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# **A review of issues with current AVETMISS and VET statistics**

**A short paper for the Service Skills Australia project “Evaluation  
Frameworks for VET”**

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## Background

This short paper is a product of a project commissioned by Service Skills Australia (SSA) and entitled “Evaluation Frameworks for VET”. The project is being undertaken from April 2010 to March 2011 with the assistance of VET research company John Mitchell & Associates and its associated quantitative measurement company JMA Analytics.

In 2009 SSA developed an issues paper “Evaluation Frameworks for VET on completion rates – issues paper on completion rates 2009” about the need for the development of nationally consistent data collection tools that will more accurately measure and evaluate course completion and non-completion rates. The current project and this short paper are consequences of that issues paper.

## Acknowledgements

Based on discussions in May 2010 with the National Centre for Research in Vocational Education (NCVER), it is acknowledged at the outset that NCVER is not only aware of issues such as those raised in this paper but also is soon to release its own issues paper on the Australian Vocational Education and Training Management Information Statistical System (AVETMISS). Consultations in May 2010 also revealed that the Council of Australian Governments (COAG) is aware of and working on key issues discussed in this paper.

## Key findings

The research undertaken for this paper indicates that two primary categories of issues in relation to AVETMISS are accuracy and the possibility of using alternative approaches to measure non-completions, as follows:

- **Data accuracy:** There exist certain problems with the National VET Provider Collection data that have the potential to create significant inaccuracies in the statistics reported.
- **Alternative future approaches:** Even if the issues concerning the accuracy of data within the National VET Provider Collection are solved, consultations reveal the view that qualification non-completion is not necessarily a negative outcome, for example, some students may never intend to complete a program; others may change employers or receive a promotion and decide not to continue with the program. Some alternative future approaches that may address some aspects of this matter are improvements to the definitions of student outcomes, recording students’ intentions prior to undertaking their program and using alternative data sources, notably the Student Outcome Survey and the Employer Views Survey.

In relation to data accuracy, the research identified three issues:

- **Module/unit of competency completion rates versus qualification completion rates.** The use of qualification completion rates, as opposed to course completion rates, has the potential to significantly underestimate the actual number of course completions. There are

significant technical hurdles in calculating course completion rates from module/unit of competency completions.

- **Lack of a universal student identifier.** The lack of an Australia-wide client identifier has the potential to significantly inflate the number of non-completions of qualification at both an industry level, as well as at an institutional level. Fortunately COAG proposes the introduction of such an identifier in 2012.
- **Completion time.** While most students take between one and four years to complete their program, many students take much longer. Given this substantial range in the time taken to complete a qualification, completion rates cannot be derived by simply subtracting qualifications from enrolments for any given year.

In relation to alternative future approaches, the research identified three issues:

- **Improving the understanding of reasons for non-completion.** Outside some broad descriptions of outcomes for module/unit enrolments such as 'withdrawn' or 'continuing enrolment', the National VET Provider Collection does not gather information about why students fail to complete their course or qualifications. In the future, understanding better the reasons why students fail to complete their course or qualifications may change the way in which the VET community perceives educational outcomes.
- **Recording student intent.** By recording students' intentions prior to undertaking their program, the VET sector will be able to determine whether or not the training outcome met the students' expectations. NCVER is currently working on a Student Intention Survey, for dissemination later this year.
- **Using alternative data sources.** A number of alternative data sources have been suggested to either augment data captured as part of the National VET Provider Collection, or to provide an alternative source for completion data. These alternative data sources are the Student Outcome Survey and the Employer Views Survey. While both can provide some insight into completion rates, neither will provide a comprehensive overview. Perhaps the most significant shortcoming of both these surveys concerns the populations from which their samples are drawn.

## Recommendations

Based upon the findings outlined above, the following recommendations are made:

- Recommendation 1: That Service Skills Australia encourages NCVER and other statistical bodies to improve the reporting of course completion rates by developing a method of linking module/unit of competency completions with course completion requirements.
- Recommendation 2: That Services Skills Australia supports COAG's establishment of an Australia wide unique student identifier.

- Recommendation 3: That Service Skills Australia encourages NCVET and other statistical bodies to support the establishment of a statistical convention to deal with the impact of differing completion times.
- Recommendation 4: That Service Skills Australia encourages NCVET and other statistical bodies to develop a method of incorporating broader outcome data into the National VET Provider Collection.
- Recommendation 5: That Service Skills Australia supports and monitors the implementation of NCVET's Student Intention Survey, to be conducted later this year, to determine the extent to which the survey adds value to the process of measuring and evaluating educational outcomes.
- Recommendation 6: That Service Skills Australia encourages NCVET to determine how the Student Outcomes Survey and the Employer Views Survey might add value to the process of measuring and evaluating educational outcomes.

## 1. Overview of AVETMISS and VET statistics

The collection and dissemination of statistical information relating to the Australian vocational education and training (VET) system is undertaken within the framework of AVETMISS, a statistical standard designed to meet the following three objectives

- the provision of a comprehensive and high-quality information repository to support policy development, research and evaluation in VET
- the provision of an information source that highlights public accountability and measurement of the state and national VET systems
- encouraging the use of this data for analytical purposes by making the data widely available. (NCVER, 2009, p.4):

Two broad categories of data collection are managed in accordance with the AVETMISS standards. The first is the Australian VET statistical collections, of which there are four components. Each component of the Australian VET statistical collections is governed by a separate AVETMISS specification, as follows:

- National VET Provider Collection: collects information on students, the modules and courses they undertake, and student achievements in their studies
- MCEETYA VET in Schools Collection: collects information on modules and courses, as well as student achievement in recognized VET studies undertaken as part of a secondary school qualification
- National VET Financial Data Collection: collected information on the finances of state training authorities
- National Apprentice and Trainee Collection: collects information on apprentices and trainees and their employers. (NCVER, 2009, p.4):

The second category of AVETMISS data collection is comprised of sample-based surveys of VET graduates, employers and client groups. These surveys are conducted on issues related to outcomes and perceptions of vocational education and training. Regular surveys conducted under the AVETMISS framework include:

- Student Outcomes Survey
- Survey of Employers' Use
- Views of the VET System
- Delivery of VET Offshore by Public Providers.

Also collected under the AVETMISS framework are a number of one-off targeted surveys.

## 2. AVETMISS and student completion rates

The National VET Provider Collection provides data on nationally recognised training and assessment programs delivered through government-funded and privately operated training providers (registered and non-registered).

The data is organised into a relational database. This relational database is comprised of eleven two-dimensional data tables, each of which has a structure that is similar to those tables used in popular spreadsheet packages such as Excel. A table therefore has a number of rows and a number of columns. Each row represents an individual entry into the table, while each column represents a specific attribute of the table. For example, each row of the Client (NAT00080) table represents one student, while each row represents a different attribute of that student – such as first name, last name, and student number.

Note that the AVETMISS standard refers to these attributes as data fields. All data fields within the National VET Provider Collection, and their associated tables, are presented in Figure 1 below.

The relationships between tables are created by data fields that are common to two or more tables. For example, the Enrolment (NAT00120) table, Client (NAT00080) table, the Disability (NAT00090) table, and the Prior Educational Achievement (NAT00100) table all have a common data field known as “Client Identifier”. This common “Client Identifier” allows the user to link data across all of these tables. That is, the user can determine prior educational achievements, as well as the disabilities amongst clients enrolled in specific subjects by linking various disparate data fields through the Client Identifier data field. Figure 2 below shows the relationships between each of the tables in the National VET Provider Collection, and identifies those data fields that are common to two or more tables. Note that all but one table of the tables are linked, either directly or indirectly, to each other.

The National VET Provider Collection contains data that can be used to analyse student completion rates. This data is contained within five tables of the collection, as follows:

- Enrolment (NAT00120)
- Client (NAT00080)
- Module/Unit of Competency (NAT00060)
- Course (NAT00030)
- Qualifications Completed (NAT00130).

The next section of this paper discusses the issue of calculating completion rates from the National VET Provider Collection.

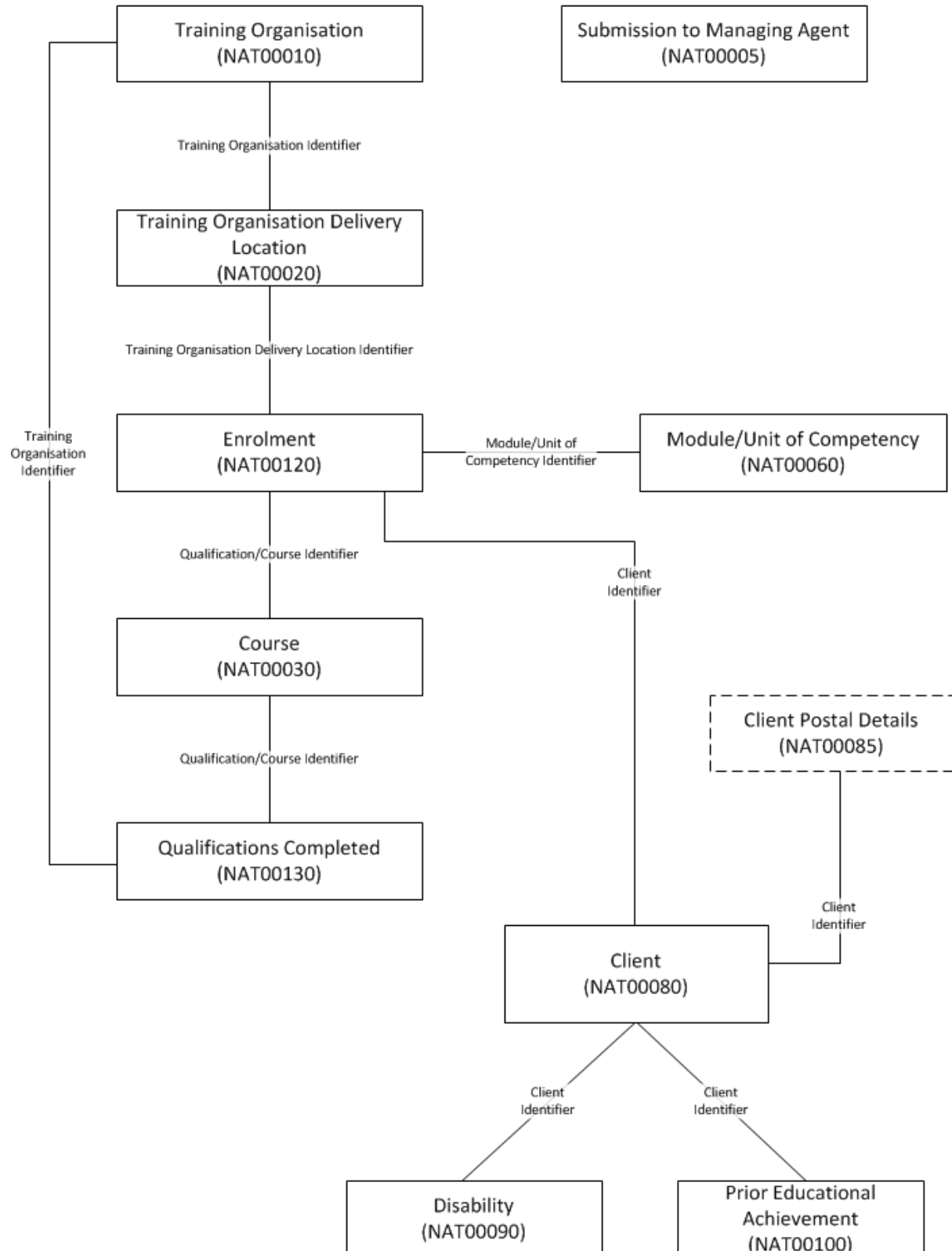
This schema shows each of the eleven National VET Provider Collection tables, and the data fields contained within each table. Note that only the national data fields are reproduced here.

**Figure 1: Table Schema**

Training Organisation (NAT00010)	Submission to Managing Agent (NAT00005)
Training Organisation Identifier Training Organisation Name Training Organisation Type Identifier Address First Line Address Second Line Address Location Postcode State Identifier	Training Authority Identifier Training Authority Name Address First Line Address Second Line Address Postal - Suburb, Locality or Town Postcode State Identifier Contact Name Telephone Number Facsimile Number Email Address
Training Organisation - Delivery Location (NAT00020)	Client Postal Details (NAT00085)
Training Organisation Identifier Training Organisation Delivery Location Identifier Training Organisation Delivery Location Name Postcode State Identifier Address Location Country Identifier	Client Identifier Client Title Client First Given Name Client Last Name Address First Line Address Second Line Address Postal - Suburb, Locality or Town Postcode State Identifier Telephone Number - Home Telephone Number - Work Telephone Number - Mobile Email Address
Enrolment (NAT00120)	Module/Unit of Competency (NAT00060)
Training Organisation Identifier Client Identifier Module/Unit of Competency Identifier Enrolment Activity Start Date Enrolment Activity End Date Delivery Mode Identifier Outcome Identifier Funding Source - National Commencing Course Identifier Training Contract Identifier - New Apprenticeships Client Identifier - New Apprenticeships Study Reason Identifier VET in School Flags	Module/Unit of Competency Flag Module/Unit of Competency Identifier Module/Unit of Competency Name Module/Unit of Competency Field of Education Identifier VET Flag Nominal Hours
Course (NAT00030)	Client (NAT00080)
Qualification/Course Identifier Qualification/Course Name Nominal Hours Qualification/Course Recognition Identifier Qualification/Course Level of Education Identifier Qualification/Course Field of Education Identifier ANZSCO Identifier VET Flag	Client Identifier Name for Encryption Highest School Level Completed Year Highest School Level Completed Sex Date of Birth Postcode Indigenous Status Identifier Main Language spoken at home Labour Force Status Identifier Country Identifier Disability Flag Prior Educational Achievement Flag At School Flag Proficiency in Spoken English Identifier Address Location - Suburb, Locality, Town
Prior Educational Achievement (NAT00100)	Disability
Client Identifier Prior Educational Achievement Identifier	Client Identifier Disability Type Identifier
Qualifications Completed (NAT00130)	
Training Organisation Identifier Qualification/Course Identifier Client Identifier Year Program Completed Qualification Issued Flag	

This diagram shows the relationship between the eleven National VET Provider Collection tables, as well as the data fields that link tables together.

**Figure 2: Entity Relationship Diagram (ERD)**



### 3. Calculating completion rates from the National VET Provider Collection

As Grant (2002) noted, there is no systematic national or state measurement of course completion rates. However, NCVER publishes a number of qualification completions tables as part of their annual 'Students and Courses' series. In the 2008 publication (NCVER, 2009a), three such qualification completion tables were provided, and are reproduced below:

**Table 1: Number ('000) of qualification completions, 2004-07 (NCVER, 2009a, p.17)**

	2004 ( <sup>'000</sup> )	2005 ( <sup>'000</sup> )	2006 ( <sup>'000</sup> )	2007 ( <sup>'000</sup> )	2006-07 % change
<b>AQF qualifications<sup>11</sup></b>					
Diploma or higher	38.0	42.3	43.9	49.0	11.4
Certificate IV	53.0	58.5	51.0	59.2	16.2
Certificate III	102.6	112.5	112.1	121.3	8.2
Certificate II	64.2	64.7	64.9	78.3	20.7
Certificate I	16.8	20.1	21.5	27.2	26.5
<b>Type of accreditation</b>					
National training package <sup>15</sup> qualifications	211.7	237.8	237.0	277.8	17.2
Nationally and locally accredited courses	62.9	60.2	56.4	57.2	1.5
<b>Total qualification completions<sup>16,17</sup></b>	<b>274.6</b>	<b>298.0</b>	<b>293.4</b>	<b>335.0</b>	<b>14.2</b>

**Table 2: Students ('000) by industry skills councils, 2004-2008 (NCVER, 2009a, p.13)**

Industry skills council	2004	2005	2006	2007
Agri-Food	16.2	18.1	18.7	20.0
Community Services and Health	27.8	31.4	35.3	37.0
Construction and Property Services	12.1	14.2	16.2	17.1
Electrocomms and Energy Utilities	2.9	4.0	5.0	6.4
ForestWorks	0.7	0.6	0.4	0.4
Government	2.0	3.2	2.8	3.0
Innovation and Business	78.1	86.1	79.1	98.1
Manufacturing	9.3	12.0	12.3	15.1
Services	46.0	49.7	47.2	61.1
SkillsDMC	1.4	1.4	1.5	1.9
Transport and Logistics	9.2	9.3	6.5	7.7
<b>Total training packages assigned to industry skills councils</b>	<b>205.6</b>	<b>229.8</b>	<b>225.1</b>	<b>267.8</b>
<b>Total training packages not assigned to industry skills councils</b>	<b>6.1</b>	<b>8.0</b>	<b>11.9</b>	<b>9.9</b>
<b>Total training packages<sup>15</sup></b>	<b>211.7</b>	<b>237.8</b>	<b>237.0</b>	<b>277.8</b>
<b>Total non-training packages</b>	<b>62.9</b>	<b>60.2</b>	<b>56.4</b>	<b>57.2</b>
<b>Total qualification completions</b>	<b>274.6</b>	<b>298.0</b>	<b>293.4</b>	<b>335.0</b>

**Table 3: Qualification Completions ('000) in top 20 parent training packages, 2004-07 (NCVER, 2009a, p.13)**

Training package	2004	2005	2006	2007	
	('000)	('000)	('000)	('000)	%
Business Services (BSA, BSB)	34.7	37.8	39.6	47.4	17.1
Community Services (CHC)	24.8	27.3	30.8	31.7	11.4
Tourism, Hospitality and Events (SIT, THH, THT)	21.0	23.6	21.5	31.6	11.4
Retail Services (SIR, WRR, WRP, WRW)	15.7	15.1	13.0	16.1	5.8
Information and Communications Technology (ICA)	13.1	12.8	11.7	15.2	5.5
Training and Assessment (BSZ, TAA)	13.7	15.1	8.6	12.9	4.7
Financial Services (FNA, FNB, FNS)	6.8	8.7	8.4	9.8	3.5
Automotive Industry Retail, Service and Repair (AUR)	5.1	7.6	11.7	9.8	3.5
General Construction (BCG)	3.8	5.7	6.6	9.0	3.2
Metal and Engineering (MEM)	4.2	5.9	6.8	7.7	2.8
Transport and Logistics (TDT, TLI)	8.2	8.2	5.1	6.1	2.2
Electrotechnology (UEE, UTE, UTL)	2.7	3.6	4.9	6.1	2.2
Health (HLT)	3.0	4.1	4.5	5.3	1.9
Amenity Horticulture (RTF, RUH)	4.5	4.7	4.5	4.6	1.7
Property Services (CPP, PRD, PRS)	4.0	4.8	6.2	4.6	1.6
Hairdressing (WRH)	2.4	3.1	4.0	4.1	1.5
Rural Production (RTE, RUA)	3.1	3.1	3.6	4.1	1.5
Australian Meat Industry (MTM)	2.5	3.0	3.8	3.9	1.4
Food Processing Industry (FDF)	3.2	3.6	3.1	3.6	1.3
Fitness Industry (SRF)	2.6	3.1	3.3	3.2	1.2
<b>Qualification completions in top 20 training packages</b>	<b>179.1</b>	<b>201.1</b>	<b>201.8</b>	<b>236.8</b>	<b>85.2</b>
<i>Other training packages</i>	<i>32.6</i>	<i>36.7</i>	<i>35.2</i>	<i>41.0</i>	<i>14.8</i>
<b>Total training package completions</b>	<b>211.7</b>	<b>237.8</b>	<b>237.0</b>	<b>277.8</b>	<b>100.0</b>

Aware of the limitations of the data contained in the National VET Provider Collection, and the impact of these limitations upon statistics such as those in the above tables, NCVER also undertakes ad hoc research into completion rates. As part of this research, data from the National VET Provider Collection is subjected to complex manipulations to minimise inconsistencies and error. The output is then run through complex statistical analyses to arrive at a somewhat more accurate estimation of completion rates (Mark and Karmel, 2010). While these approaches produce research of the highest quality, the advanced methodology is not feasible for wide-scale use. The irregularity of such publications makes it difficult to monitor course completion rates on a continual basis.

From the broadest perspective, the use of National VET Provider Collection data to calculate completion rates raises two sets of issues:

- **Data accuracy:** There exist certain problems with the National VET Provider Collection data that have the potential to create significant inaccuracies in the statistics reported.
- **Alternative future approaches:** Even if the issues concerning the accuracy of data within the National VET Provider Collection are solved, consultations reveal that there still exists a view that qualification non-completion is not necessarily a negative outcome. For example, some students may never intend to complete a program; others may change employers or receive a promotion and decide not to continue with the program. Some alternative future approaches that may address some aspects of this matter are improvements to the definitions of student outcomes, recording students' intentions prior to undertaking their program and using alternative data sources, notably the Student Outcome Survey and the Employer Views Survey.

These sets of issues are discussed in the following two sections.

## 4. Data accuracy

Statistical calculations are only as accurate as is the data upon which they are based. The National VET Provider Collection provides a comprehensive data set that collects a broad range of VET data. While this data is invaluable to the understanding and evaluation of VET, there still exist a number of problems associated with its accuracy. Of particular importance are the following three issues:

- Module/unit of competency completion rates versus qualification completion rates
- Lack of a universal student identifier
- Completion time.

### **Module/unit of competency completion rates versus qualification completion rates**

The National VET Provider Collection collects enrolment and completion data at the module/unit of competency level. This information is contained in the Enrolment (NAT00120) table. Specifically, enrolment and completion data can be used to monitor which students enrolled in which module/unit of competency, as well as which students either successfully completed or failed to complete a particular module/unit of competency. At this level, it is straightforward to subtract completions from enrolments to get a fairly accurate view of module/unit of competency completion rates.

The National VET Provider Collection also collects data on the issuance of qualifications; that is, data relating to students who apply for a qualification after having completed course requirements. This information is contained in the Qualifications Completed (NAT00130) table, and forms the basis for calculating qualification completion rates, as opposed to course completion rates.

It is important to note that the calculation of qualification completion rates is not dependent upon, nor is it linked to module/unit of competency completion rates. Rather, qualification completion rates are based upon records of those students who have applied for a qualification. It is generally understood that the number of successful qualification applications is not a good indication of course completion because not all students who finish their course will apply for a qualification. Further to this argument, the cost incurred in applying for a qualification can be a strong disincentive against making such an application.

The use of qualification completion rates, as opposed to course completion rates, has the potential to significantly underestimate the actual number of course completions. However, it should be acknowledged that there exist significant technical issues in calculating course completion rates from module/unit of competency completions. At the core of this problem is the complexity involved in monitoring the myriad relationships between modules/units of competency and courses.

For example, different courses have different module/unit of competency requirements. Some courses are linked to embedded qualifications, while others are linked to dual qualifications. Some courses have work experience requirements, while others have practicum requirements.

There also exists the issue of recognition of prior learning (RPL) and credit for previous study and qualifications, to name a few. These and many more issues need to be overcome before an accurate

link can be made between course/unit of competency completion rates and course completion rates.

Such complexity is not insurmountable. Moreover, the value gained by overcoming this problem can provide valuable information about the efficiency and effectiveness of VET.

### **Lack of an Australia wide unique client identifier**

All relational databases require unique identifiers to track items or individual. In order to track individual students through the VET system, each training organisation that contributes to the National VET Provider Collection provides a unique organisational 'client identifier' for each enrolled student - usually in the form of a student number. This organisational client identifier can be found within six of the eleven National VET Provider Collection tables, as follows:

- Enrolment (NAT00120)
- Client (NAT00080)
- Prior Educational Achievement (NAT00100)
- Qualifications Completed (NAT00130)
- Disability (NAT00090)
- Client Postal Details (NAT00085).

The proliferation of a client identifier throughout the various National VET Provider Collection tables indicates the importance placed upon linking data to individual students. Unfortunately, the client identifiers currently used in the National VET Provider Collection are only unique within each training organisation. There is no unique Australia wide client identifier that can track students across institutions.

This lack of a unique Australia wide client identifier can result in the multiple counting of a single student when such a student undertakes study across more than one training organisation. A student usually begins VET study by enrolling into a course with a training organisation. There are a number of students who, for many different reasons, choose to change their training providers at some point in their studies. If a student begins a course of study at one training institution, but finishes and obtains a qualification from another training organisation, that student will have two client identifiers in the National VET Provider Collection (one from each training organisation that they enrolled in). Because there is no Australia wide client identifier, there is no way of tracking students who have changed educational providers. Initial enrolment will therefore be calculated as a non-completion.

The lack of an Australia wide client identifier has the potential to significantly inflate the number of qualification non-completions at both an industry level, as well as at an institutional level. At an industry level, the multiple counting of student enrolments will lower the overall course completion rates. Similarly, at an institutional level, incomplete course enrolments will also lower the institutional course completion rate – even though these enrolments may have been accredited towards a qualification at another institution. Such anomalies make it difficult to accurately benchmark qualification completion rates between institutions, as well as between industry groups.

Note that COAG has announced the establishment of an Australia wide unique student identifier that will stay with an individual from primary school through to post-graduate studies. It is expected that this unique student identifier will be introduced by 2012 for Vocational Education and Training students (Communiqué from Council of Australian Governments, 7 December 2009).

### **Completion time**

The way in which account is made for the time taken to complete a qualification has a critical impact upon the way in which course and qualification completion rates are viewed. Neither national nor state authorities have imposed a time period in which a qualification must be completed. While most students take between one and four years to complete their studies, a sizable portion of students take much longer. Given this substantial range in the time taken to complete a qualification, completion rates cannot be derived by simply subtracting qualifications from enrolments for a given year. It is well known that many students who qualified in the current year may have enrolled over one or more year previously. Similarly, those who enrolled in the current year may take two or more years to finish their course.

One way of overcoming this problem is to report qualifications over multiple expanding time periods: for example, simultaneously reporting qualification completions for the year 2008, as well as for the years 2008 and 2007, and for years 2008, 2007 and 2006. While NCVER has tried similar ways of accounting for the time factor in qualification completions, it is notable that there would seem to be no statistical convention for dealing with completion time.

## 5. Alternative future approaches

While the above issues concerning the accuracy of data within the National VET Provider Collection may be solved, consultations reveal that there still exists a belief that qualification non-completion is not necessarily a negative outcome – no matter how accurately it is measured. Anecdotal evidence suggests that there are a number of students that enrol into VET courses for the purpose of gaining some very specific skills and many of these students have no intention of completing their course. Alternatively, there are many students who fail to complete their course for a number of very positive reasons, such as having gained a promotion.

Currently, reasons for not completing a module/unit of competency are collected as part of the Enrolment (NAT00120) table. The 'Outcome Identifier' within this table collects data relating to "...the result or outcome of a client's participation in a unit of competency or module" (Australian Government, 2008, p.103). The choice of outcomes available within this identifier is limited to the topic of academic achievement, and contains the following options (Australian Government, 2008, p.103):

- 20 - Competency achieved/pass
- 30 - Competency not achieved/fail
- 40 - Withdrawn
- 51 - Recognition of prior learning granted
- 52 - Recognition of prior learning not granted
- 53 - Recognition of current competency granted
- 54 - Recognition of current competency not granted
- 60 - Credit transfer
- 70 - Continuing enrolment
- 81 - Non-assessed enrolment - Satisfactorily completed
- 82 - Non-assessed enrolment - Withdrawn or not satisfactorily completed

A fuller discussion of these issues is undertaken below, around the following topics:

- Improving the understanding of reasons for non-completion
- Recording student intent
- Using alternative data sources.

### **Improving the understanding of reasons for non-completion**

Outside these academic outcomes for module/unit enrolments, the National VET Provider Collection does not gather information about why students fail to complete their course or qualifications. Significantly, understanding the reasons why students fail to complete their course or qualifications may change the way in which the VET community perceives educational outcomes.

No doubt many students fail to complete their studies for a host of negative reasons. These might include the inability to cope with the academic standards, financial stress or personal reasons. There

are others, however, who fail to complete their studies for reasons that are positive. For example, a student might disengage from study because he or she has obtained suitable employment.

There are many reasons as to why students fail to complete their course of study - not all of them negative. Understanding these reasons will not only provide a greater ability to respond to non-completions, but might also provide a greater appreciation of the complexities surrounding non-completions.

There are a number of difficulties in the collection of data relating to course non-completions. Perhaps the most significant of these is the issue of actually recognising when a student has disengaged from a course. As outlined above, the National VET Provider Collection cannot link module/unit of competency completions to course completions. Rather, course completions are estimated by the number of qualifications issues. Are those students who have not applied for a qualification non-completers. Further to this problem is the issue of physically contacting all those who have disengaged. Not only may it take considerable time to identify such students (after which many are no longer contactable), but the resources required to contact each and every disengaged student is often beyond the capacity of many training organisations.

While these issues are significant, they are not insurmountable. Just having the ability to link module/unit of competency outcomes to course outcomes will help solve some of these problems.

### **Recording student intent**

There are limitations associated with the National VET Provider Collection in regard to outcome data, as well as difficulties associated with collecting outcome data. One possible solution to this problem is understanding student 'intent'. That is, by understanding students' intentions prior to undertaking their studies, it could be possible to determine whether or not the training outcome met the student's expectations.

The collection of data relating to student intent should be undertaken prior to the commencement of the training, however such collection would be difficult to organise. A possible solution is to dissociate the collection of student intention data from the National VET Provider Collection, preferring to collect student intention data through a national survey. Notably, NCVER is currently working on a Student Intention Survey, to be disseminated later this year.

### **Using alternative data sources**

A number of alternative data sources have been suggested to either augment data captured as part of the National VET Provider Collection, or to provide an alternative source for completion data. These alternative data sources are:

- Student Outcome Survey
- Employer Views Survey.

While both surveys can provide some insight into completion rates, neither will provide a comprehensive overview. Perhaps the most significant shortcoming of both these surveys concerns the populations from which their samples are drawn. Respondents to the Student Outcome Survey are restricted to VET graduates only. Those that did not graduate, but might have had a very positive

outcome from their training, are not included in the survey sample. Similarly, the Employer Views survey is completed by Employers. Understandably, employers might have very different attitudes to that of students when evaluating training outcomes.

The two surveys are sample based surveys. This means that they do not include all members of their target populations. Rather, they include enough samples so as to allow accurate inferences about the target population to be made. However, inferences are subject to inaccuracies. Moreover, the nature of sample surveys is such that the more stratified the data, the less reliable are the inferences. That is, the more the population is divided by its composite parts, the less reliable is the data. For example, inferences about positive outcomes from training are more reliable at the State level than at the RTO level. And inferences relating to large RTO are more reliable than inferences relating to smaller RTOs.

Despite these shortcomings, there may still be a role for these surveys in the reporting and monitoring of student outcomes.

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