Fee for service operations generated 18.8% of total revenue

Box 3: Adult and Community Education students, subject enrolments and annual hours by program, 2001

	Vocational	Non-vocational
Students	238 700	279 200
Subject enrolments	563 900	408 600
Annual hours	14 440 800	6 254 000

Box 4: Apprentices and trainees

- As at December 2001:
- 373,200 apprentices and trainees
 - three-quarters undertaking AQF level III programs
 - two largest occupation groups were trades and related workers and intermediate clerical sales and service workers
- From 1996 to 2002:
- participation rates (15-64 years) increased from 1.9% to over 3.9%
 - participation rates (15-24 years) increased from 8.5% to 11.6%
 - participation rates for young females (15-24 years) more than doubled

The Australian Bureau of Statistics collections that focus on individuals comprise:

- ♣ The Population Census
- ♣ The Survey of Employment and Work²
- ♣ The Survey of Education and Training³

² Previously, titled Transition from School to Work.

³ The latest survey (2001) has a component on information technology and is fully titled the Survey of Education, Training and Information Technology.

Table 2 describes the collections in terms of methodology, scope, and coverage.

Table 2: Methodology, scope and coverage of Australian Bureau of Statistics collections

	Methodology	Scope	Coverage
Population Census	Full census every five years. Self-enumeration. Data provided by a household member	Education data includes educational participation (point in time) and highest education qualification.	All individuals aged 15 years and above.
Survey of Employment and Work	Annual household survey. Interviewer based. Data provided by a responsible adult	Information about educational experience, especially in relation to labour force status. Includes: participation in education in previous year, labour force characteristics, type of educational institutions, level of education of current and previous study, level of highest non-school qualification, level of highest educational attainment, unmet demand for education and characteristics of apprentices.	Supplementary to the monthly labour Force Survey (persons aged 15-64 years)
Survey of Education and Training	Annual survey every four years. Interviewer based. Data provided by individual concerned	Information on labour force status educational attainment, participation in education over previous 12 months, and use of information technology	2001 survey included all persons 15-64 years in private dwellings (narrower scopes were used for the 1993 and 1997 surveys)

It is not the purpose of this paper to criticise any of the Australian Bureau of Statistics collections. They are designed for many purposes, not for measuring total VET effort. However, from the point of view of measuring total VET effort, the Census and the Survey of Education and Work are rather limited. First, the data are not collected from the person concerned, and it is clear that not all respondents know with any accuracy what study their fellow housemate is doing or where it is being done. This is not surprising given the complexity of our educational frameworks and the crossover between schools, VET and higher education. The other problem is that those two collections are point in time. This is particularly problematic for VET where much of the delivery is short courses. It is not such a problem for school and university based courses, where the dominant study pattern is full-time, although even here non-standard study patterns are becoming increasingly important.

The first of these problems is evident from Table 3.

Table 3: Comparison of highest non-school educational qualifications based on Australian Bureau of Statistics surveys

	2001 Census	Survey of Education and Work (2001)	Survey of Education and Training (2001)
Advanced diploma/diploma	793.9	854.6	982.2
Certificates III and IV	1691.1	1798.6	1988.2
Certificates I and II	301.4	873.6	1043.3
Certificate n.f.d.	69.2	192.1	205.7
Level inadequately described	158.7	142.7	147.5
Not stated	992.0		

Source: Australian Bureau of Statistics (2003)

The table suggests large differences due to the collection methodology.

While educational attainment is of some interest the main area relevant to measuring total VET effort is educational participation.

Table 4: Educational participation, persons 15-64 years by type of institution ('000)

	Census 2001	Survey of Education and Work (2001)	Survey of Education and Training (2001)
Higher education			
full-time	456.3	532.8	514.5
part-time	257.2	294.4	338.5
TAFE			
full-time	159.2	142.3	189.0
part-time	322.9	333.7	454.7
Other tertiary			
full-time	32.0	34.0	57.0
part-time	97.8	139.6	252.2

Source: Australian Bureau of Statistics (2003).

Table 4 illustrates a number of the difficulties in estimating total VET effort. It is clear that the survey methodology affects the figures in a very significant way.

The above two tables clearly show that the Survey of Education and Training provides the largest estimates of educational activity. Recall that this is the survey where the actual individuals are interviewed. Hence, it is reasonable to assume that this survey provides the most accurate data of the three. Another advantage of this survey is that it does ask about educational participation in the previous year, and thus covers a full 12 month period, as does the NCVER collection. So it is worth considering in more detail whether it can be used to measure total VET effort.

Table 5 gives estimates on participation, by level of education, from the survey for both 2000 and 2001.

Table 5: Survey of Education and Training; persons who studied for a non-school qualification, 2000 and 2001

	2000	2001
Post-graduate degree	119.9	109.5
Grad diploma/certificate	102.2	102.6
Bachelors degree	603.6	575.6
Advanced diploma/diploma	242.6	238.0
Certificate III, IV	358.4	354.0
Certificate I or II	144.0	174.8
Certificate n.f.d	242.3	273.1
Level not determined	64.3	59.9
Total	1877.1	1887.5

The similarity between the two years is rather discomfoting, since the reference periods are different. The questions relating to 2000 cover the first course of persons who answered in the affirmative to the question *Did you enrol at any time in 2000, that is, last year?* By contrast, for 2001 the questions are *Are you currently enrolled in any course of study?* followed by *Did you enrol in any course of study at any time in 2001, that is, this year?*

Noting that the survey was conducted between the end of April to the start of August, one would have expected that the estimates for 2000, especially for the lower level courses, would have been

somewhat higher than for 2001 given that the former cover a full year rather than up to the beginning of August.

However, the more serious concern is that the survey of Education and Training seriously undercounts educational participation relative to the NCVET collection. In Table 6 we provide the corresponding estimates for Certificates 1 to IV (the advanced diplomas and diplomas have been excluded from this table because it is not possible to isolate Higher Education from VET qualifications in the Australian Bureau of Statistics survey) plus what one might term odds and sods.

Table 6: A comparison of student numbers for the year 2000

	Survey of Education and Training	NCVER students and courses
Certificate III or IV	353.7	521.2
Certificate I or II	174.7	388.4
Certificate not further defined	273.4	
Level not determined	60.2	
AQF level unknown		32.0
Other recognised course		121.1
Non-award course		397.6
Module only		86.7
Total	861.9	1547.0
Total, excluding non-award courses and modules	861.9	1062.7

Source: Australian Bureau of Statistics Survey of Education and Training confidentialised file. NCVET Australian Vocational and Education Training Statistics 2000 *in detail*.

The numbers are so different that it is difficult to conclude anything except that individuals do not view the world in the same way as administratively determined statistical systems. The Australian Bureau of Statistics lead in is *The following questions are about any study you have done in 2000 that could lead to an educational qualification*. So it is possible that the respondents are not including non-award courses and modules (although in many cases these could lead to a qualification). Even excluding these from the NCVET figure we are still looking at NCVET figures that relate to public VET larger than the Australian Bureau of Statistics figures that purportedly refer to all VET.

In looking at the utility of using the Survey of Education and Training to measure total VET another thing to note is that, while the survey questionnaire is quite detailed, sample size considerations impact on the level of disaggregation.

My conclusion is that the fundamental limitations of survey data, together with infrequency of the survey, and the change in coverage over time imply that the Survey Education and Training is not an appropriate instrument to measure total VET effort. Its strength is its coverage of non-accredited training (as distinct from formal courses at education institutions), educational attainment and its information on links between training and the labour market.

2. Where to and why?

The previous sections have talked about the statistical collections and their gaps. It is clear that they do not provide an estimate of total VET. But before suggesting how we might remedy the situation it is worth asking the question: how much are we really missing out on? We then need

to ask the question: well so what? What is the justification for suggesting widening the NCVER collection?

The answer to the first question is that we are missing a lot. We can get some idea from some of the data presented above. Referring back to the Survey of Education and Training data in Table 4, we see that ‘other providers’ number of full-time students is 30% the number at TAFEs. The corresponding percentage for part-time students is 55%. This is not to say that the ‘others’ represent the part of the market not covered by the NCVER collection. The world is not that simple. However, the figures are indicative of the importance of the private sector.

The Hall Chadwick survey of private registered training providers, sponsored by the Queensland Department of Employment and Training and ACPET, throws more light on the importance of the private part of the VET market. While the survey was restricted to Queensland and the response rate was what you might expect for this type of voluntary survey, the figures are pretty interesting. The survey estimated that there were around 230 000 students in Queensland who undertook training with private Registered Training Organisations during the 2002 financial year. This number is of the same order as the NCVER number, as can be seen from Table 7.

Table 7: Estimates of numbers of students, Queensland

	Hall Chadwick estimates of private providers	NCVER students and courses, public
Diploma or higher	23.9	39.3
Certificate IV	38.3	33.6
Certificate III	43.5	81.9
Certificate II	30.5	61.4
Certificate I	11.2	17.2
Other AQF	23.6	
Non-award	0.0	0.4
Miscellaneous education	0.0	65.2
Non-accredited	38.5	
ESL	20.7	
Total	230.3	299.0

There is some cross over between the figures. Hall Chadwick estimate that 30 per cent of the students of the private providers are government funded (and hence covered by the NCVER collection). This equals about 70,000. The equivalent NCVER figure is of the order of around 50,000 and suggests that the Hall and Chadwick figures, while rather rough because of the nature of the exercise, have a reasonable amount of credibility. If we take 50,000 as the appropriate figure this would suggest that private provision, not collected by NCVER, is of the order of 180,000 students or 60 per cent of NCVER’s measure of the public sector. The figure would be lower for training hours because TAFEs tend to have more full-time students than private providers.

While I am rather dubious about using the Survey of Education Training to get a picture of total VET effort, it provides a further view of the importance of the private sector. Table 8 gives the split for awards that are at certificate IV or lower level (that is, degrees and diplomas are excluded⁴).

⁴ I have excluded diplomas because they are dual sector awards and the VET contribution cannot be isolated.

Table 8: Persons studying for non-school qualification (certificate IV and below) in 2001

	Sector of institution or organisation for current non-school study		
	Public	Private	Total
TAFE or technical college	499,004	8,904	507,908
University or other higher education	35,174	12,824	47,998
Business college, adult or community education centre	25,264	25,446	50,710
Industry skills centre, Skillshare centre or other government training centre	15,352	6,602	21,953
Professional or industry Association	10,957	34,010	44,968
Other private training Organisation	8,906	72,708	81,614
Other organisation	33,730	20,781	54,510
Total	628,386	181,275	809,661

Source: Australian Bureau of Statistics, Survey of Education and Training 2001

The conclusion from these data is that the private sector has a very substantial part of the market. Putting the funding source to one side the data suggests that private Registered Training Organisations have students at 30 per cent of the public institution numbers.

Finally, NCVER's own data shows how substantial private provision is. Currently, some private providers give the state training authority data for all their students, not just the authority funded students. As can be seen from Table 9 these data are very substantial in Victoria and Tasmania. The *not in publication* data refer to students that are not funded by the State Authority.⁵

Table 9: Data from private Registered Training Organisations that currently provide all student data to NCVER, 2002

	Not in publication		In-publication scope		Not in publication/ In publication	
	Enrolments	Hours	Enrolments	Hours	Enrolments	Hours
NSW	0	0	239,955	5,689,862	0%	0%
VIC	98,687	2,483,240	489,597	11,628,156	20%	21%
QLD	9,989	247,606	369,713	8,931,572	3%	3%
WA	0	0	117,614	2,339,645	0%	0%
SA	1,361	47,000	170,423	4,135,569	1%	1%
TAS	34,812	920,079	38,840	968,338	90%	95%
NT	8,090	214,032	37,220	970,130	22%	22%
ACT	1,347	41,725	25,406	713,950	5%	6%
Australia	154,286	3,953,682	1,488,768	35,377,222	10%	11%

Note: *In publication* data correspond to students who are funded by state training authorities.

The major argument for expanding the NCVER collection to cover the whole of VET relates to the size of the private sector. In policy terms it is too large to ignore. The VET sector is defined by governmentally sanctioned structures and is largely publicly funded. Governments need to have information about the whole sector if they are to design policies and allocate resources in efficient and effective ways. An indication of the importance of this issue is the research that is

⁵ The *not in publication* data also contain reported provision overseas.

being undertaken by the ANTA Board into future demand for VET. One of the major limitations in conducting this work is that there is no quality data on privately funded VET activity, so it is impossible to paint a picture of the total VET effort in Australia. As such, the ANTA Board has signalled to Ministers (who have agreed) that they will be directing the National Training Statistics Committee to speed up its work on capturing privately funded VET effort within our national statistics collection. In addition, there is a strong argument that the industry would benefit from having comprehensive activity data. Information on the numbers of persons undertaking a particular course at the regional and industry level would be invaluable, I would have thought, in a direct business sense.

3. Principles for a collection

I have argued that the NCVET collections need to be expanded to collect additional information from the private sector. Before canvassing precise options it is useful to agree on a number of principles that should govern any collection. The overarching principles should be of cost effectiveness and fitness for purpose. To amplify these I put forward the following for discussion:

The scope of the collection should be restricted to 'accredited' VET, that is, students studying subjects or courses that can lead to an Australian Qualification Framework (AQF) qualification. Data would not be collected on non-accredited training, important as it is—the problems of definition and scope are just too great.

The coverage of the collection would be restricted to Registered Training Organisations, as listed in the National Training Information System. The authority to the collection would be provided by the Australian Quality Training Framework and its regulations concerning records relating to students. In this regard, under the Australian Quality Training Framework a Registered Training Organisation is assumed to have 'outstanding record keeping and business practices'. The standards also require compliance with external reporting requirements (for example, AVETMISS), although the current application only requires this in respect to government funded provision. In addition providers need to have systems that allow 'retention, archiving and retrieval of student results for a period of 30 years'.

Any methodology has to be cognisant of the type of provider. The main distinction is between those whose main business is education and training and those industry providers for whom education and training is an adjunct activity. It would be possible to have a reporting regime that is less detailed for providers whose main business is not education and training.

Any methodology should recognise the size of the provider, and possibly whether the provider delivers at multiple sites or in more than one state. It may well be possible to have a collection that sampled smaller providers without affecting the information needed for national and industry requirements.

The information collected and the frequency of any collections should be the minimum needed to meet national and industry information requirements. In this regard my preference would be for an annual collection of students. While this is simplest for administrative reasons the justification is the pace of change in the education and training industry. A collection of financial information would not be justified.

The burden on providers should be kept to a minimum. There are a number of aspects here: the data items, method of completion and frequency of collection. Some ideas on these issues are raised in the Section 4.

Confidentiality of data must be assured. Appropriate privacy and confidentiality protocols would need to be developed. The protocols for the current collection might be a suitable model.

Reporting would be done in a way consistent with the standard for the current collection, AVETMISS. This does not imply the imposition of the full AVETMISS standard, which can be somewhat daunting

to smaller organisations, primarily because of the large number of data items. However, AVETMISS should be thought of as providing a common language so that different providers mean the same thing when talking about a particular data item. It should also be noted that many of the data items could be derived from knowledge of name of the course or module. An example would be teaching hours, a variable that might be quite difficult to collect. However, if we know the name of the module it is easy for the system to impute an agreed value. This approach of course requires the description of the module to be standard that is compliant with AVETMISS.

There is also a sound business case for having AVETMISS compliant data in student record systems. Student management systems are a provider's reservoir of information about students and training activity. They are used in different ways by each of provider to support the business. AVETMISS is not a description of how to store data but rather a description of some data that is helpful in managing an education business. AVETMISS is a description of a set of extract files and a description of data values. It provides a common language for talking about vocational education and training not a complete management framework for a business. Most providers will collect more information than what AVETMISS defines to manage day to day operations for instance the financial payments by students. AVETMISS is a subset of data that a quality training organisation could reasonably be expected to maintain to manage and understand their own business.

Reporting needs to recognise the sensitivity of some providers to the fact that States are both funders and, through their TAFEs, providers. This recognises the need to protect commercial in confidence concerns. No state, territory nor the NCVET has an interest in publishing data that would be to the detriment of a commercial organisation. Existing protocols ensure data is not published or released into any arena that could jeopardise the commercial opportunities of any organisation:

- ♣ Data are not published or distributed at an organisation specific level
- ♣ No training organisation is given specific information about the delivery of another organisation
- ♣ Data sets are not published where the numbers could conceivably identify an individual or an organisation.

I would argue that existing protocols for the collection of data are sufficient protection. However, we would be quite open to amending these protocols if that would provide a greater level of comfort. Other possibilities that could be considered would be the provision of data to the NCVET directly rather than through a state training authority, or indeed to an organisation nominated by ACPET for forwarding to NCVET in a suitable format. Of course any such arrangements would need to be cost effective for all parties.

Duplication of reporting arrangements should be avoided. By this, I mean that if data is given to, say, the state training authority, then the same data should not have to be provided to, say, NCVET. Currently some providers provide AVETMISS extracts to a state training authority that cover fee for service data as well as the government funded activity. Such providers would not then have to provide a set of data to say, NCVET, to cover the fee for service activity.

Useful data should be fed back to private providers.

The availability of information of the total recognized VET effort would provide a huge capacity to generate meaningful information that will be of direct benefit to governments in planning their provision and the way they allocate their resources. However, private providers will have access to the same information that could be used in a direct business sense. Information could include: the numbers of people undertaking a specific course in a geographic region, the number of people training in a specified industry, or the participation of people of a certain age group. The combination is only limited by the variables that are collected.

At this stage it is worth putting in a plug for NCVET. We are continually looking to see how we can make our data useful to the industry, and if anyone has particular ideas about what would be useful, please let us know. Regional and industry statistics are both on the list of things we are developing. All organisations could have access to this type of information to support planning and positioning in the market place. Of course, this information would not be available if it were requested at such a low level that it might identify training organisations or individuals.

4. Options

In this section, I would like to canvass some options about how we might expand our collection to cover total recognised VET. These options should be thought of alternatives for specific groups of providers.

Before doing this I would like to propose a minimum set of data that would be collected from those organisations not providing a full AVETMISS extraction.

Data element	Rationale
Encrypted full name (encryption assures confidentiality)	For matching to other collections to facilitate netting and tracking over time
Sex of student	Key variable of interest for monitoring and reporting
Postcode and location of residence	Key variable of interest for monitoring and reporting at regional level
Date of birth and/or age	Key variable of interest for monitoring and reporting
Course code (as listed on the NTIS)	Allows details of the program undertaken to be obtained from the NTIS
Provider identification (NTIS code)	Necessary for statistical quality assurance. Also allows analysis of data by provider type, size and industry
Provider location	Allows regions where training is being delivered to be identified in analyses
Funding source	To allow public and private sector contributions to recognised training to be reported
Modules/units of competency undertaken in the calendar year	Allows measure of activity
Modules/units of competency completed in the calendar year	Allows measure of outputs
Course completed (yes, no, continuing)	Measure of outputs at qualification level

Option 1. Registered Training Organisations provide a full AVETMISS extraction. NCVET in fact is given these for a number of providers (see Table 8), but currently the data are not included in our publications (that is, they are currently out of scope). These providers would not have to do anything. Further, my intention is to begin publishing supplementary tables containing these data. There is also a considerable number of providers that receive government funding that already have sophisticated student systems. I know that some of these use systems in which developers have inserted an ‘extract only government funded training records’ buttons. It would be a trivial matter for developers to either remove the filter or include an ‘extract non government funded training records’ button. There are also applications that enable organisations to submit data on a continuous basis and get automatic feedback on data quality. One such system has been developed in Victoria. It is an on-line (WEB browser) system. Organisations can submit data on this system at any time and receive automated feedback on their data quality as well as a series of management reports about their training activity and students. A possible option for collecting statistical information might be to expand this type of system.

Option 2. A second option is for organisations to provide a ‘mini’ AVETMISS extraction to meet the needs of the minimum data set. If there were interest in this we would talk to the appropriate developers of student systems.

Option 3. For organisations without a student system suitable for options 1 or 2, it would be relatively easy for NCVET to provide an AVETMISS template so data could be entered directly. Such a template could also contain some simple software to provide instant feedback on the quality of the data (for example, it could check that a course code was a legitimate code).

Option 4. In a similar way to Option 3 a paper based unit record data entry template could be provided. The disadvantage of this is that data are double handled and no instantaneous feedback can be provided.

Option 5. The last option would be for providers to fill in a Registered Training Organisation summary data collection proforma. It would be similar to the sort of form that Hall Chadwick use in their benchmarking exercises (although the data items would not include finance ones). Personally, I am not keen on this last option. This is for two reasons. The first is that it limits the analysis that can be done on the data and we could not feedback the types of cross classifications that can be generated from unit record data. The second reason is that it transfers the administrative workload to the respondent.

The above options cover the data capture side. It is also worth thinking about the overall design of the collection. There are two options here. The first is a complete collection. The main advantage of this is that it enables very detailed cross tabulations to be fed back to industry. If the interest is in detailed regional data, then this is probably necessary. The second option is to have a sample survey. This would provide very good Australian and State figures, and possibly industry and broad regional data. The advantage of it is that it reduces response burden for smaller providers. A rotating sample of these could be selected so that each (small) provider would be in the survey every, say, fifth year. However, to design such a survey it would still be necessary to have some information about every provider. Essentially, the survey designer needs to have a measure of its size and an idea about which industry it operates in. It should also be noted that for such an approach to work, large providers would have to be in the collection each year.

The table below gives a schema of how a design might look.

Table 10: Schema for design of a total VET effort collection

	Student coverage	Data coverage	Collection methodology
TAFE/government providers	all students except 'self improvement'	Full AVETMISS	Complete enumeration
Other Registered Training Organisations with training authority funded students			
---training authority funded students	students studying toward AQF award	full AVETMISS	Complete enumeration
---fee for service students	<i>students studying toward AQF award</i>	<i>full AVETMISS</i>	<i>Complete enumeration</i>
Other Registered Training Organisations with no training authority funded students			
---large providers	<i>students studying toward AQF award</i>	<i>minimum AVETMISS</i>	<i>Complete enumeration</i>
---small providers	<i>students studying toward AQF award</i>	<i>minimum AVETMISS</i>	<i>Rotating sample</i>

Italics have been used to denote possible areas of expansion of current collection.

5. Conclusion

A major push for collecting total VET effort has come from Ministers, as noted earlier. The Australian National Training Authority Board, with Ministers' backing, has instructed the National Training Statistics Committee to progress this issue. That committee has had a number

of preliminary discussions and has charged the NCVER with the task of consulting with stakeholders, with a view to reporting back to Ministers. This consultation has already started. I have already had a number of discussions with ACPET and I have written to a wide range of stakeholders to ensure that our consultations are comprehensive. In due course we will circulate a National Training Statistics Committee discussion paper as part of this process. This discussion paper will no doubt echo some of the sentiments I have expressed in this paper: that education and training is vitally important; that our current collections are deficient in getting a handle on overall VET effort; that the Australian Bureau of Statistics collections, while valuable in their own right are not suitable vehicles; that the size of the private provision is very substantial; and that we should be able to come up with a collection methodology that will impose a light burden but deliver useful information to governments and industry. However, I stress that the material I have presented in the paper reflects my personal whimsy, not the views of Ministers nor the National Training Statistics Committee.

As a final comment I would like to indicate two areas that NCVER is pursuing immediately. The first is the publication of data on private provision that is supplied to us but is currently treated as 'out of scope'. In this light, we would be pleased to receive data from Registered Training Organisations who would like their data to be included in the national collection. The second is some publicly funded VET, which does not appear in our collection because it is funded by government departments other than the training authorities, notably training to prison inmates, police, defence personnel and health workers. While it may take some time to get a total picture of VET provision, we are heading in that direction.

References

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