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Data on total investment in VET: what should be collected

Gerald Burke
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Australian Government
Department of Education and Training

INFORMING POLICY AND PRACTICE
IN AUSTRALIA'S TRAINING SYSTEM

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About the research

Data on total investment in VET: what should be collected

Gerald Burke, Monash University*

The financing of vocational education and training (VET) entails investment primarily from three sources: governments, industry and individuals. Currently, the annual publication of national VET finance information covers government funding for training (although not every aspect), as well as revenues for fee-for-service and student fees and charges, as recorded by the various government departments responsible for training. It also details the operating expenditures and training costs of these departments.

While comprehensive, this collection does not cover the full terrain of national VET resource inputs and expenditures. A more complete picture of all sources of investment in VET would be useful for better measuring and understanding the full spectrum of national investment in VET – by governments, industry and individuals. This could more effectively inform national policy, in terms of efficiency, effectiveness and equity, with the aim of ensuring that the VET system develops skills for individuals, industry and the economy.

A more complete picture of financing would also complement the new collection of all student activity in the VET system, known as 'total VET activity' (TVA).

The purpose of this report is to explore from first principles a framework for a more comprehensive record of VET investment in Australia, both direct and indirect support, if indeed the latter could be meaningfully defined. The report focuses in particular on what is presently 'missing' and might be collected above and beyond that currently collected in the National VET Financial Data Collection, maintained by the National Centre for Vocational Education Research (NCVER). To do so, it considers, for each type of investment: its materiality, the availability of data, its potential importance for policy or accountability, its likely quality and the cost of collection. The in-principle findings are that:

- In general there is a good case for extending the regular collection of information on investment in vocational education and training. While NCVER's current financial collection can be used for accountability and efficiency, it is not easily linked to equity and the other objectives of the system.
- There are some items of investment that may be collected in the shorter term. These include student assistance grants, information on employer incentives for apprenticeships, the cost of non-repayment of VET FEE-HELP loans, and possibly the funding of VET in Schools.
- More difficult to collect, at least in the shorter term, and constituting a large component of all sources of investment in VET, are household, international and employer spending on private registered training organisations (RTOs), and broader expenditure on training by employers.
- Most of the extended information on investment in VET can be collected through government departments. In all probability, the only feasible approach to any understanding of the broader expenditure on training by employers would be a periodic survey.

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Executive summary

This report concerns the data on the investments in vocational education and training (VET) not captured in the National Centre for Vocational Education Research's (NCVER) *Financial information.* That publication provides data on government-funded vocational education and training, which is 'broadly defined as all activity delivered by government providers and government-funded activity delivered by community education providers and private training providers'. The data in *Financial information* are taken from NCVER's National VET Financial Data Collection.

The term 'investment' is used in this report to mean the revenues received for vocational education and training and their expenditure. The areas covered will be the direct provision of training and also the funding provided to support training, including student assistance and incentives paid to employers.

A framework is used to organise the data. It classifies an investment according to whether:

- it is for core training and education or for non-core matters such as student support or employer incentives
- it is received by registered training organisations (RTOs) or by other bodies
- it is a government (public) or private investment, with private considered in three domains — enterprises/employers, households and rest of the world.

Using this classification, the following main items were identified as not covered or only partially covered in the NCVER collection:

- enterprises/employers – most of their training expenditures
- rest of the world – spending by international students on private and community RTOs
- household spending on fees for training at private and community RTOs
- government incentives to employers and other support for apprentices
- government student assistance grants to students and apprentices
- the cost to governments of non-repayment and interest subsidy on VET FEE-HELP
- tax expenditures (concessions and exemptions) for households and enterprises from the Australian and state and territory governments
- funding of VET in Schools.

These items are assessed for:

- the possible size of the investment
- the importance of the data for accountability, policy and research
- the ways of collecting data, its likely quality, and the costs of collection.

The conclusion is that there is a good case for NCVER to extend its financial data collections. Some items should be collected almost immediately; others over a longer term; and some are subject to further analyses before attempting collection. The items have been

regrouped and put into the order in which their collection might be attempted. The bodies with the capacity to supply the data have also been included.

- *Student assistance grants*: this includes grants such as Youth Allowance and the characteristics of persons receiving them, with data supplied by the Department of Social Services.
- *Employer incentives*: this includes Commonwealth and state funding and the characteristics of the apprentices supported, with data from the Department of Education and Training and state and territory authorities.
- *VET FEE-HELP*: this focuses on the cost of non-repayment and of the subsidy due to charging interest on the debt at lower-than-market rates, with data from the Department of Education and Training and Treasury.
- *VET in Schools funding*: this involves identifying the relevant funding in school budgets and/or in the VET sector financial information, with data from state authorities.
- *Enterprise/employer, rest of the world and household expenditure on private RTOs*: these funds would best be captured by a requirement that all RTOs receiving public subsidy or VET FEE-HELP report their income and expenditures. Such reporting is required for schools and for universities.
- *Rest of the world*: pending reporting by all RTOs receiving government support, more detail on spending by international students could be sought from the Department of Education and Training's International Education Group (IEG), supplemented by Australian Bureau of Statistics (ABS) data.
- *Employer expenditure other than on RTOs*: for an overall understanding of the expenditure on training by employers (including spending on RTOs) a survey on the lines of the UK Employer Skills Survey could be undertaken. Discussions could be held with the Department of Education and Training and the ABS.
- *Tax expenditures*: for estimates of deductions and concessions for education and VET, discussions could be held with Treasury but without optimism that useful data will be obtained.

If additional data on these items can be collected, they could be included in the NCVER publication *Financial information*, but perhaps reported separately from the main collection, which would remain focused on the delivery of education and training.

A final observation: where data are not available on an activity, the activity is likely to be neglected in policy debate and research.

Introduction

This project examines investment in vocational education and training, concentrating on the areas not covered in NCVER's *Financial information* (2015a, p.4), a publication that:

> provides information on how government-funded vocational education and training (VET) in Australia is financed and where the money is spent. Government–funded VET is broadly defined as all activity delivered by government providers and government-funded activity delivered by community education providers and private training providers.

In other words, the current NCVER collection encompasses the public and private funds of public providers, while only the public funds of private providers are covered; these include revenue from VET FEE-HELP, but not their other private funds.

Several forms of funding are not included in the NCVER collection; for example, most employer spending on training, household spending on private RTOs, the spending by international students on private RTOs, government financial support for students, such as Youth Allowance, and government incentives paid to employers of apprentices.

Data on investment can be useful for accountability; for the operation of the training market; and for regulation. They can contribute to improved performance in the VET system; lessen the misuse of funds; and reduce the waste of students' opportunities. Data at the provider level could assist choice by students and help in the detection of low-quality provision.

Financial data can be used in policy developments relating to efficiency, effectiveness and equity. Currently, the Productivity Commission (2015) makes estimates of changes in efficiency by estimating recurrent government spending per hour of training and per hour completed. It provides estimates in constant prices (using the GDP chain price index) to allow meaningful comparisons over time. The Productivity Commission relies mainly on NCVER surveys of providers, student outcomes and employers for this part of its work. However, the NCVER financial data cannot be linked easily to effectiveness and equity.

To enhance the usefulness of financial data it is desirable that they:

- have statistical linkages to student measures (Fowler 2016)
- have similar scope to student data on outputs such as hours of training, number of graduates, and levels and fields of study for formal training, and some measures of quantity and field for non-formal training[1]
- can be related to post-training outcomes

1 Formal learning refers to learning which is structured, taught learning in institutions and organisations and leads to a recognised qualification issued by a relevant body. Non-formal learning does not lead to a qualification and includes non-accredited workplace training. Informal learning refers to unstructured, non-institutionalised learning activities that are related to work, family, community or leisure. For more detailed and alternative definitions see table C1 in appendix C.

- can be related to equity groups, which implies that data are available on student support
- can be used in analyses over time, which implies estimates in constant prices
- have a clear conceptual basis so they can be related to other finance collections, including Higher Education Finance, the National Report on Schooling in Australia, ABS Government Finance Statistics, government budget papers and international data.

The case for collecting particular data is made in the paper. A general observation is that where data are not available on an activity, the activity and the associated data are likely to be neglected in policy debate and in research.

Funding classification

Table 1 provides a three-way classification for financial data. It shows:

- the *providers* on whom spending is made: RTOs and 'other than RTOs'
- *services*: core education and training services such as instruction services and 'not core' services
- *sources of funding*: governments, enterprises, households and rest of the world.

In table 1 items are coloured green if they are included in NCVER's *Financial information*. The funding items in purple are those considered in this paper, while the funding items in black are areas identified but not considered at this stage.

The classification in table 1 is based on the Organisation for Economic Co-operation and Development's (OECD) classification of educational expenditure (OECD 2015).

Comparison with OECD classification

The OECD classification, as outlined in appendix A and table A1, has three dimensions. Its first dimension covers spending on educational institutions and spending outside educational institutions, in effect the same as in table 1 for RTOs and other than RTOs.

The second dimension is similarly for core and not-core services, although the OECD includes an additional category for research. This would be needed for universities but not for the VET sector, so a research category has not been included in table 1.

The third dimension of the OECD's classification covers sources of funding and comprises three categories: public (including international agencies); private; and subsidised private. By comparison, the framework in table 1 has governments (not including international agencies) and the three private sectors. The three private sectors closely align with the sectors used in the Australian System of National Accounts (ABS 2014).

A separate category for the 'subsidised private' sector in the OECD classification has not been included in the classification used for table 1, since it is not obvious that it would be useful. The existing and potential data sources mean that the classification used in table 1 is likely to be feasible.

Core services might be considered to be the provision of formal courses, particularly those leading to Australian Qualifications Framework (AQF) qualifications, but the term may also cover structured training that does not lead to a qualification, which could be called non-formal. VET providers undertake a range of other services, including short courses on a fee-for-service basis, some of which might be considered as non-formal, but may still be considered core services.[2] In any case, with the data available, it may be necessary to regard all of the activities of public RTOs as core services.

2 McKenzie (2014) and Karmel (2015) discuss a classification based on the type of provider, level of training and field of training.

Table 1 Classification of Australian VET funding

			Payments to (or for) public and private RTOs					Payments to other than RTOs	
Purpose	**Source**		NCVER financial information in green; items considered in the paper are marked in purple; items not considered are marked in black						
Core education and training services	**Governments**		Payments to public and private RTOs by state government departments from state funds and from Australian Government funds under NA and NP (*revenue from government*)	Payments to RTOs by Australian Government for ISF, SEE, AMEP etc. (*revenue from government and fee-for-service*)	Advances for HELP (*student fees and charges and revenue from govt*)	State and Common-wealth administra-tion, regulation (*revenue from government*)	Taxation reductions for students and enterprises	Payments to secondary schools to support VET in Schools. Training supported by Job Active providers	Taxation reductions for non-institutional training by enterprises and other entities
	Private	**Enterprises**	Accredited and non-accredited training purchased from public RTOs (*fee-for-service –other*)	Payment of fees for employees (*student fees and charges*)	Fees, including from levy funds paid to private RTOs	In-kind contributions		Wages of trainers and other training costs	Non-accredited training provided by non-RTOs
		Households	Fees to public RTOs (*student fees and charges and fee-for-service – other*)	Purchase of other services from public RTOs (*fee-for-service*)	Fees paid to private RTOs	Repayment of HELP loans	Donations to public RTOs (*other revenues*)	Outlays on private tuition	Outlays on books, computers etc.
		Rest of the world	Fees to public RTOs (*fee-for-service – overseas student fees and fee-for-service – contracted overseas training*)		Fees paid to private RTOs by international students and contracts			Outlays on books computers etc.	
Not core services	**Governments**		Other contracts with public RTOs (*fee-for-service*)					Employer incentives (AAIP), AASN	Student assistance e.g. Youth Allowance; loans to apprentices
	Private	**Enterprises**	Other contracts with public RTOs (*fee-for-service*)	Income of public RTOs from investments (*other revenues*)				Wages paid to employees during training	
		Households						Students' living costs, childcare, transport	Earnings foregone by students while studying
		Rest of the world	Contracts with public RTOs (*fee-for-service – other or contracted overseas training*)					Students' living costs, childcare, transport	

Notes: Green italicised information in brackets refers to sections of NCVER's financial statements.

AAIP = Australian Apprenticeships Incentives Program; AMEP = Adult Migrant English Program; AASN = Australian Apprenticeship Support Network; ISF = Industry Skills Fund; NA = National Agreement for Skills and Workforce Development; NP = National Partnership Agreement on Skills Reform; SEE = Skills for Education and Employment (previously LLN).

The additional categories of private sources included in table 1 — enterprises and the rest of the world — are areas of concern for policy and research in the VET sector. They are of lesser interest for schools and higher education, which are the focus of the OECD classification.

Table 1 provides only broad categories and more detailed classifications are needed when dealing with Australian and state and territory governments (for example, Dumbrell, Burke & Leahy 2013).

Funding reported by NCVER

Table 1 lists over 30 different types of funds in the framework just discussed. It shows the funds included and those not included in the NCVER collection. This section deals with the former. Given that the funds not included in the collection are the focus of this paper and are treated in detail, this issue is the subject of a separate chapter – the following.

To elaborate on the information given in the introduction: public funding for the core education and training services by RTOs is included in NCVER's *Financial information* (2015a). The private income of public RTOs is also included by NCVER. This private income includes fees paid by or on behalf of domestic and international students. VET FEE-HELP loans are provided by the Commonwealth for students undertaking diplomas and advanced diplomas with approved RTOs. Their payment to a public provider is treated as student fees and charges, in keeping with the approach in the Government Finance Statistics (ABS 2015b).

In relation to private providers, the NCVER collection is limited to the government funds provided for the delivery of training, and now includes the VET FEE-HELP funds received by private providers.[3] The payments to public providers are included by NCVER under student fees and charges and the payments to private providers are included under Commonwealth Administered Programs – Other.

NCVER's *Financial information* presents data for Australia and for each state and territory but not for individual RTOs. Note that financial information is available for individual providers in the school and higher education sectors and is discussed below.

The NCVER data are largely based on those supplied by the states and territories, including from public providers. This includes most of the funds provided by the Commonwealth to the states for agreed purposes. The NCVER data also include state funds used in support of VET but not allocated to providers. The Commonwealth supplies data direct to NCVER on the programs that it provides other than through the states.[4]

3 Funds paid to private providers from VET FEE-HELP are not included in the Government Finance Statistics.

4 The VET FEE-HELP income of private providers in the NCVER collection was not accompanied by the inclusion of expenditures by private providers from that income. It would seem to weaken the link between funding and the delivery of training and it may be a reason for the substantial increase in the surplus of revenue over expenditure for 2014 (NCVER 2015a, table 6).

Funds not in the NCVER collection

A number of forms of public and private funding for the provision of vocational education and training or related to the VET system are not included or not separately identified in the NCVER collection. The major items are examined here, noting two issues for consideration:

- The funding of the items cannot be simply added together as this could lead to some double-counting; for instance, some employer funding may be used by an employee to pay student fees and charges at a public RTO and be counted in the NCVER collection.
- Some items are of importance in themselves and not only as they contribute to the total investment; for example, the detail of employer expenditures is of interest in an analysis of training and productivity and for the study of who bears the cost of training.

In considering whether data should be regularly compiled and analysed, there are several factors that could be taken into account. They include:

- the approximate size of the investment
- how the data could be used — in accountability, improved market information and policy development, and the extent to which the spending can be influenced by policy
- whether data of a reasonable quality can be collected, compatible with other collections, and at what cost, including the burden on those supplying it.[5]

The funding items seen to be worth further assessment and possible data collection are now considered:

- *Enterprise (employer) expenditure*: past surveys undertaken by the ABS indicated employer expenditure on training at roughly the level of government spending on VET. Most employer spending is not recorded in the NCVER collection, as only a small part is spent on public RTOs.
- *Rest of the world (mainly international students)*: about three-quarters of the international students are enrolled with private RTOs, so only a small proportion of their total fees is included in the NCVER collection.
- *Household spending on private providers*: part of the household spending is received by public providers and included by NCVER as student fees and charges. Spending by households on fees at private RTOs or on tuition by non-RTOs is not included in the NCVER collection. Household spending on training-related costs such as text books or private tuition and transport and childcare is not included in the NCVER collection.

5 The costs of data collection could well be lower, and data quality and use higher, when data are provided routinely as part of general administrative processes rather than requiring the establishment of episodic special purpose collections. This will need to be examined.

- *Australian Government and state government apprenticeship support*: this includes employer incentives and direct assistance to apprentices, including Trade Support Loans. Some states make cash payments to apprentices additional to the Commonwealth's, and nearly all of the states provide payroll tax or WorkCover exemptions.
- *Australian Government financial support to students through grants*: these programs, of which Youth Allowance (student) is the largest, are designed to support students from low-income backgrounds. A small component might be spent on student fees, and those paid to public providers would be included, although they are not identified in the NCVER collection.
- *VET FEE-HELP loans*: the cost to the Australian Government and state governments of non-repayment and the interest subsidy. States are liable for half the costs on places they subsidise but not for the loans made to full-fee students. These costs are separate from the annual outlay by the Australian Government on new loans which finance student payment of fees.
- *Tax expenditures (concessions and exemptions) for individuals and enterprises*: Australian Government tax expenditures include claims for expenses against company and personal income tax and exemption from GST (Treasury 2015b). (In several states exemptions are given from payroll tax and WorkCover charges for apprentices, as shown under the point relating to government apprenticeship support above).
- *VET in Schools funding*: there were 247 000 students enrolled in VET in Schools in 2014, with consequently considerable expenditure.[6] Over half are enrolled in the publicly funded VET system, but the extent to which the funding of their training is included in the NCVER collection or attributed to the budget for government schooling is not clear (NCVER 2014b).

There are other expenditures related to education and training not included in the NCVER collection but for which it seems unlikely that data collection would be feasible:

- *Australian Government support for training through Job Active providers*: so far the identification of data relating to this has not been possible.[7]
- *Earnings foregone*: economic studies of returns from investment in education typically measure the benefits of training as the difference between the earnings of a graduate and the earnings of non-graduates. The benefits are expressed as a rate of return on the tuition costs and the income foregone during study. However, the data needed are those related to particular courses and graduates. Estimates of the total earnings foregone by all tertiary students may not be useful for policy or research and in any case are not readily undertaken.

6 The recent collection of statistics on *Young people in education and training* (NCVER 2015d, table 9) gives a figure of 376 000.

7 'The activities of Commonwealth employment services are a cause for concern in the Victorian VET system, with risks of over-servicing of students' (Mackenzie & Coulson 2015).

- *Other training-related costs*: text books, personal computing, student living costs, childcare and transport and payment for private tuition are so far not under consideration, although they could be investigated at a later date.

The data potentially available on the eight funding items listed above are likely to be derived from government budget data or from surveys. These data will not be immediately compatible with the data in the NCVER collection, which are based on the AVETMIS Standard for VET Financial Data (NCVER 2015g). The NCVER uses an accrual accounting approach, with a focus on reporting operating revenues and expenditures.[8] Reporting standards are not discussed in this paper but will have to be considered if and when data on additional funding items are compiled.

The next section describes in detail the funding items identified as potential candidates for data collection.

Enterprise/employer expenditure on RTOs and non-RTOs

Approximate size and data available

The ABS has carried out several surveys of employer training expenditure, the last for the year 2001–02, when the estimated total direct employer training expenditure, net of subsidies, was $3.7 billion (ABS 2003a). This was nearly as much as the $3.9 billion spent by governments on the VET system for 2002 (NCVER 2007).

Adjusted to 2014 prices, the 2001–02 spending by employers would total $5.5 billion. If we assume a 25% real increase in line with employment growth in Australia, the estimate rises to $7 billion. This is almost as much as government spending on the publicly supported VET system (NCVER 2015a).

As noted earlier (and discussed more fully below), employers receive subsidies from governments, mainly for the employment of apprentices. These subsidies were estimated at nearly 10% of total employer expenditure in 2001–02.

In 2001–02 employers often paid the fees of employees undertaking education and training in higher education as well as in VET institutions; they engaged internal trainers; and they contracted external trainers, including private providers and TAFE (technical and further education), for possibly half of the training undertaken. Expenditure by employers on public VET providers is included in 'fee-for-service — other' in the NCVER collection, which in 2014 totalled a little over $0.4 billion (NCVER 2015a). This is small compared with the rough estimate of employer expenditure of $7 billion given above.

The employer direct expenditure just discussed does not include the wages and salaries of employees while in training. The 1993 and 1996 Australian surveys did include this and it was estimated to be 46% of total employer expenditure in 1996 (ABS 1997). The UK employer survey in 2013 had a similar finding — that the wages and salaries of employees

8 The operating expenditures include depreciation and amortisation. They exclude capital appropriations and infrastructure payments, which are separately accounted for.

undergoing training approached half of all employer expenditure training (UK Commission for Employment and Skills 2014).

Importance for policy or accountability

The returns on investment in training by employers have been shown to be large (OECD 1998). The study of Australian employer expenditure by Smith et al. (2008) reported employers as seeing the benefits as: improving skills and firm capability; addressing skills shortages; reducing turnover and its costs; and ensuring compliance with regulations. Employer training is likely to be important for labour force participation, as better-skilled persons have a higher employment rate. Shortages, especially in the skilled trades and in some professions, are seen as a factor restricting productivity growth and shortages have persisted in many trades for years (Department of Employment 2015). Employer provision of training where it is extended to the less advantaged can be important for equity, although the evidence is that it is disproportionately provided to those in full-time work who hold educational qualifications (ABS 2010).

But does that mean we need to collect data on employer expenditure on this training? The apparent use of past surveys may provide some guidance. National surveys of employer expenditure by the ABS were undertaken in 1989, 1990, 1993, 1996 and 2001–02. The aim of the early surveys was to help in the monitoring of the 'Training Guarantee', which operated from 1990 to 1994 (Fraser 1996). By 1992 the Training Guarantee required employers with a payroll above $200 000 to spend at least 1.5% of their wages budget on training or to pay a levy/tax.[9]

The main elements in the employer expenditure surveys were:

- the quantity of structured training (formal, non-formal) and informal training
- the occupation of employees
- type of training
- state or territory
- employer size
- industry
- in-house training or purchase from external providers, including TAFE and private RTOs and universities
- expenditure on the provision of training and the payment of wages and salaries for persons undergoing training
- gross expenditure and expenditure net of subsidies
- data on all employers and for employers providing structured training

9 The surveys of expenditure by the ABS were complemented with household surveys aimed at finding more about adults' and particularly workers' education and training experiences. The last of these surveys was in 2009 (ABS 2010).

- expenditure per person trained and per employee.

The Australian National Training Authority (ANTA) took over funding the expenditure surveys after the Training Guarantee was abandoned. ANTA had as one of its objectives for the VET system: 'Maximising investment in training'. Its key performance measure (KPM) for this objective was 'total expenditure': the sum of public and private expenditure on the VET system, as reported to NCVER, plus the net spending by enterprises, as estimated in the surveys by the ABS. ANTA, in its report for 2003, used the data on enterprise spending from the 1996 and 2001–02 ABS employer expenditure surveys (ANTA 2004). Following the abolition of ANTA in 2005 and the cessation of the employer expenditure surveys, 'total expenditure on VET' has been dropped from the key performance measures for the VET system (Department of Education 2006, p.16).

To sum up, past experience has shown that only limited use was made of such data and it is not clear which policy developments were affected by the availability of these data.[10] If data were to be collected in the future, there would need to be a clear case made for how they could be used. Data on employer expenditure should potentially be useful in the development of policies to encourage training in industry and might be used in the design of policies on employer incentives, discussed below, or programs such as the Industry Skills Fund.

Ways of collecting, quality and cost

The ABS survey of employer expenditure was not continued for reasons of cost, the burden on respondents and the quality of the data. A key factor relating to the cost to the employer was the completion of a long mailed questionnaire. The burden on respondents included assembling data not readily available in most enterprises, which led to the removal, in the last survey in 2001–02, of questions on the wages of employees undergoing training.

In a comment on quality, the ABS in its last 'end of survey report' concluded that, while 'on balance reported data was of acceptable quality … due to a lack of accurate records or access to relevant data a number of employers were required to estimate their training expenditure'(ABS 2003b). The lack of records on training expenditure was confirmed in a study in 2007, which asked a sample of employers to consider whether they could answer the questions in the 2001–02 questionnaire (Smith et al. 2008).

The latest UK Employer Skills Survey, in 2013 (UK Commission for Employment and Skills 2014), involved a detailed questionnaire on skills and skill shortages, collected from a sample of over 90 000 establishments. Investment in training was considered in a supplementary survey of 13 000 of the employers who had indicated in the main survey that they had undertaken training of staff in the previous 12 months and were happy to be contacted on training expenditure.[11] That investment survey was considerably shorter than

10 Andy Dickerson from Sheffield, England, and a member of an expert panel at the UK Commission for Employment and Skills is currently visiting Australia. He did not think the results of the UK 2013 survey had received much attention in policy development.

11 The last Australian sample size was fewer than 6000.

the last Australian employer expenditure survey, but it covered many of the same areas of expenditure. Smith et al. (2008) concluded that a fairly short survey, along the lines of the corresponding English employer survey, may be sufficient to produce approximate estimates of employer expenditure in Australia and provide fairly consistent data over time.

As discussed in the next section, a requirement for all private providers to submit data on their revenue and expenditure, as already occurs for schools and universities, would yield data on that part of employer expenditure received by RTOs. But this would not give a total picture of employer activity in training, which may be a major purpose of collecting data in this area.

Rest of the world

Approximate size and data available

Fee revenue from international students in VET was about $1.1 billion in 2014, as estimated by the International Education Group (IEG; 2015a). NCVER shows that public providers received less than $0.2 billion, indicating that most of the revenues are received by private providers (NCVER 2015a).

This is roughly what is expected from the data on student numbers. In 2014 about 33 000 international students were enrolled with public providers, whereas the total was about 150 000, meaning that most were enrolled with private providers.[12] International student numbers peaked in VET in 2009 and 2010, at 207 000, but fell, largely due to changes in visa regulations, to 135 000 in 2013. The numbers are rising again, to 150 000 in 2014 and 170 000 in 2015 (International Education Group 2015b, 2016).

Importance for policy or accountability

The fees paid by international students and contracts for training overseas have made up around three to five per cent of the revenues of public providers. They are likely to be a much bigger proportion of the income of private providers.

In relation to developing policy on exports, more detailed data on international earnings could be useful. The fees charged for courses are already shown on RTOs' websites and are subject to scrutiny by the International Education Group.

Ways of collecting, quality and cost

The ABS provides financial data on education exports, reporting them as 'travel — education related' (ABS 2015c). The total for all education sectors peaked with student numbers in 2009, but at $17 billion was nearly as high in 2014. The International Education Group reports the total for VET at $2.7 billion or 16% of the total of $17 billion (International Education Group 2015a; ABS 2015c). However, the ABS method of estimation includes student living expenses, as well as the fees they paid. Living expenses make up well over

12 Nerlich (2015) reports that about half the students enrolled with public RTOs in 2013 were taking higher education courses and half taking VET courses.

50% of the exports of education. The inclusion of living costs is a matter of dispute (Birrell & Smith 2010[13]). The ABS defence is that their approach aligns with the internationally agreed methodology for balance of payments estimates.

If we want to estimate the fees paid to providers and the related student enrolments, then collecting the data from providers seems the most effective way. A requirement that all public and private providers provide annual estimates of their revenues and expenditure is discussed in the next section on private spending on private providers.

Total non-government spending on private RTOs

Approximate size and data available

Total non-government spending on private RTOs is made up of that by enterprises and the rest of the world (just considered) and households (that is, individuals' spending). It is possible that together these three forms of private spending on private RTOs could be as much as $4 billion per annum.

The basis for this estimate is that the data on total VET activity showed 818 million hours of training delivered in 2014 (NCVER 2015c). Some 547 million hours were previously reported by the publicly funded providers (NCVER 2015b). The publicly funded sector had a total spending of $8 billion in 2013 (NCVER 2014a).

The total revenues received in 2014 by private providers include $1.4 billion financed by VET FEE-HELP (NCVER 2015a) and nearly $1 billion spent by international students (International Education Group 2015a).

Importance for policy or accountability

Data on total VET activity, including students, enrolments and hours, will be of more use if they are accompanied by data on all sources of funding: it seems likely that the market for VET would work more effectively, while accountability to students and governments for the use of public funds could be improved, particularly if the data were published for every RTO, as discussed below.

Ways of collecting, quality and cost

A way of approaching this would be to require all public and private training providers receiving government funds to supply information on their finances, in addition to the information already supplied on students and courses. VET FEE-HELP data are already published for individual providers (although some are grouped, such as NSW TAFE). Those data are making a contribution to accountability and policy development: they are providing

13 They argue that 'the published figures are inflated because of three broad factors. First, estimates of student expenditure on goods and services in Australia are based on students with different demographic characteristics than [sic] the current stock of overseas students. Second, the value of on-shore earnings by overseas students is included in the total. Third, direct costs, such as off-shore agents' fees have not been deducted from the stated earnings. It is likely that the actual export value of education is about half the stated figure' (p.4).

information for would-be students but they have also ensured increased public scrutiny of the providers. Data on the finances of individual schools and universities are already published and this is briefly outlined.

Schools

Every primary and secondary school is required to report income data, expenditure data and student and output data. 'All schools or school system authorities are required to provide data by submitting an annual Financial Questionnaire and a Census return, in accordance with the requirements of the funding agreement for recurrent assistance' (Department of Education and Training 2015a). Financial data have been required since 1974. State-level results are published every year for Catholic and independent schools at primary level and secondary level, and for schools that provide both primary and secondary levels.

Since 2011 the Australian Curriculum, Assessment and Reporting Authority (ACARA) has published an annual summary of the public and private revenue for each of over 9600 schools on the *My School* website. The website also provides information on the student body and some measures of outputs, particularly measures of student literacy and numeracy achievement. A list of the items published on the *My School* website is given in table 2.

Table 2 School finances, student background and achievement reported on *My School*

Recurrent income (total and per student)	**Other information**
Australian Government recurrent funding	Total enrolments, boys, girls
State/territory government recurrent funding	Full-time equivalent enrolments
Fees, charges and parent contributions	Indigenous students
Other private sources	Language background other than English
Capital expenditure	Student attendance rate
Australian Government capital expenditure	Index of Community Socio-Educational Advantage (ICSEA)
State/territory government capital expenditure	National Assessment Program Literacy and Numeracy (NAPLAN) Years 3, 5, 7 and 9.
New school loans	Teaching and non- teaching staff
Income allocated to current capital projects	

Source: Australian Curriculum, Assessment and Reporting Authority (2015).

Higher education

The revenues and expenditure of 38 public higher education providers and Notre Dame (a private not-for-profit university) are published in *Finance 2014: financial reports of higher education providers* (Department of Education and Training 2015b).[14] The aggregate revenues for Australia are provided in table B1. Data for each individual provider are published in the same format. Comments on the differences between the reporting of higher education and VET funding are provided in appendix B.

14 Over half of the students at the Notre Dame are now in Commonwealth Supported Places.

The Tertiary Education Quality and Standards Agency (TEQSA) has oversight of 178 providers of higher education and has estimated the revenues and expenditures of nearly all individual providers. It has used these data to provide a report on financial metrics (2016).

The data in the Tertiary Education Quality and Standards Agency report were drawn from TEQSA's and the Department of Education and Training's higher education collections (but all the regular higher education collections will be undertaken by the Department of Education and Training from 2016[15]). In its metrics report the standards agency did not name any provider but presented graphs for all providers and separately for groups such as universities and for-profit and not-for profit providers and for institutions of various sizes. The metrics on which the Tertiary Education Quality and Standards Agency reports are the major sources of funding, surplus/profit, employee expenditure relative to revenue, asset replacement ratio and liquidity. These metrics would be of considerable value as part of the agency's reviews of providers.

Collections for individual RTOs

The financial reporting for higher education and schools provides an indication of what might be possible for vocational education and training.

The task of developing a reporting system would be more complex than for higher education, noting that the Tertiary Education Quality and Standards Agency recently reported on 168 higher education providers (2016); NCVER collected data from 4601 providers for its report on total VET activity (NCVER 2015c) and for the report on publicly funded training 2071 providers supplied data (NCVER 2015b).

The school sector might also be considered complex, with over 9600 schools, about 30% of which were non-government. However, its curriculum and sources of funding appear to be less diverse and all schools receiving government assistance are not for profit. Its current financial data collection has been built up over a long period, with the publication of the individual school data being the main recent development.

In considering financial reporting by individual RTOs, the additional cost to the RTO would need to be investigated. The experience of the higher education sector, where data on private providers have recently been compiled, could be considered (Tertiary Education Quality and Standards Agency 2016). The processes by which the TEQSA compiled its recent financial metrics report and by which the Australian Curriculum, Assessment and Reporting Authority developed the data reported publicly on *My School* could also be investigated.

Other ways of measuring household spending

An alternative approach to estimating household spending on private providers from existing ABS surveys is unlikely to yield data of any precision. The irregular Household Expenditure Survey (last published 2009–10) with a sample of nearly 10 000 households includes some

15 'This change will see the establishment of a single point for all registered higher education providers to report student, staffing and financial data' <http:///www.teqsa.gov.au/for-providers/provider-obligations/information-collection>.

questions on household educational payments. This is worth further investigation but seems unlikely to ever yield useful data at the VET sector level without a much larger sample (ABS 2011).

Employer incentives and apprenticeship support

Approximate size and data available

Both the Commonwealth and the states provide incentives to employers of apprentices.[16]

The total Commonwealth allocation for the Australian Apprenticeships Incentives Program, covering grants to employers and apprentices, was $0.9 billion in 2013—14. It was estimated at $0.45 billion for 2015—16. The fall in spending was mainly due to the incentives being restricted to occupations on the national skills needs list and priority areas and the replacement of Tools For Your Trade with Trade Support Loans similar to FEE-HELP. Commonwealth spending on Australian Apprenticeship Centres (now Australian Apprentice Support Network [AASN]) has been largely maintained at nearly $0.2 billion (Treasury 2016)

States provide tax or WorkCover exemptions and several make cash payments to employers that are additional to the Commonwealth's.[17] The state benefits are listed in table 3. The value of all these state benefits could be considerable but have not been estimated.

Table 3 Forms of state and territory apprenticeships incentives

State/territory	Incentive
New South Wales	Payroll tax rebate on wages paid to newly employed apprentices and trainees and a rate reduction on Work Cover
Victoria	Some Work Cover premiums are exempt. Most assistance eliminated except for a 50% discount on apprentices' motor registration
Queensland	Payroll tax exemption for apprentices and some travel and accommodation assistance. Construction Skills Queensland provides considerable funds to employer funded from levies
Western Australia	Payroll tax exemption
South Australia	Critical Skills Fund paying $4000 for an apprentice completion in particular trades as well as WorkCover exemption for trade apprentices
Tasmania	Payroll tax exemption and some travel assistance
Australian Capital Territory	Payroll tax exemption and workers compensation reductions
Northern Territory	$6000 assistance for training for occupations on the NT Skilled Occupation Priority List

Source: Australian Apprenticeship Support Network (2015).

Importance for policy or accountability

16 'Australia is the only country that pays government incentives and subsidies on a large scale for the employers of apprentices and trainees to offset wage costs. Some countries do have much more limited incentives, based on an assessment of need (for example, some continuing education and training programs in Singapore), or to create training opportunities for people who are disadvantaged or have a disability, or in response to economic circumstances, such as the recent global financial crisis (NCVER 2011).

17 Some of this assistance is in the form of tax expenditures, discussed later in other tax expenditures, but is included here as their focus is apprenticeship support.

Smith et al. (2008) reported that many employers claimed that their provision of training and their choice of accredited or non-accredited training had been affected by the availability of employer incentives.

As shown in table 4, the numbers of commencements fell in trade occupations by 15% from 2010 to 2014, although the number for non-trades fell by 50%, which seems largely explained by the changes in eligibility for Commonwealth funding. However, there does not appear to have been detailed research undertaken in this area.

Table 4 Apprentice and trainee commencements 2010–14 ('000)

	2010	2011	2012	2013	2014
In trade occupations	96	92	96	99	82
In non-trade occupations	219	229	234	147	110

Source: NCVER (2015f).

ANTA (2004, p.166) included Commonwealth Government outlays on employer incentives in its estimated total expenditure on VET. The Productivity Commission (2016) lists these as a source of funds for VET but it does not present any data. Employer incentives are similarly listed as a form of spending in the *Annual national report of the vocational education and training system* (Department of Industry 2012, p.13). It reports the spending of $1.02 billion for 2012–13 and gives some details of funding rate per apprentice but these are not considered further in its analysis of the VET system.

The Expert Panel on Apprenticeships for the 21st Century discussed Commonwealth incentives at considerable length and made recommendations for changes in eligibility (Expert Panel on Apprenticeships for the 21st Century 2011). Their suggestions underpin the changes in Commonwealth incentives made the following year. The Expert Panel did not present any information on the total level of funding for apprentices. They mentioned that several states had incentives but did not provide any information on them.

It appears that in the absence of data there has been no detailed analysis of the effects of funding rates and of total funding on apprenticeships and traineeships. Policy development would be enhanced with the provision of such data.

Ways of collecting, quality and cost

The Australian Government obviously has information on its outlays, although whether they can be disaggregated to particular categories of subsidy and types of apprentices is not known. Discussions could also be sought with states and territories about the extent of their assistance and the beneficiaries, and the possible uses for better data in this area.

Student financial support

Approximate size and data available

The Australian Government's total spending on Youth Allowance and Austudy for full-time tertiary students was about $3.2 billion in 2014–15. VET full-time students may have accounted for $0.6 billion of this.[18] The estimated share for VET is based on the number of students on benefits: about 50 000 VET students and 200 000 higher education students (Treasury 2015a; Department of Social Services 2015).

The Australian Government also provides ABSTUDY, with a total spending on tertiary students of about $100 million in 2014–15. About 10 000 students received support; a little over half were in the VET sector, so VET expenditure is likely to be around $50 million.

Other Commonwealth benefits include the Training for Employment Scholarships, to be introduced under the Industry Skills Fund, but the numbers are likely to be small. In passing it can be noted that a Student Start-Up Loan is being introduced in 2016 to replace the higher education Start-Up Scholarship available in recent years. Neither the scholarship nor the loan is available to VET students.[19]

Importance for policy or accountability

The Bradley review (2008) paid particular attention to student support payments in its concern for equity in higher education. Bradley et al. developed principles for student support; analysed the existing system, including its levels and means testing; and provided detailed recommendations for reform. The report demonstrated that the proportion of higher education students receiving benefits had declined in recent years; the value of the benefits to students had decreased; and the percentage of students from low socioeconomic backgrounds had fallen. Much of what Bradley et al. (2008) recommended was adopted by the Commonwealth.

Data on students in receipt of benefits since then show that the VET share of student assistance is lower than for higher education. It is estimated that 15% of VET full-time students compared with 35% of higher education full-time undergraduates receive assistance (table 5). These findings need to be analysed further, as VET students come disproportionately from low socioeconomic backgrounds compared with higher education students (NCVER 2013).

It is surprising how little attention is given to student financial support in VET, particularly since it has been studied regularly for higher education (for example, Bradley et al. 2008;

18 Youth Allowance (Students and Australian Apprentices) provides a means-tested payment for full-time students and Australian Apprentices generally aged 16 to 24 years. Austudy (students and Australian Apprentices) provides a means-tested payment to full-time students and Australian Apprentices who are aged 25 years and older. ABSTUDY (students and Australian Apprentices) provides a living allowance payment plus a range of supplementary benefits for Aboriginal and Torres Strait Islander students aged 16 years or older <http://www.studyassist.gov.au/sites/studyassist/studentincomesupport>.

19 Kwong Lee Dow (2011) undertook a review of student support. He reported on submissions and reports that argued that the exclusion of VET students from the Start-Up Scholarship was unfair. The matter was discussed with the government but was not supported due to budget difficulties.

Bexley et al. 2013). A rare study is by Ryan (2013), using data from the Longitudinal Surveys of Australian Youth.[20]

Table 5 Full-time students on Youth Allowance or Austudy, Australia 2010–14

Number receiving either Youth Allowance or Austudy ('000)			
	HE	*VET*	*Total*
2010–11	178	49	227
2012–13	187	49	236
2014–15	203	52	254
Estimated full-time domestic students ('000)			
	HE undergraduate	*VET*	*Total*
2010	482	262	744
2012	526	324	850
2014	573	344	917
Percentage on benefits			
	HE undergraduate	*VET*	*Total*
2010	37%	19%	30%
2012	36%	15%	28%
2014	35%	15%	28%

Note: The percentages are approximate as some masters' course students are eligible for assistance and data on numbers receiving allowances are for financial years. Full-time students can receive benefits subject to a means test (see <studyassist.gov.au/sites/studyassist/studentincomesupport>).

HE = higher education.

Source: Treasury (2015a); NCVER (2015b); Department of Education and Training (2015d).

Ways of collecting, quality and cost

The chief source of data is the Department of Social Services, which now administers the main schemes. The department provides limited information in its budget statements and in its annual report but has an occasional statistical paper giving greater detail (Department of Social Services 2013). In addition to expenditure data, it should also be possible to obtain the related 'output' data on students by a range of demographic statistics and categories of benefits.

This should be the most achievable of the additional areas of data collection considered in this paper and it seems unlikely to be expensive to collect.

20 The key messages of Ryan's study included: full-time tertiary enrolment rates following Year 12 are similar regardless of whether or not students are eligible for Youth Allowance; Youth Allowance substantially improves course completion rates; Youth Allowance does not alleviate financial hardship totally.

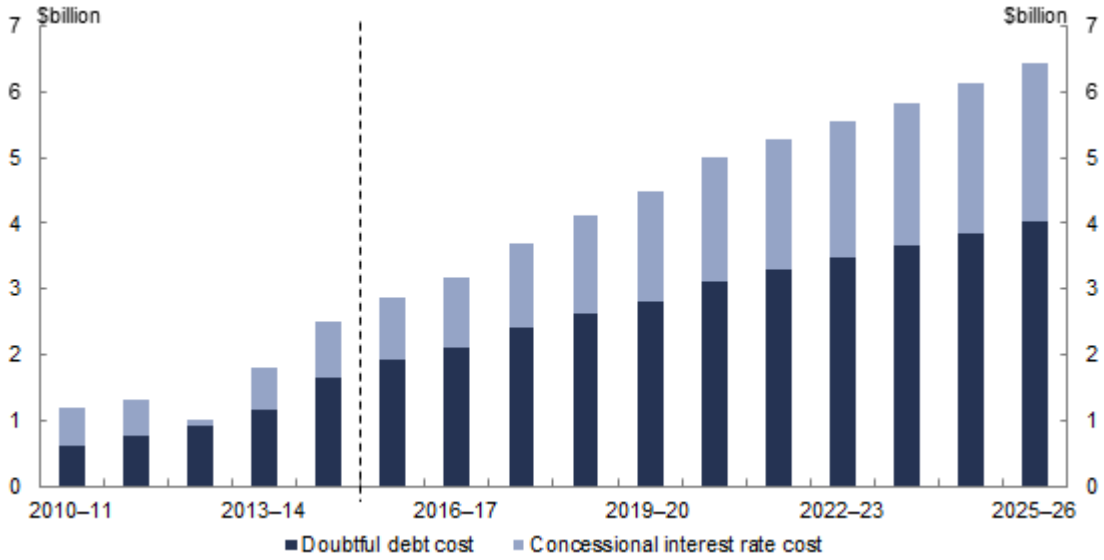
VET FEE-HELP: extent of the subsidy

Approximate size and data available

The expense to government of the Higher Education Loan Program (HELP) is the annual estimate of loans that will not be repaid and the interest subsidy from adjusting debt according to the Consumer Price Index (CPI) rather than the prevailing bond rate (Treasury 2015c). The Commonwealth Government treats annual outlays on VET FEE-HELP as Advances in its balance sheet in the Government Finance Statistics, adding to an asset (debt owed to it by students). The repayment of loans by graduates reduces the debt. Norton (2014a, 2014b, 2015, 2016) has provided a valuable contribution to understanding the costs of the various loan schemes.

The size of the annual expenses for all HELP loans, of which most are for higher education, are reported in the budget papers as $2.4 billion for 2014–15, rising to $2.9 billion by 2019–20 (Treasury 2016a). Estimates of the costs of HELP can vary substantially with the underlying assumptions. Figure 1 provides estimates of the cost of each year's loan over its lifetime made by the Parliamentary Budget Office (2016). It shows the estimated shares of the interest subsidy and the non-repayment of the debt in the total cost. The total figure for 2014–15 is roughly the same as the budget estimate, but the figure for 2019–20 is considerably higher.

Figure 1 Expected total lifetime costs of new HELP loans



Source: Parliamentary Budget Office (2016).

Norton (2015) estimated that 40% of VET FEE-HELP money will not be recovered, compared with 21% of HELP for higher education. In the short term, it may be higher than this, with the reported fraud in 2015. Under the 2012 National Partnership Agreement on Skills Reform, states and territories are liable for half the costs of VET FEE-HELP provided for

subsidised courses.[21] But the large part of VET FEE-HELP is received by private RTOs for full fee-for-service courses.

Estimates of the annual expense of HELP need to be kept distinct from the size of new loans in any year, which are largely accounted for in the NCVER and Higher Education collections. As mentioned, the payments to public providers are included under student fees and charges by NCVER and the payments to private providers in Commonwealth Administered Programs – Other.

VET FEE-HELP commenced in 2009 but the total amount of loans remained very low until the removal of the requirement for the course to be linked a higher education course. This change led to a rapid growth in annual loans, to over $300 million in 2012, $700 million in 2013, nearly $1.8 billion in 2014 and $2.9 billion in 2015. Over 80% of the loans are received by private providers (Australian Government 2016).

As noted in detail in the recent government dicsussion paper (Australian Government 2016), the misuse of the loans led to a number of changes in regulations in 2015 and 2016 and a commitment to the introduction of a new VET FEE-HELP scheme in 2017 (Australian Government 2016). These changes are likely to rein in the outlays on VET FEE-HELP, but it is acknowledged that the recovery rate of VET FEE-HELP is lower than for loans to higher education students. The government dicsussion paper estimates that: 'The introduction of VFH accounts for 35% ($3.3 billion) of the projected growth in the annual cost of HELP over the period 2015–16 to 2025–26' (Australian Government 2016).

Importance for policy or accountability

Getting a full picture of the costs of loans is important for policy relating to efficiency in the use of funds and also for considerations of equity.

Depending on how the data are recorded, we can be overestimating or underestimating the public or private share of funding. If we consider all payments financed by VET FEE-HELP as coming from households, we exaggerate the private contribution, as VET FEE-HELP is subsidised.[22] However, to report as revenue from government the VET FEE-HELP funds going to private providers tends to overstate the government share of the financing of VET, since it is expected that most loans will be recovered. This means detailed data that can be rearranged for analysis for particular purposes are required.

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21 'In order to receive access to income-contingent loans [ICLs] in relation to students accessing subsidised diploma and advanced diploma places, a state or territory will need to: agree to pay 50% of the fair value of impaired assets relating to ICLs taken out in their state for diploma or advanced diploma courses to which a state subsidy applies; plus 50% of public debt interest cost for these loans, arising from the concessional treatment that applies to ICLs under the VET FEE-HELP Assistance Scheme. This will be paid annually in arrears based on actuarial assessments undertaken by the Commonwealth. Additional analysis may be needed as implementation plans are developed for jurisdictions to fully assess the likely impact of these costs' (Council of Australian Governments 2012b).

22 The way the loan receipts are reported in higher education statistics is shown in table B1.

Ways of collecting, quality and cost

The Australian Government holds the data on the total expense of HELP but only releases the expense data in a highly aggregated form for all types of HELP loans (as in figure 1).This is distinct from the data on new loans under VET FEE-HELP, which are released by individual or grouped providers — an important addition to the information supporting choice and accountability (Department of Education and Training 2015c).

Alternative ways of considering the costs of HELP are outlined by the Parliamentary Budget Office (2016), which notes: 'the lack of information on the impact of HELP loans on the budget and the incomplete costs presented in budget measures relating to HELP has [sic] meant that the financial consequences of these policy changes are not transparent and therefore not well understood'.

An early task will be to sort through the alternative ways of reporting the expenses of HELP and of VET FEE-HELP in particular. A way needs to be found to report the annual expenses of the latter to enable them to be considered alongside the other data reported in the NCVER financial collection.

Other tax expenditures (non-apprentice)

Approximate size and data available

Australian Government tax expenditures are tax reductions or exemptions for particular purposes (Treasury 2015b).

The major items apply to the whole education sector, including schools and higher education. Some, such as philanthropy, are wider than education. From the Treasury's annual report the following are the most important:

- *Education*: certain education supplies are GST-free. These include education courses, directly related administrative services, curriculum-related goods, student accommodation for students attending a primary, secondary or special education course, excursions and field trips, and supplies related to the recognition of prior learning. This is the largest item of revenue foregone.
- *Philanthropy*: this includes gifts to deductible gift recipients, including registered charities, scientific and public educational institutions.
- *Scholarships and other education allowances*: if paid to full-time students at a school, college or university, they may be exempt from income tax.
- *Self-education expenses*: the costs associated with maintaining or improving skills or knowledge which the taxpayer uses in income-earning activities are deductible.
- *Certain amounts of Commonwealth education or training payments and certain parts of payments under the ABSTUDY scheme* are exempt from income tax.

In the states and territories exemptions are given from payroll tax and from WorkCover charges for some apprentices. These have already been considered in the section on employer incentives for apprentices.

Note that training provided by employers is considered a normal expense of business and deducted before profit is estimated. Tax benefits related to this are not listed among the tax expenditures.

Importance for policy or accountability

Tax expenditures are a largely neglected matter in public debate but not within treasury departments and government. Whether policy could be affected by actual estimates of the amounts applicable to the different education sectors needs further consideration.

Ways of collecting, data quality and cost of collection

The likelihood of obtaining Australian Government tax expenditures relating specifically to VET does not seem high. It should be possible to get estimates of many of the state programs, considered above, but those related to payroll tax exemption would be very difficult to estimate, given that small employers do not have to pay the tax.[23] It is suggested that any attempt to estimate expenditures in this area be confined to the support provided to apprentices, as considered earlier.

VET in Schools

Approximate size and data available

The total number of students undertaking VET in Schools was estimated at 250 000 in 2013 (NCVER 2015e). The approach to funding VET in Schools differs across states. If, nationally, the annual outlay on their training per year was as in Victoria (discussed below), the cost would be about $0.28 billion. As Victoria has had the lowest rates of funding for government schools and publicly funded VET, this is likely to be an underestimate (Australian Curriculum, Assessment and Reporting Agency 2014b; Productivity Commission 2015).

The National Agreement for Skills and Workforce Development (Council of Australian Governments [COAG] 2012a) states: 'As agreed in 2008, the NSPP [National Specific Purpose Payment] includes VET in Schools funding, including for non-government schools'. But it appears that some jurisdictions fund some or all of VET in Schools from the schools budget.

For Victorian Government secondary schools, the school funding model makes explicit the funding of VET in Schools. An illustrative example from the Victorian website for school funding is presented in table 6.

Of the estimated 250 000 students in VET in Schools in Australia, some 143 000 are also counted as being in the publicly funded VET system in 2013 (NCVER 2014b). But the funding of VET in Schools is not explicit; for example, the only VET in Schools funding shown in the NCVER collection is $32 million in 2013, paid as grants and subsidies (NCVER 2015a, note 5).

23 See <http://www.payrolltax.gov.au/harmonisation/payroll-tax-rates-and-thresholds>. Victoria has the lowest threshold of $550 000 payroll.

Of the estimated 100 000 VET in Schools students not in the publicly funded VET system, some may be undertaking the course with their school as the RTO or engaged with training purchased by the school from a private RTO.

Table 6 Funding per VET in Schools student in government schools in Victoria 2016

Indicative gross funds per student in 2016 (Years 11 and 12)	$8 063
Note 1: Only 91.5% of the gross SRP [Student Resource Package] is used as 8.5% will be billed back by the Department from schools for superannuation costs in 2016.	
Indicative funding per student in 2016 $8,063 X 91.5%	$7 378
Proportion for program delivery $7,378 X 75%	$5 534
Note 2: Average number of subject enrolments assumes an annual student program of 900 hours with FTE VETiS certificate enrolment of 180 hours. That is, 900 / 180 = 5	
Allocation per subject enrolment $5,534 / 5 =	$1 107
If VETiS is one of 6 subjects undertaken by a student then the notional available SRP would fall to $922 per FTE certificate of enrolment.	
If a student is enrolled in more than one VET qualification (which is often the case with a VCAL Program) then it is expected that the school should be able to release a proportionally higher amount of core SRP to purchase those certificates.	

Source: <http://www.education.vic.gov.au/school/principals/finance/Pages/srpref056.aspx>.

The differences across the states and territories appear to be considerable. Queensland provides funds from its VET investment budget for employment-related certificate I and II courses. Other VET in Schools funding comes from the schools budget (Queensland Department of Education and Training 2015). However, Queensland has indicated that this schools budget funding is included in their AVETMISS accounting and hence in the NCVER *Financial information*.

Importance for policy or accountability

VET in Schools, and its role in general education relative to its role in training for employment, is often discussed and is considered in detail by Clarke (2014). The only reference to funding in that report is the move by Queensland, just noted, to restrict the use of VET General Revenues to VET in Schools programs 'focused on employment outcomes and aligned to the skill needs of industry'. More comprehensive data on VET in Schools would enable consideration of the adequacy of its funding and would help in analyses of equity, given that a considerable proportion of students participating in these programs are from less advantaged social groups.

Ways of collecting, quality and cost

The first objective here is to determine the extent to which VET in Schools is funded from schools or VET budgets in each state. If that were achieved, then estimating the total funding of VET in Schools could be considered and linked to VET in Schools student numbers.

Conclusions

There is a good case for NCVER to extend its data-reporting to include a number of the other areas discussed in this report. Much of the additional data could be reported in the NCVER *Financial information* publication, but separately from the main NCVER National VET Financial Data Collection, which would remain focused on the delivery of education and training. The suggested areas for further reporting are listed in the order in which they might be tackled. The order relates to the size of the outlays, the importance of the data, and the cost and ease of collecting data of reasonable quality:

- *Student assistance grants such as Youth Allowance and the characteristics of persons supported*: there is a substantial outlay on student assistance, including for VET students. It is of importance for participation by equity groups, and it has been very little researched in the VET sector. It should be relatively easy to obtain disaggregated statistics from the Department of Social Security.
- *Employer incentives (Commonwealth and state) and number of apprentices supported*: this remains a large area of outlay. The incentives are provided to support the training of apprentices, which is seen to be important for the productivity of the economy. It should be possible for the Department of Education and Training and Treasury to provide much more detailed data than are currently available. State and territory departments could be approached to investigate their cash incentives and their exemptions from payroll and WorkCover payments.
- *The cost of non-repayment and interest subsidy in VET FEE-HELP*: this would encompass estimates of the number of students involved, the proportion of the debt unlikely to be repaid and the interest subsidy under alternative assumptions. There has been a massive expansion in funding, and understanding the effects of this are of great importance. Approaches to the Department of Education and Training and Treasury are needed to determine the extent to which they can assist.
- *VET in Schools*: the first task is to identify the extent to which the funding is contained in school budgets rather than in the VET sector financial information. This could be explored with the relevant state authorities.
- *Employer, household and international expenditure on private RTOs*: this can best be captured by a requirement for all RTOs receiving subsidies or VET FEE-HELP to report their income and expenditures, given that such income and expenditure data are published for schools and for universities. In the interim, discussion might be sought with the International Education Group on possible ways of capturing international student spending on private providers.
- *Broader expenditure on training by employers, including in-house training and non-formal training*: a survey on the lines of the UK Employer Skills Survey could be undertaken, although a case would have to be developed on its usefulness. The ABS, which conducted several such surveys up to 2001–02, could be approached for a costing and advice on how such a study could be developed.

- *Tax expenditures*: it seems unlikely that it will be possible to identify and measure broader tax expenditures related to VET, but discussions with Treasury could be undertaken to confirm this. Work in this area could be confined to incentives for apprentices, discussed above.

Investigating and collecting these data will in several instances be a major task. The ways in which the data can be used in policy, for accountability and in research will affect decisions about the range and detail to be collected. In deliberations on how new data can be presented, consideration could be given to the use of constant price data. This is currently estimated by the Productivity Commission but otherwise is rarely produced in the education sector.

References

ABS (Australian Bureau of Statistics) 1997, *Employer training expenditure Australia July to September 1996*, cat.no 6353.0, ABS, Canberra.

––2003a, *Employer training expenditure and practices 2001–02 Australia*, cat.no.6362.0, ABS, Canberra.

––2003b, *2001–02 Training expenditure and practices survey: end of survey report*, ABS, Canberra.

––2010, *Education and training experience 2009*, cat.no.6278.0, ABS, Canberra.

––2011, *Household expenditure survey: summary of results* 2009–10, cat.no.6530.0, ABS, Canberra.

––2014, *Australian System of National Accounts: concepts, sources and methods Australia 2014,* cat.no.5216.0, ABS, Canberra.

––2015a, *Government finance statistics, Australia 2013–14,* cat.no.5512.0, ABS, Canberra.

––2015b, *Government finance statistics: education, Australia 2013–14*, cat.no.5518.0.55.001, Glossary and explanatory notes, ABS, Canberra.

––2015c, *International trade in services by country, by state and by detailed services category, calendar year, 2014,* cat.no.5368.0.55004, online, ABS, Canberra.

Australian Curriculum, Assessment and Reporting Authority 2015, *My School* viewed May 2016, <http://www.myschool.edu.au/>.

Australian Apprenticeship Support Network 2015, viewed 31 May 2016, <http://www.apprenticeshipsupport.com.au/Employers/Incentives-and-Funding>.

Australian Government 2016, *Redesigning VET FEE-HELP: discussion paper,* viewed May 2016, <https://docs.education.gov.au/node/40661>.

Australian National Training Authority 2004, *Annual national report of the Australian vocational education and training system* 2003, ANTA, Brisbane.

Bexley, E, Daroesman, S, Arkoudis, S & James, R 2013, *University student finances in 2012: a study of the financial circumstances of domestic and international students in Australia's universities,* Universities Australia, Canberra.

Birrell, B & Smith, F 2010, 'Export earnings from the overseas student industry: how much', *Australian Universities Review,* vol.52, no.1.

Bradley, D, Noonan, P, Nugent, H & Scales, B 2008, *Review of Australian higher education: final report,* Bradley review, Department of Education, Employment and Workplace Relations, Canberra.

Clarke, K 2014, *Entry to vocations: building the foundations for successful transitions,* NCVER, Adelaide.

Council of Australian Governments 2012a, *National Agreement for Skills and Workforce Development,* viewed May 2016 <http://www.coag.gov.au/node/303>.

––2012b, *National Partnership Agreement on Skills Reform,* viewed May 2016, <https://www.education.gov.au/national-partnership-agreement-skills-reform>.

Department of Education 2006, *Annual national report of the Australian vocational and technical education system 2005,* viewed May 2016, <https://www.education.gov.au/annual-national-reports-australian-vocational-education-and-training-vet-system>.

Department of Education and Training 2015a, *2015 (2014 Data) financial questionnaire for non-government schools,* viewed May 2016, <http://ssphelp.education.gov.au/sites/ssphelp/files/files/2015_fq_instructions_3.pdf>.

––2015b, *Finance 2014, financial reports of higher education providers,* viewed May 2016, <https://www.education.gov.au/finance-publication>.

––2015c, *2014 VET FEE-HELP statistical report,* viewed May 2016, <http://www.education.gov.au/vet-fee-help-statistics>.

––2015d, *Selected higher education statistics – 2014 student data,* viewed May 2016, <https://www.education.gov.au/selected-higher-education-statistics-2014-student-data >.

––2015e, *Financial statement guidelines for Australian higher education providers for the 2014 reporting period,* viewed May 2016, <https://www.education.gov.au/financial-statement-guidelines>.

Department of Employment 2015, *The skilled labour market: a pictorial overview of trends and shortages 2014–15,* viewed May 2016, <https://docs.employment.gov.au/documents/skilled-labour-market-pictorial-overview-trends-and-shortages>.

Department of Industry 2012, *Annual national report on the Australian vocational education and training system 2012*, viewed May 2016, <https://docs.education.gov.au/system/files/doc/other/anr_australian_vet_system_2012.pdf>.

Department of Social Services 2013*, Income support customers: a statistical overview 2013,* statistical paper no.12, viewed May 2016, <https://www.dss.gov.au/about-the-department/publications-articles/research-publications/statistical-paper-series/statistical-paper-no-12-income-support-customers-a-statistical-overview-2013>.

––2015, *Annual report 2014–15,* viewed May 2016, <https://www.dss.gov.au/about-the-department/publications-articles/corporate-publications/annual-reports/dss-annual-report-2014-15>.

Dumbrell, T, Burke, G & Leahy, M 2013, *Funding flows in Australian VET,* report to the Department of Industry, Innovation, Science, Research and Tertiary Education by the LH Martin Institute, Melbourne.

Expert Panel on Apprenticeships for the 21st Century 2011, *A shared responsibility: apprenticeships for the 21st century*, DEEWR, Canberra.

Fowler, C 2016, 'One and one makes three: getting smarter with data', *Insight,* issue #57, 16 March, NCVER, Adelaide.

Fraser, D 1996, *Training guarantee: its impact and legacy 1990–1994*, Department of Education, Employment, Training and Youth Affairs, Canberra.

International Education Group 2015a, *Export income to Australia from international education activity in 2014,* viewed May 2016, <https://internationaleducation.gov.au/research/Research-Snapshots/Documents/Export%20Income%20CY2014.pdf>.

––2015b, *International student enrolments in Australia 1994–2014,* viewed May 2016, <https://internationaleducation.gov.au/research/International-Student-Data/Pages/InternationalStudentData2014.aspx>.

––2016, *End of year summary of international student enrolment data Australia, 2015*, viewed June 2016, <https://internationaleducation.gov.au/research/International-Student-Data/Documents/Monthly%20summaries%20of%20international%20student%20enrolment%20data%202015/12_December_2015_MonthlySummary.pdf>

Karmel, T 2015,'Research into the financing of TVET in the Pacific: strengthening TVET finance data collections: overview paper', Research project into the financing of technical and vocational education and training (TVET) in the Pacific, Department of Foreign Affairs and Trade, Canberra, viewed May 2016, <http://dfat.gov.au/about-us/publications/Documents/tvet-financing-overview-paper-strengthening-tvet-finance-data-collections.pdf>.

Kwong Lee Dow 2011, *Review of student income support reforms*, viewed May 2016, <http://web.archive.org/web/20120105131937/http://www.deewr.gov.au/HigherEducation/Programs/YouthAllowance/Documents/RSISR_Report.pdf>.

Mackenzie, B & Coulson, N 2015, *VET funding review: final report*, Victorian Government, Melbourne, viewed May 2016, <http://www.education.vic.gov.au/Documents/about/department/VET_Funding_Review.pdf>.

McKenzie, P 2014, 'Regional framework for TVET finance data collections, thematic paper for Research into the Financing of TVET in the Pacific, ACER for Department of Foreign Affairs and Trade, Melbourne.

Nerlich S 2015, 'International students in Australia's vocational education and training sector', presentation to the NCVER No Frills Conference, International Research and Analysis Unit, Department of Education and Training, Canberra.

NCVER (National Centre for Vocational Education Research) 2007, *Financial information 2006*, NCVER, Adelaide.

––2011, *Overview of apprenticeship and traineeship institutional structures*, Report 2, Department of Education, Employment and Workplace Relations, Canberra.

––2013, *Tertiary education and training in Australia 2010*, NCVER, Adelaide.

––2014a, *Financial information 2013*, NCVER, Adelaide.

––2014b, *Young people in education and training 2013*, NCVER, Adelaide.

––2014c, *Students and courses 2013*, NCVER, Adelaide.

––2015a, *Financial information 2014*, NCVER, Adelaide.

––2015b, *Government-funded students and courses 2014*, NCVER, Adelaide.

--2015c, *Total VET students and courses* 2014, NCVER, Adelaide.

--2015d, *Young people in education and training 2014*, NCVER, Adelaide.

--2015e, *VET in Schools 2014*, NCVER, Adelaide.

--2015f, *Apprentices and trainees 2014*, NCVER, Adelaide.

--2015g, *AVETMISS: the Standard for VET Financial Data*, NCVER, Adelaide.

NSW Government Office of State Revenue 2015, 'Apprentice and trainee wages', viewed 7 December 2015, <https://www.osr.nsw.gov.au/taxes/payroll/wages/apprentice>.

Noonan, P, Burke, G, Wade, A & Pilcher, S 2014, *Expenditure on education and training in Australia, analysis and background paper*, no 01/2014, Mitchell Institute, Victoria University, Melbourne.

Norton, A 2014a, *Doubtful debt, the rising cost of student loans*, Grattan Institute, Carlton, Victoria.

--2014b, *Mapping Australian higher education 2014–15*, Grattan Institute, Carlton, Victoria.

--2015, 'Submission on the operation of the VET FEE-HELP loan scheme to Senate Education and Employment References Committee Inquiry into the operation, regulation and funding of private vocational education and training (VET) providers in Australia', viewed May 2016, <http://grattan.edu.au/wp-content/uploads/2015/03/238_norton_submission_senate_inquiry.pdf>.

--2016, *HELP for the future: fairer repayment of student debt*, Grattan Institute, Carlton, Victoria.

OECD (Organisation for Economic Co-operation and Development) 1998, *Human capital investment: an international comparison*, Centre for Educational Research and Innovation, Paris.

--2015, *Education at a glance 2015*, OECD, Paris.

Parliamentary Budget Office 2016, *Higher Education Loan Program impact on the Budget*, report no.02/2016, viewed May 2016, <http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Budget_Office/research_reports/Higher_Education_Loan_Programme>.

Productivity Commission 2016, *Report on government services,* viewed May 2016, <http://www.pc.gov.au/research/ongoing/report-on-government-services/2016>.

Queensland Department of Education and Training 2015, *Vocational education and training in schools (VETiS*), viewed May 2016, <www.training.qld.gov.au/training-organisations/funded-programs/vetis.html>.

Ryan, C 2013, *Student income support and education and training participation in Australia*, Longitudinal Surveys of Australian Youth research report 62, NCVER, Adelaide.

Smith, A, Burke, G, Dumbrell, T & Long, M 2008, *Approaches to measuring and understanding employer training expenditure,* NCVER, Adelaide.

Tertiary Education Quality and Standards Agency 2016, *Key financial metrics on Australia's higher education sector: selected insights,* April 2016, viewed May 2016, <http://www.teqsa.gov.au/sites/default/files/publication-documents/KeyFinMetrics042016.pdf>.

Treasury 2015a, 'Portfolio Budget statements 2015–16, Budget related paper no.1.5, Education and Training Portfolio', viewed May 2016, <https://docs.education.gov.au/system/files/doc/other/education_and_training_portfolio_budget_statements_2015-16.pdf>.

--2015b, 'Portfolio Budget statements 2015–16, Budget related paper no.1.15a, Social Services Portfolio', viewed May 2016, <https://www.dss.gov.au/sites/default/files/documents/05_2015/2015-16_dss_pbs.pdf>.

--2015c, 'Tax expenditures statement 2014', viewed May 2016, <http://www.treasury.gov.au/PublicationsAndMedia/Publications/2015/TES-2014>.

--2016, 'Portfolio Budget statements 2016—17, Budget related paper no.1.5, Education and Training Portfolio', viewed June 2016, <https://docs.education.gov.au/system/files/doc/other/education_and_training_portfolio_budget_statements_2016-17_full.pdf>.

UK Commission for Employment and Skills 2014, *UK Commission's Employer Skills Survey 2013: UK results,* viewed May 2016, <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/327492/evidence-report-81-ukces-employer-skills-survey-13-full-report-final.pdf>.

UNESCO Institute for Statistics 2012, *International Standard Classification of Education ISCED 2011,* viewed May 2016, <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>.

--2016, *A roadmap to better data on education financing*, information paper no.27, Montreal.

Appendix A: OECD classification of educational expenditure

The following is extracted from the OECD's *Education at a glance* for 2015 (p.205).

Educational expenditure is classified through three dimensions:

The first dimension – represented by the horizontal axis in the diagram below – relates to the location where spending occurs. Spending on schools and universities, education ministries and other agencies directly involved in providing and supporting education is one component of this dimension. Spending on education outside these institutions is another.

The second dimension – represented by the vertical axis in the diagram below – classifies the goods and services that are purchased. Not all expenditure on educational institutions can be classified as direct educational or instructional expenditure. Educational institutions in many OECD countries offer various ancillary services – such as meals, transport, housing, etc. – in addition to teaching services to support students and their families. At the tertiary level, spending on research and development can be significant. Not all spending on educational goods and services occurs within educational institutions. For example, families may purchase textbooks and materials themselves or seek private tutoring for their children.

The third dimension – represented by the colours in the diagram below – distinguishes among the sources from which funding originates. These include the public sector and international agencies (indicated by light blue), and households and other private entities (indicated by medium-blue). Where private expenditure on education is subsidised by public funds, this is indicated by cells in the grey colour.

Table A1 OECD classification of educational expenditure

	Spending on educational institutions	**Spending on education outside educational institutions**
	(e.g. schools, universities, educational admin. and student welfare services)	*(e.g. private purchases of educational goods and services, including private tutoring)*
Spending on core educational services	e.g. public spending on instructional services in educational institutions	e.g. subsidised private spending on books
	e.g. subsidised private spending on instructional services in educational institutions	e.g. private spending on books and other school materials or private tutoring
	e.g. private spending on tuition fees	
Spending on research and development	e.g. public spending on university research	
	e.g. funds from private industry for research and development in educational institutions	
Spending on educational services other than instruction	e.g. public spending on ancillary services such as meals, transport to schools, or housing on the campus	e.g. subsidised private spending on student living costs or reduced prices for transport
	e.g. private spending on fees for ancillary services	e.g. private spending on student living costs or transport

Public sources of funds | Private sources of funds | Private sources publicly subsidised

Source: OECD (2015, p.205).

Appendix B: Notes on higher education and VET revenues

These notes list the major similarities and differences between the reporting of higher education and VET financial information:

- Higher education revenues and expenses from continuing operations for each individual public provider and Notre Dame are reported. (These institutions are referred to here as public universities.)

  VET income and expenses are reported at state and national levels but not for individual providers.

- Public grants to public universities are identified for several categories, including Australian Government capital funding and an aggregate figure for the very small state funding.

  In VET several categories of Australian Government grants and state grants, including capital funding, are identified. Additional funds from government received for government agencies for particular services are identified under 'Fee for Service'.

- The aggregate revenues for public universities are shown in Table B1 and such data are also published for each public university. The Tertiary Education Quality and Standards Agency has separately presented financial information relating to nearly all public and private providers but it has not identified them (2016).

  For VET the aggregate incomes of all public institutions are included and also the public funds paid to private providers.

- All student loan revenues received by the public universities are included: HECS-HELP, FEE-HELP and SA-HELP. VET FEE-HELP received by VET providers in dual-sector institutions is included. Loan funds are identified under the broad heading of Australian Government Financial Assistance. FEE-HELP received by private higher education providers is not included.

  For VET, VET FEE-HELP received by public providers is included under 'student fees and charges' but is not separately identified. VET FEE-HELP received by private VET providers is included in the VET Financial Information under 'Commonwealth Administered programs – Other' but not identified as such in the tables.

- For public universities, several categories of revenues from fees, including from overseas students, are identified. Fees paid by domestic students, in addition to the support from HECs-HELP, are shown as Upfront Student Contributions.

  For VET, student fees and charges are separately identified (as noted, the total includes any VET FEE-HELP at a public RTO). Overseas student fees and contracted overseas training are identified under Fee for Service, along with other fees.

- Substantial revenues are received as investment and consulting and other revenues by public universities.

  For VET, Ancillary Trading and Other income are identified.

Table B1 Revenue all publicly supported higher education providers, 2014 $ million

	All institutions	VET in dual -sector institutions
Australian Government Financial Assistance	**16 123**	**99**
Australian Government Grants	*11 284*	*62*
Commonwealth Grants Scheme and Other Grants	6 748	35
Scholarships	303	0
Education Research Grants	1 425	0
Capital funding	242	13
Australian Research Council	856	0
Other Australian Government Financial Assistance	1 710	15
HECS-HELP – Australian Government Payments	*3 947*	*0*
FEE-HELP – Australian Government Payments	*796*	*37*
SA-HELP – Australian Government Payments	*96*	*0*
State and Local Government Financial Assistance	**575**	**184**
Upfront Student Contributions	**565**	**0**
Fees and Charges	**6 342**	**150**
Continuing Education	120	12
Fee Paying Overseas Students	4 742	46
Fee Paying Non-Overseas Postgraduate Students	310	3
Fee Paying Non-Overseas Undergraduate Students	75	16
Fee Paying Non-Overseas Non-Award Students	49	3
Other Domestic Course Fees and Charges	181	47
Student Services and Amenities Fees	111	9
Other Fees and Charges	754	13
Investment Income	**1 061**	**3**
Royalties, Trademarks and Licenses	**121**	**0**
Consultancy and Contracts	**1 163**	**4**
Other Income	**1 802**	**150**
Total Revenues from Continuing Operations	**27 752**	**590**

Note: The treatment of HECS-HELP and FEE-HELP is outlined in Department of Education and Training (2015e, pp.4, 62−3).

Source: Department of Education and Training (2015b).

Appendix C: Formal, non-formal and informal learning

Table C1 gives the definitions of formal, non-formal and informal learning as used by the ABS (2010).

Table C1 Definitions of formal, non-formal and informal learning

ABS (2010)

Formal learning

Refers to learning which is structured, taught learning in institutions and organisations and leads to a recognised qualification issued by a relevant body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional, industry or community needs. A learning activity is formal if it leads to a learning achievement that is possible to position within the Australian Qualifications Framework (AQF) and includes workplace training if such training results in a qualification.

Non-formal learning

Learning which does not lead to a qualification within the AQF. It includes non-accredited workplace training, that is, training that does not lead to a recognised qualification.

Some examples of types of non-formal courses include:

- Adult education courses (e.g. introduction to computing)
- Hobby and recreation courses (e.g. ceramics, jewellery making, dancing)
- Personal enrichment courses (e.g. personal finance, sports instruction, public speaking)
- Work-related courses (e.g. manager development, job search training, induction courses)
- First aid courses
- Bridging courses
- Statements of attainment

Informal learning

Refers to unstructured, non-institutionalised learning activities that are related to work, family, community or leisure. Activities may occur on a self-directed basis, but are excluded from scope if there is no specific intention to learn.

UNESCO Institute for Statistics (2012)

Formal education

Education that is institutionalised, intentional and planned through public organizations and recognised private bodies and – in their totality – constitute the formal education system of a country. Formal education programmes are thus recognised as such by the relevant national education authorities or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. Formal education consists mostly of initial education. Vocational education, special needs education and some parts of adult education are often recognised as being part of the formal education system.

Non-formal education

Education that is institutionalised, intentional and planned by an education provider. The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all. It caters to people of all ages but does not necessarily apply a continuous pathway-structure; it may be short in duration and/or low-intensity, and it is typically provided in the form of short courses, workshops or seminars. Non-formal education mostly leads to qualifications that are not recognised as formal or equivalent to formal qualifications by the relevant national or sub-national education authorities or to no qualifications at all. Non-formal education can cover programmes contributing to adult and youth literacy and education for out-of- school children, as well as programmes on life skills, work skills, and social or cultural development.

Informal learning

Forms of learning that are intentional or deliberate but are not institutionalised. It is consequently less organized and structured than either formal or non-formal education. Informal learning may include learning activities that occur in the family, workplace, local community and daily life, on a self-directed, family-directed or socially-directed basis.

Appendix D: Comparability problems

Within Australia

A question facing policy-makers is the relative needs of the VET, higher education and schools sectors. The financial data currently available are not easily used for such an issue.

The *Government Finance Statistics: Education* (ABS 2015b), derived from the larger GFS, presents aggregate estimates of the government funding to both public and private providers for several levels of education. For public providers, it includes the 'sales of goods and services', which is principally the fees and charges of public institutions such as universities.

Table D1 illustrates the type of data provided, *by purpose*, and an indication of the degree of aggregation. The main purposes listed are Primary and secondary education, University education, Technical and further education, Pre-school and education not definable by level, Transportation of students; and Education nec (in which it records student assistance).

Table D1 Government finance statistics: education, all levels of government, Australia, 2008–09 to 2013–14

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14
	$m	*$m*	*$m*	*$m*	*$m*	*$m*
Operating expenses on education, by purpose						
Primary and secondary education	33 105	39 101	40 166	38 736	40 625	41 763
Tertiary education						
University education	17 460	18 276	19 830	20 714	22 291	22 792
Technical and further education	5 513	5 861	6 273	6 686	6 661	6 317
Tertiary education nec	68	78	91	47	64	76
Total tertiary education	*23 042*	*24 215*	*26 195*	*27 447*	*29 016*	*29 185*
Pre-school and education not definable by level	2 983	3 089	3 325	4 216	4 452	4 784
Transportation of students	1 326	1 352	1 381	1 401	1 354	1 547
Education nec	1 930	3 729	4 610	4 060	4 036	4 097
Total operating expenses on education, by purpose	**62 385**	**71 486**	**75 677**	**75 859**	**79 484**	**81 375**

Note: nec = not elsewhere classified.

Source: ABS (2015b).

Other tables in the dataset include the operating expenses *by economic transaction*: Employee expenses, Non-employee expenses, Depreciation, Current transfer expenses and Capital transfer expenses. But it does not publish these for the separate purpose groups — the education sectors. It does provide estimates by purpose of gross fixed capital formation

and sales of goods and services and provides estimates by jurisdiction and of the transfers from the Commonwealth to the states.

The great virtue of government finance statistics on education is that it applies the same concepts to each education sector and therefore we can expect a high degree of comparability. Noonan et al. (2014) used the dataset to compare the aggregate growth in government spending across the sectors in recent years. The data in table D4 show that pre-school and student assistance (Education nec) had the largest growth in the years from 2008 to 2009 and that Technical and further education had the least. With the known policy changes of recent years, this is quite plausible.

But the problem is that the data are so aggregated that we cannot drill down to see what lies behind the aggregate changes. It is probably for this reason that its use appears to be limited. To get more understanding of the elements of spending in the sectors we need to go to more detailed collections such as the NCVER's *Financial information* for the VET sector or the Department of Education and Training's collection for higher education and to the Australian Curriculum, Assessment and Reporting Authority for schools.

What is disconcerting for VET is that the aggregate total of expenditure estimated by NCVER is very much higher in both government outlays and in private income for public providers than that estimated by the ABS collection; for example, for 2013 the government funding in the NCVER collection is listed as $6.8 billion and other spending at $1.9 billion – a total of $8.7 billion. This can be compared with $5.3 billion and $1.4 billion for a total of $6.7 billion for 2012–13 in ABS. Clearly there are differences in scope in the two collections that are not obvious from an initial consideration of the definitions in both.[24]

International data

The very recent UNESCO publication on data on education financing (2016, p.15) stresses that data on a consistent and similar basis are needed if lessons might be drawn from international comparisons.

The major international presentation of financial data relating to education is contained in the OECD's *Education at a glance* for 2015. Unfortunately, the structure of Australia's VET system and the OECD's classification of students according to ISCED levels mean that the Australian data on VET are not separately identified within the school, post-secondary non-tertiary and tertiary data published by the OECD. The funding data is pro-rated according to the allocation of students. Even when we work at an aggregate level for the whole of education, there are differences in the levels of expenditure reported by the OECD and the ABS that are not easily reconciled. The Department of Education and Training supplies the Australian data to the OECD and it would be helpful if they provided a commentary on the OECD statistics to enable them to be used in conjunction with Australian databases.

24 A factor could be the inclusion in the NCVER collection of VET FEE-HELP paid to private providers as revenue from government when it is not included in ABS (2015b).

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