

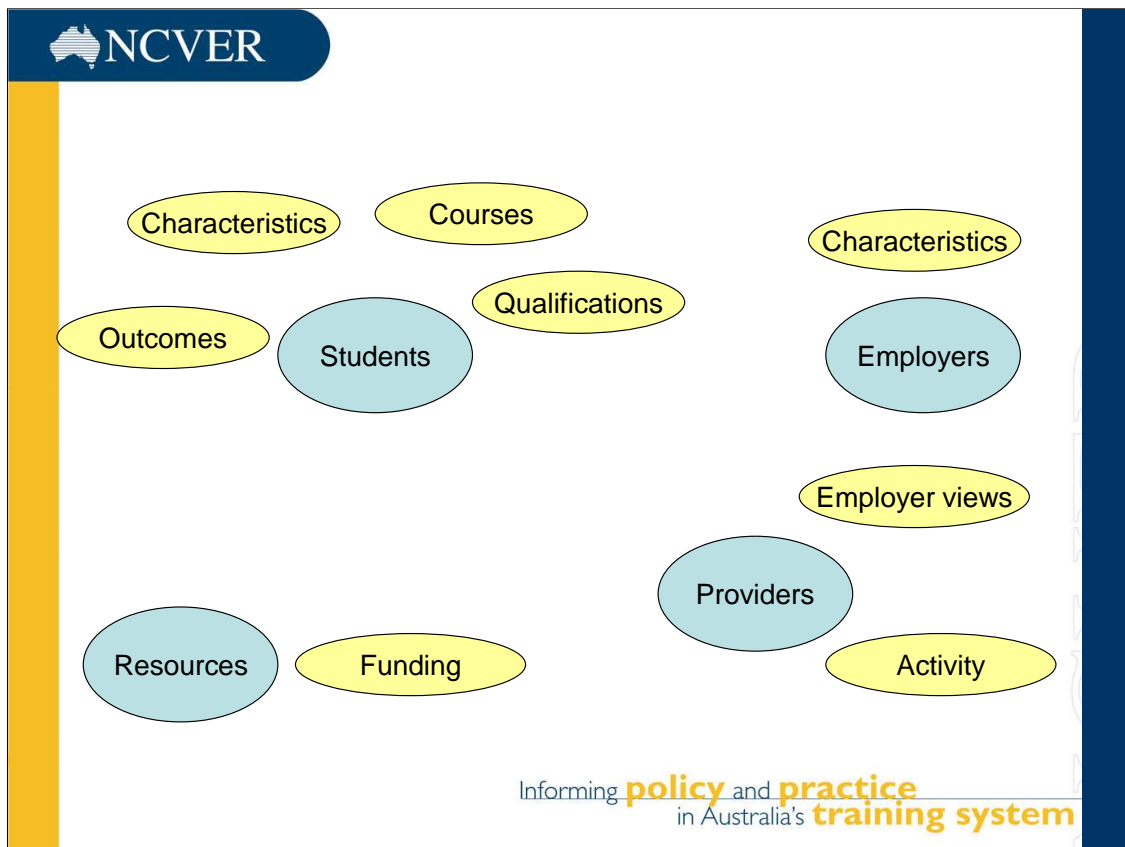
Statistics with Meaning

Michelle Circelli and Bridget Wibrow

Informing **policy** and **practice**
in Australia's **training system**

Objectives

- What data is available from NCVER?
- Overview of other relevant data sets
- How can this data be used?
- Resources available through the NCVER website



There are four main areas in Vocational Training that researchers are interested in

1) Students:

- Interest can lie in demographics (age, sex, etc)
- OR how many students are undertaking what courses and qualifications
- How successful are they etc
- OR the nature of the training, eg if they are doing an apprenticeship or traineeship.

2) With VET Providers (eg: TAFES, RTO's) we are interested in:

- The views of employers about the VET sector
- What courses providers are offering and where
- How many students are enrolled etc

3) With Employers, along with their perceptions of providers, we also want to know about the characteristics of employers who use vocational training, such as industry type, size, location etc.

4) And finally in terms of Resources

- Finances – who's funding the training etc

Where can you find this information?

- NCVER
 - LSAY
- ABS
- DEEWR
 - NTIS

NCVER – we provide VET specific information about students, courses, providers and employers; We obtain VET statistics through the administrative systems of the states and territories, together with data from the apprenticeship/traineeship training contracts and targeted national surveys.

LSAY - Longitudinal Survey of Australian Youth; This is a research program that tracks young people as they move from school into further study, work and other destinations.

- It uses large, nationally representative samples of young people to collect information about education and training, work, and social development.

- LSAY is managed and funded by the Department of Education, Employment and Workplace Relations (DEEWR).

- Mid last year NCVER was contracted to provide the analytical and reporting services for the next three years for LSAY. NCVER is undertaking this service for DEEWR in collaboration with the Australian National University's Social Policy Evaluation, Analysis and Research Centre (SPEAR).

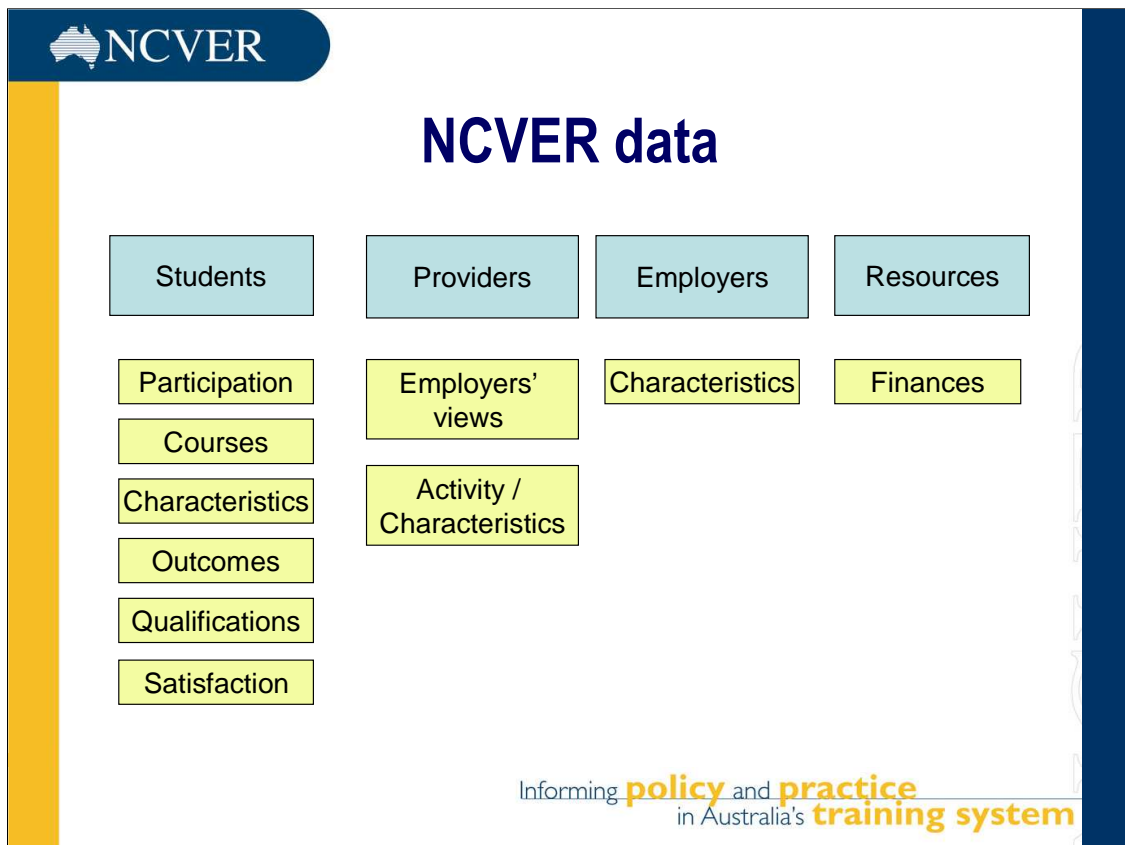
- Information collected as part of the LSAY program covers a wide range of school and post-school topics, including: student achievement, student aspirations, school retention, social background, attitudes to school, work experiences and what students are doing when they leave school.

- Data is provided to the Australian Social Science Data Archive (ASSDA) annually. Research reports, technical papers and other materials are produced regularly each year. The data can be purchased from ASSDA in Statistical Package for Social Sciences (SPSS) format for a nominal charge. Further information is available from the ASSDA website, <http://assda.anu.edu.au/>.

ABS – gives contextual information – some of the relevant ABS data sets include the Survey of Education and Training, and Education and Work.

DEEWR (or previously DEST) – maintains the NTIS (National Training Information Service): This is the official national register of all training organisations in Australia registered under the Australian Quality Training Framework and all nationally recognised training products that are endorsed by government;

The NTIS gives details of the training products/services that each training organisation provides and is updated daily.



What NCVER data provides information on.

1) Students:

- Participation
- What are they studying
- Demography
- Outcomes
- What Qualifications
- Satisfaction; (For both Apprentices and Trainees, and all Vocational Ed. Students)

2) Providers

- Employers view of providers and the system
- Characteristics of providers, such as name of provider and delivery location, type of provider (eg TAFE, uni, enterprise, community-based adult education)

3) Employers

- Characteristics of employers such as size, type (eg if private, local government, state government, group training etc),

4) Resources

- Financial etc.

NCVER Collections

- VET Provider Collection
 - ▶ Students and Courses
- Apprentice and Trainee Collection
- VET in Schools Collection
- VET Financial Data Collection
- Student Outcomes Survey
- Survey of Employer Use and Views of the VET system
- LSAY

Informing **policy** and **practice**
in Australia's **training system**

1. VET Provider Collection:

- An annual, administrative collection of information on students, the courses they undertake and their achievement. Commenced in 1994; broadly covers the public VET system
- The information is gathered from student enrolment forms and through state training authorities from registered training providers.
- A key publication that emanates from this collection is *Students and Courses*

2. The National Apprentice and Trainee Collection:

- is a collection on apprentices and trainees and their employers. The information for this collection is sourced from state training authorities via Australian Apprenticeships Centres from the Apprenticeship/Traineeship Training contracts registered at the time of commencement and updated throughout the life of the contract.
- It is a quarterly data collection with the collection of data undertaken on a cumulative basis.
- To account for delays in processing contracts for reporting to NCVER, published statistics on apprenticeship activity are based on estimated data. The estimation method involves weighting recently processed numbers based on average reporting lags.

3. The VET in Schools Collection:

- is a collection of courses undertaken by school students in recognised VET qualifications, including certificate I, II, III, and senior secondary certificate. Sourced from student enrolment records through the board of studies in each state or territory.
- 2005 was the first year of this collection

4. VET Financial Data Collection:

- this is an annual, administrative collection of information on the finances of state training authorities and provides accountability of the VET sector. Dates back to 1997.
- scope is the revenue and expenditure of the 8 state and territory govts and the c'wealth.
- This is a really useful contextual tool; but if you need more information on, say, expenditure per hour of training, you may want to look at the Productivity Commission's Report on Government Services.

5. Student Outcomes Survey:

- This data is based on a mail-out survey of students who completed (that is, graduates) or part-completed a qualification (we refer to these as module completers) in the public VET system in the preceding year, covering their views on the training they received, their employment outcomes and whether they undertake further study
- It is an annual survey that dates back to 1997

6. Survey of Employer Use and Views of the VET System:

- The data is based on a telephone survey of employers looking at their satisfaction with aspects of the VET system, including satisfaction with the skills of recent VET graduates
- The survey was last conducted in 2007, previously versions in 2005 and 2001; current scope is all employers.
- Both the Student Outcomes Survey and Survey of Employer Use and Views of the VET System are undertaken as a sample rather than a census. Therefore, responses are weighted to population benchmarks. (An effect of weighting data is that proportions are based on the population rather than on the number of responses.)
- The estimates are subject to sampling variability; that is they may differ from the estimates that would have been produced if everyone in the respective survey populations had been included and responded. (By convention, a 95% confidence interval is applied in judging the reliability of survey estimates. That is, if the survey were to be repeated there is a 95% chance that the new results obtained would be within a width of plus or minus two standard errors.)

7. Longitudinal Survey of Australian Youth –described earlier

Two other surveys that may be of interest:

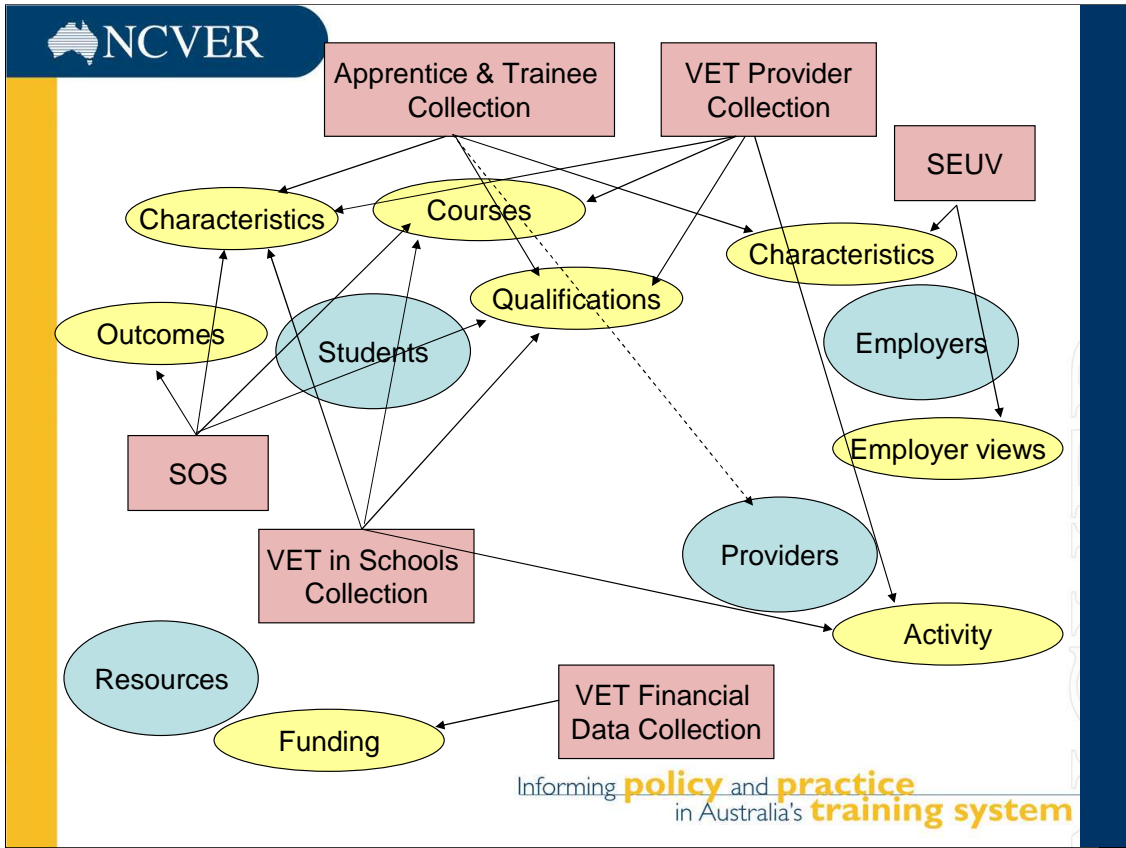
The "down the track" (DTT) survey was a follow-up survey of TAFE students aged 15 to 24 years who undertook training in 2001 and completed the Student Outcomes Survey in May 2002. Data are provided for three time points: six months prior to training; approximately six months after training in May 2002; and approximately two-and-a-half years after training in September 2004.

See: <http://www.ncver.edu.au/publications/1694.html> – get copy of executive summary of the DTT publication.

The indigenous survey –

This was a face-to-face survey of Indigenous students that extends some of the information sought in the SOS, with a specific focus on Indigenous people and the benefits arising from training. It was conducted in 2004, with the scope being Indigenous students in the public VET system who undertook any training in 2003.

See <http://www.ncver.edu.au/students/publications/1630.html> for 'at a glance' that summarises findings from the survey, as well as the NCVER systematic review and other relevant research.



How NCVET collections relate to the 4 main groups of interest in the VET sector.

Other data sources

Informing **policy** and **practice**
in Australia's **training system**

The ABS runs a number of household surveys that are relevant to researchers doing work in the vocational education and training sector. A very useful document to look at is the Directory of Education and Training Statistics, 2007 (**cat. 1136.0**) – this is a guide to the range of national statistical resources available relating to education and training activity in Australia.

1. The Survey of Education and Work (cat. 6227.0)

-The focus of this survey is on educational attainment, participation and transitions from education to work, as well as selected characteristics of apprentices.

-It is an annual survey, and is a supplement to the May Labour Force Survey; the scope is the population aged 15 – 64 years.

2. The Survey of Education and Training (cat. 6278.0)

-This provides a comprehensive picture of participation, outcomes and access, to education and training.

-It is conducted every four years, first time in 1989, last time in 2005. Scope is, very broadly, the population 15 years and over (some caveats to this)

-There has been some variation in the content of the SET over the years but essentially there are 6 areas which comprise the core content of the survey. These are:

- participation in education - current and previous study
- educational attainment - highest year of school completed and level and field of up to four non-school qualifications (most recent and three highest)
- work-related training - with information on completion of up to four training courses
- access to education and training - unmet demand and barriers to study and work-related training
- general and labour force information - including demographics, current employment details, employment history (last 12 months), Indigenous, migrant and disability status, and the characteristics of education or training providers

3. The Adult Literacy and Life Skills Survey (ALLS) (cat. 4228.0)

-The ALLS was conducted in Australia in 2006 as part of an international literacy study, coordinated by Statistics Canada and the Organisation for Economic Co-operation and Development (OECD). It is the second survey of its type to be conducted in Australia. Its predecessor, the International Adult Literacy Survey, was conducted in Australia in 1996 as the Survey of Aspects of Literacy (SAL).

-The survey covered all persons aged 15-74 years

-The ALLS survey provides information on knowledge and skills in four domains: prose literacy, document literacy, numeracy, and problem solving. The prose and document literacy domains are comparable to those in the 1996 survey, the other two are not.

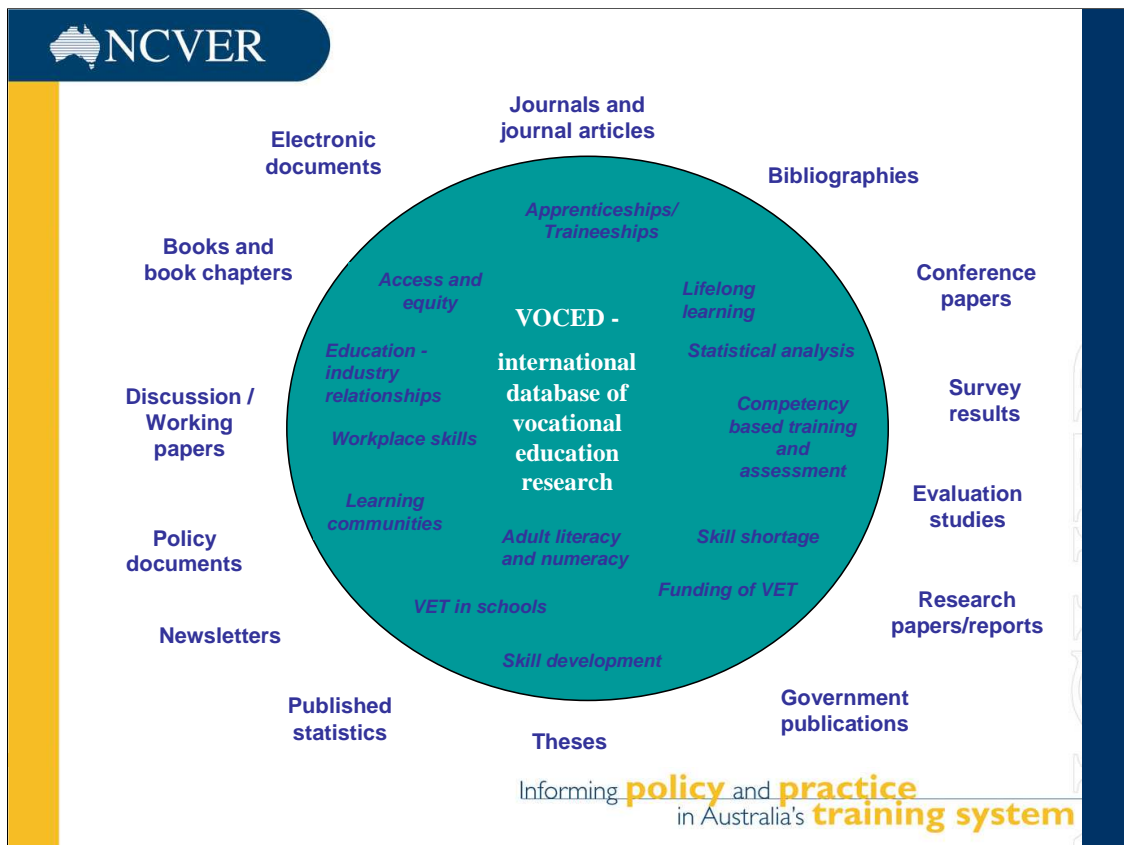
-In addition, a 'health literacy' domain has been developed from responses to relevant textual material from the other four domains.

-International comparisons can be made.

The Future

- Updated release of the VET Atlas
- Data cubes

1. The VET Atlas will be updated with 2007 data from the VET Provider Collection early in the second half of this year. Data from earlier years will be added sometime in the future.
2. Secondly, in addition to the web tables we were just looking at, NCVET is also going to be providing simple data cubes.
 - These are interactive tools that allow you to change the presentation of the data (eg switch rows for columns and vice versa), you can manipulate the data, print or export it. So in contrast to the web tables which are a static presentation of our data, the data cubes are dynamic.
 - 'Simple' data cubes mean there are relatively few variables and are designed for the vast majority of users.
 - The simple data cubes will be provided with a free reader (called 'supertable')
 - *Students and Courses 2007*, is anticipated to be the first publication to provide data cubes along with the web tables. In the future, data cubes will be provided with every statistical publication.
 - There will also be a far more complex set of data cubes produced, referred to as VOCSTATS. These are designed for the expert user and have no limitation on the number of variables.



What is VOCED?

VOCED is a research database for technical and vocational education and training and is available free on the web (at www.voced.edu.au.)

It is a specialised tool unique to the field of vocational education and training (VET), providing a user-friendly way to stay up to date with the latest research in the field. It is international in scope, with an emphasis on Australia and the Asia Pacific region.

Topic coverage is broad and includes all aspects of skill development for the workplace and are based on NCVET's five themes:

Students and individuals, VET in context, Teaching and learning, Industry and employees, VET system.

These main topics covered include: skill development and skills shortages; VET in schools; career education; economic aspects of VET; adult education, literacy and numeracy, lifelong learning; and VET related policy and reform.

VOCED indexes:

research reports, monographs and individual book chapters, journal articles, conference papers, policy documents, government reports and publications, published statistics, theses, bibliographies, unpublished reports, papers and electronic documents from web sites. Approximately 50% of recent entries in VOCED are published electronically with a hypertext link to the full text provided in the VOCED entry.

Material is sourced primarily by regularly monitoring the web sites of relevant research organisations; over 300 sites are checked as well as undertaking general trawling of the web to pick up new resources and web sites.

There are close to 300 Australian and international journals and newsletters are routinely indexed. and traditional sources such as printed catalogues and bibliographies within other publications are also checked.

NCVER web site:

www.ncver.edu.au

VOCED web site:

www.voced.au

Informing **policy** and **practice**
in Australia's **training system**

NCVER has an enormous amount of data that is publicly available and easily accessible that can help provide context to your research, and indeed should be used as a springboard to other research questions.