
B Education preface

Education is a lifelong activity, delivered both informally (for example, by family, by the community or at work) and formally by the education system (for example, by schools, technical and further education [TAFE] institutes, registered training providers and universities). The education sector has a range of objectives — some of which are common across all levels of education (for example, to increase knowledge) and others which are more specific to a particular level of education (for example, with vocational education and training [VET], to provide skills and knowledge directly related to work related competencies).

Both government and non-government providers deliver formal education services. Government education agencies include government primary and secondary schools, and TAFE institutes. Governments also fund services delivered by universities and non-government providers in the preschool, school and VET sectors.

The education section of this Report covers the performance of the school and VET sectors. Preschool programs, which provide a variety of educational and developmental experiences for children before full time schooling, are covered in the children's services chapter (chapter 14).

Areas of government involvement in education that are not covered in the following chapters include:

- universities (although some information is included in this preface);
- the transportation of students;
- income support payments for students; and
- adult and community education (except VET programs).

Factors external to the education sector — including other government services (such as health and community services) — influence education outcomes. These factors are not formally part of Australia's education system and are not covered in the following chapters, but are discussed in other sections of the Report. Indigenous status, socioeconomic status and geographic location are also potential influences on education outcomes. It is a priority of the Review to improve the reporting of

data for these factors in relation to the education outputs reported in the following chapters.

The remainder of this preface provides a systemwide picture of Australia's education system and its broad outcomes.

Profile of education

Roles and responsibilities

The roles and responsibilities of administering, funding and determining the objectives of the education sector encompass different levels of government and non-government authorities and stakeholders. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) coordinates strategic policy at the national level, develops national agreements on shared objectives and interests, and negotiates the scope and format of national reporting for the school sectors. Membership of MCEETYA includes Commonwealth, State and Territory ministers with responsibility for education, employment, training and youth affairs.

The Australian National Training Authority (ANTA) Ministerial Council is comprised of Australia's Commonwealth, State and Territory ministers with responsibility for vocational education and training. The ANTA Ministerial Council decides strategic policy, national objectives and priorities for the training system.

The Commonwealth Government's roles and responsibilities in providing education services include:

- providing funding to State and Territory governments and non-government schools to support agreed priorities and strategies;
- providing funding through the ANTA to States and Territories for the delivery of VET programs;
- being the primary funding source for, and provider of, related policy to the higher education sector; and
- providing financial assistance for students.

State and Territory governments' roles and responsibilities in providing education services include:

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- having constitutional responsibility for the provision of schooling to all children of school age;
 - administering and delivering VET and school education in government schools;
 - administering and funding TAFE institutes;
 - having regulatory responsibilities for both private and publicly provided VET programs, including the registration of training organisations and the accreditation of nationally recognised training;
 - being responsible for legislation relating to the establishment of universities and the accreditation of higher education courses by registered training organisations;
 - regulating non-government school activities and policies;
 - determining school curricula; regulating school activities and policies, course accreditation, student assessment and awards; having the major financial responsibility for government school education; and contributing funds to non-government schools;
 - funding VET programs; and
 - delivering schooling through non-government schools.

More detailed descriptions of the roles and responsibilities in the school and VET sectors can be found in the respective chapters 3 and 4.

Funding

Education is a major area of expenditure and activity. Total operating expenses for all governments in 1999-2000 were approximately \$34.0 billion, which was equivalent to 5.4 per cent of gross domestic product. Private final consumption expenditure on education in 1999-2000 was approximately \$8.8 billion, or 1.4 per cent of gross domestic product (GDP) (ABS 2001b).

Commonwealth Government operating expenses on education in 1999-2000 were \$10.3 billion, with \$7.8 billion (75.7 per cent) comprising grants to other levels of government. The next largest component of Commonwealth expenditure, current transfers to households amounted to \$1.8 billion (17.5 per cent). This expenditure included payment of income support payments for students. State and Territory (including local government) operating expenditure was \$23.2 billion for the same year. Multi-jurisdictional (university) operating expenses were \$8.7 billion. The inter-sector transfers, such as grants, were \$8.1 billion (table B.1).

Between 1998-99 and 1999-2000, the annual real growth rate of total government expenditure on education was 3.6 per cent. With the introduction of accrual accounting, the education expenditure series between 1998-99 and earlier years is not comparable.

Table B.1 Commonwealth, State and Territory (including local) government expenditure on primary, secondary and tertiary education (1999-2000\$ million)^a

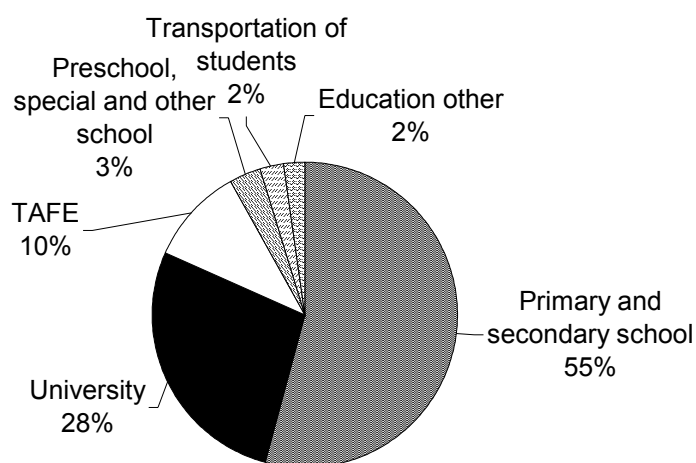
	1998-99 ^c	1999-2000	Annual real growth (%)
Commonwealth operating expenses	9 895	10 299	4.1
Transfers to other levels of government ^b	(7 364)	(7 787)	5.7
Commonwealth expenses after transfers	2 532	2 512	- 0.8
State and Territory (including local) operating expenses	22 268	23 225	4.3
Transfers to other levels of government ^b	(123)	(107)	- 13.0
State and territory (including local) expenses after transfers	22 145	23 118	4.4
Multi-jurisdictional (university) operating expenses	8 433	8 659	2.7
Transfers to other levels of government ^b	(249)	(254)	2.0
Multi-jurisdictional (university) expenses after transfers	8 184	8 405	2.7
Total operating expenses	32 861	34 035	3.6

^a Based on accrual operating expenses for education. ^b Payments between levels of government within the public sector. ^c Calculated using the GDP price deflator.

Source: ABS (2000a, 2001b).

In 1999-2000, schools accounted for the highest proportion of education expenditure (55 per cent), followed by universities (28 per cent) and TAFE (10 per cent) (figure B.1).

Figure B.1 **Total government expenditure on education, 1999-2000^{a, b}**



^a Based on accrual operating expenses for education. ^b 'Education other' includes 'tertiary other'.

Source: ABS (2001b).

The breakdown of State and Territory government expenditure across the education sector varied across jurisdictions in 1999-2000. The proportion of State and Territory expenditure allocated to total school education (including primary, secondary, preschool and special education) ranged from 86.6 per cent in Queensland to 74.5 per cent in the NT. The ACT had the highest proportion of expenditure on technical and further education (15.3 per cent) and the NT had the lowest (6.9 per cent). There was little difference between jurisdictions in the proportion of expenditure on university education, except in the NT, which had the highest proportion (7.4 per cent) (table B.2).

Table B.2 **State and Territory (including local) government expenditure, 1999-2000**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Total school ^a	%	78.9	76.2	86.6	84.0	84.7	84.2	79.7	74.5	80.7
Technical and further	%	15.2	14.3	10.3	13.3	14.1	12.3	15.3	6.9	13.6
University	%	0.1	0.5	0.2	–	–	0.3	1.5	7.4	0.4
Other Tertiary	%	–	0.6	–	0.6	–	–	–	3.6	0.3
Other ^b	%	5.8	8.4	2.8	2.1	1.3	3.3	3.3	7.4	5.1
Total	%	100	100	100	100	100	100	100	100	100
Total	\$m	7 458	5 657	4 125	2 494	1 936	676	459	420	23 225

^a Includes preschool, special and other school, and primary and secondary school. ^b Refers to transportation of students and education not elsewhere classified.

Source: ABS (2001b).

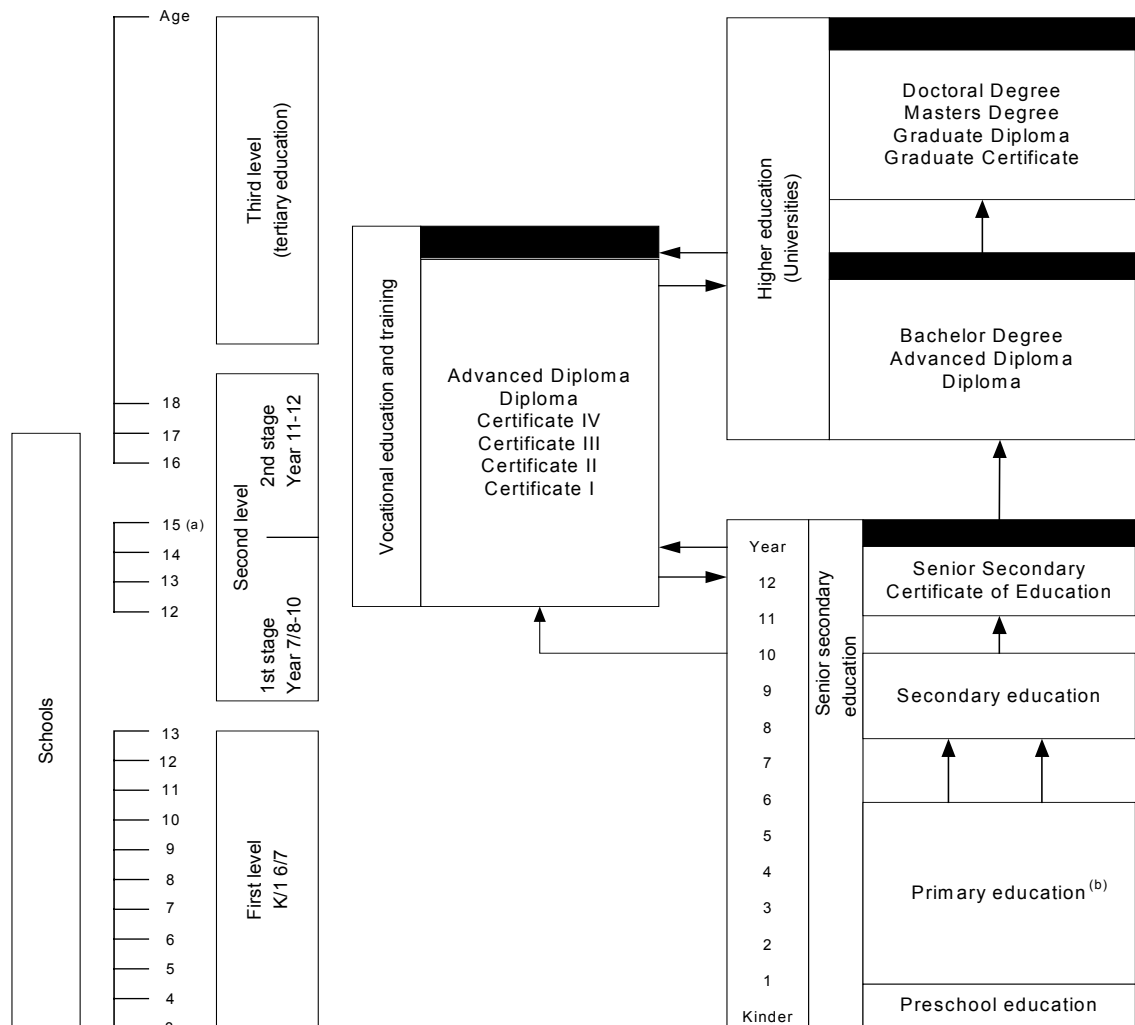
Size and scope

In 2000, approximately 5.6 million people participated in some form of formal education and training. Approximately 58.1 per cent of these people participated in school education, 29.5 per cent participated in VET and 12.4 per cent participated in university education (ABS 2001a).

In 2000, there were 9595 schools in Australia, including 6961 government schools (ABS 2001c). Vocational Education and Training programs were provided by 86 TAFE and other government institutions, 1139 community education providers and 3388 other registered training providers (NCVER 2001). There were 42 higher education institutions which received funds for operating purposes through the Commonwealth Department of Education, Training and Youth Affairs (DETYA). Most of these, plus two others, were eligible for funds for research purposes through DETYA. In addition, three other higher education institutions received funds for operating purposes through other portfolios.

Box B.1 illustrates the Australian education system, indicating the compulsory years of schooling and the range of pathways and options available to students. In addition to the arrangements outlined in box B.1, TAFE institutes and registered training providers deliver graduate certificates, graduate diplomas and undergraduate degrees.

Box B.1 Outline of the Australian education system



a End of compulsory schooling. **b** Year 7 is part of primary school in some States and Territories and part of secondary education in others.

Source: NOOSR (2000).

Australian Qualifications Framework

The Australian Qualifications Framework was developed to provide a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training. It was introduced in 1995 and was fully implemented by the end of 1999 (box B.2).

The framework encourages flexible learning pathways; for example, modules from VET certificates are able to be integrated with the senior secondary certificate, and

both VET and higher education diplomas, and advanced diplomas gain credit towards a bachelors degree. Equally the VET sector recognises some higher education qualifications.

Box B.2 Australian Qualifications Framework

This outline shows nominally the qualifications delivered in each sector, although qualifications may be delivered across sectors.

<i>School sector</i>	<i>Vocational education and training sector</i>	<i>Higher education sector</i>
		Doctorate
		Masters degree
		Graduate diploma
		Graduate certificate
		Bachelor degree
	Advanced diploma	Advanced diploma
	Diploma	Diploma
Senior Secondary	Certificate IV	
Certificate of Education	Certificate III	
	Certificate II	
	Certificate I	

^a The Australian Qualifications Framework Advisory Board members are discussing the relationship between the senior secondary certificate and VET qualifications.

Source: Australian Qualifications Framework Advisory Board (1998).

Expanded options for students

One of the major objectives of schooling is to provide students with general education, employment related skills, career options, and skills for further education and training. Since 1996, the ANTA Ministerial Council has allocated \$20.0 million of ANTA funds each year (for four years from 1997 to 2000) and a further \$20.0 million in 2001 to support VET in schools. This funding, together with Commonwealth, State and Territory funding, supports the delivery of VET programs as part of the senior secondary curriculum, including school based, part time New Apprenticeships. This program involves Commonwealth, State and Territory education and training departments and agencies, and the non-government schooling sectors working in partnership with industry.

Under the Australian Qualification Framework, VET certificates (mainly certificates I and II) may be achieved in schools and may contribute towards the

Senior Secondary Certificate of Education, resulting in a dual qualification. Approximately 153 616 students were enrolled in VET in schools programs in 2000, with over 90 per cent of schools that offered a senior secondary curriculum also offering VET. Enrolments were highest in tourism and hospitality programs (21.0 per cent). In 2000, approximately 53 per cent of students participating in VET in schools programs undertook workplace learning (MCEETYA 2001). By the end of 2000, nearly 6000 students were involved in a schools based New Apprenticeship.

Australia's post-school sectors (VET and higher education) have expanded in recent years. Both sectors offer courses at the diploma and advanced diploma level, and an evolving system of credit transfer arrangements between VET providers and universities has facilitated pathways for students from one sector to the other (box B.2).

The number of students in post-school vocational programs increased by 6.2 per cent between 1999 and 2000 to reach 1.75 million. The participation rate in VET was 28 per cent for people aged 15–19 years and 19 per cent for people aged 20–24 years (NCVER 2001).

Measuring the performance of the education system

Measuring the effectiveness and efficiency of the Australian education sector is a complex task. Individual performance indicator frameworks for the schools and VET sectors have been developed for the purposes of the Review, although there is significant interaction between the two sectors. Socioeconomic factors, geographic location, age, racial characteristics and the performance of other service sectors (particularly, the health and housing sectors) also contribute to an individual's overall education outcomes.

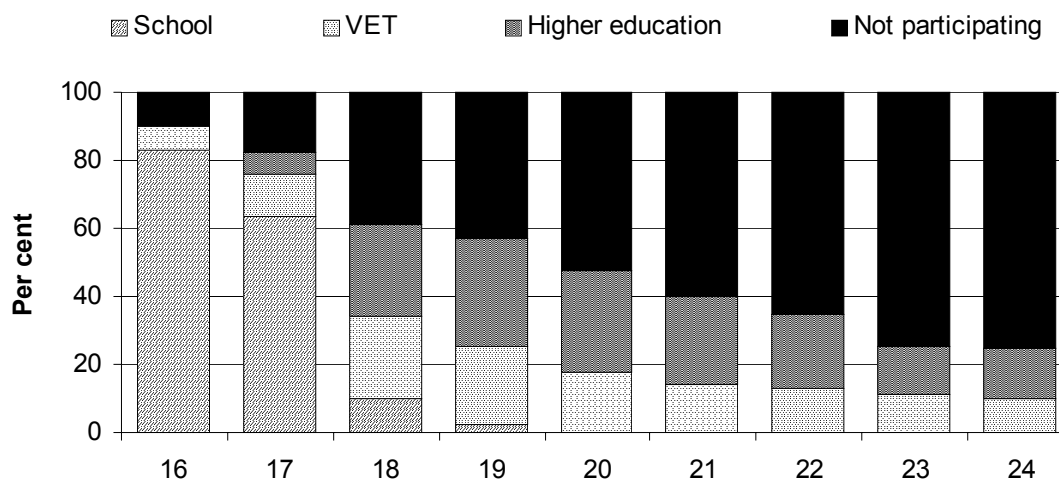
Effectiveness

Participation in education and training

Successive Australian governments have viewed education as a key means to improve economic and social outcomes and equity across all sections of society. They have sought, therefore, to increase rates of participation in education. In 2000, approximately 5.6 million people participated in some form of education and training. Participation in school education accounted for 3.3 million people, or 58.1 per cent of the total participants in formal education in that year.

Beyond the age of compulsory school education (16 years in Tasmania and 15 years in all other jurisdictions), the percentage of people participating in education and training declines. In 2000, participation was 61.4 per cent for 18 year olds and 24.6 per cent for 24 year olds (figure B.2).

Figure B.2 **Participation in education and training by people aged 16–24 years, by sector, 2000^{a, b, c, d}**



^a Participation in school for persons aged 20–24 years has a relative standard error greater than 50 per cent and is considered too unreliable for general use. ^b As defined under the Australian Bureau Statistics (ABS) Classification of Qualification. ^c Includes persons who never attended school. ^d Includes persons whose study was not intended to result in a recognised educational qualification.

Source: ABS (unpublished).

Progress towards Finn targets

In 1991, ministers responsible for VET set ‘Finn targets’ for the participation of young people in post-compulsory education and training (box B.3). The targets relate to national participation and qualification attainment for 19 and 22 year olds in schools, VET and higher education, and provide overall measures for the education sector (figure B.3).

The Australian National Training Authority has noted that progress for 19 and 22 year olds, while improving, is not yet in line with Finn targets. It projects, if the current participation and attainment trends continue for 19 and 22 year olds, that the achievement of the Finn target for these age groups by 2001 will not be reached (ANTA 2001).

Box B.3 Finn targets

By 2001, 95 per cent of 19 year olds will:

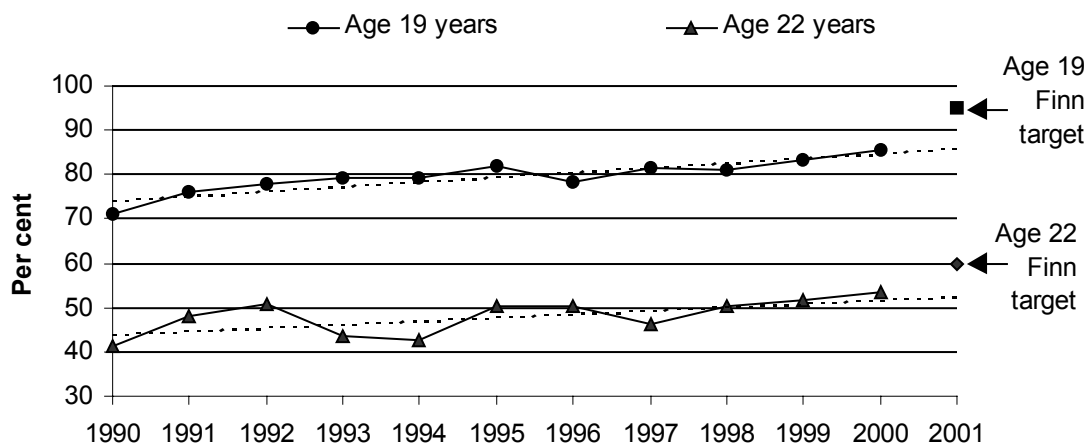
- be participating in, or have completed, year 12; or
- have completed years 10 or 11 and be participating in, or have completed, some formally recognised education and training.

By 2001, 60 per cent of 22 year olds will:

- be participating in education or training programs that lead to level 3 awards; or
- have attained level 3 or above qualifications; or
- be participating in, or have completed, higher education studies such as diplomas and degrees.

Source: ANTA (2001).

Figure B.3 Participation and qualifications attainment by 19 and 22 year olds in post-compulsory education^{a, b, c}



^a Targets for the participation of young people in post-compulsory education and training are also known as Finn targets. ^b The dotted lines show the trend. ^c The approach adopted to monitor Finn targets was revised in 1999. Some previous data used to measure attainment against the targets have been revised.

Source: ANTA (2001).

Enrolment in a post-school education and training institution

From 1996 through to 2000, the proportion of the population aged 15–64 years applying for enrolment in post-school education and training was fairly stable at 20.0 per cent, while 1.5 per cent deferred their studies. The number that applied to enrol but did not gain placements declined from 1999 to 2000 (table B.3).

Table B.3 Applications to enrol in a post-school education and training institution, by people aged 15–64 years ('000)^a

	1996	1997	1998	1999	2000
All persons studying in May that year	2 128.2	2 131.8	2 143.1	2 257.2	2 256.4
Gained placement but deferred study	199.3	182.5	176.2	188.0	185.4
Unable to gain placement	106.4	75.1	83.5	92.3	86.0
Total VET	67.3	44.0	47.7	59.2	53.4
TAFE institutes	48.3	35.3	35.2	45.8	40.5
Other VET ^b	19.0	8.7	12.5	13.4	12.9
Higher education	25.3	18.3	22.9	20.0	18.8
Study not for a recognised qualification	13.8	12.8	12.9	13.1	13.8
Applied to enrol for that year	2 433.9	2 389.3	2 402.8	2 537.5	2 527.8
Total population	12 042.1	12 187.0	12 340.9	12 482.6	12 652.7

^a Reasons for applicants not receiving a place in post-secondary education include: the course was full; the course was cancelled; they were not eligible/their entry score was too low; they applied too late; or other reasons. ^b Includes other educational institutions not separately listed.

Source: ABS (2000b).

School leaver destinations

Approximately 303 000 students left school in the year to May 2000 to work, to attend university or vocational training, or to undertake combinations of work and education. Of these students, 33.4 per cent were early school leavers. Higher education institutions attracted around 90 000 school leavers in 2000, or 29.6 per cent of all school leavers. Institutes of TAFE attracted 77 000 school leavers (25.3 per cent). Sixty nine per cent of year 12 leavers went on to post-school education and training, while 41.7 per cent of early school leavers went on to post school education and training (table B.4).

Table B.4 School leaver destination (15–25 year olds), May 2000^a

Type of institution attended in May 2000	Unit	Year 12 leavers			Early school leavers ^b			All school leavers		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Higher education	%	41.9	45.3	43.7	0.6	2.7	1.3	24.7	35.2	29.6
TAFE institutes	%	22.1	17.2	19.5	43.5	23.4	36.9	31.0	18.7	25.3
Other study ^c	%	3.6	8.0	5.9	2.0	6.7	3.5	2.9	7.7	5.1
Not attending	%	32.4	29.5	30.9	54.0	67.2	58.3	41.4	38.4	40.0
Total	'000	94.8	107.3	202.0	67.9	33.2	101.2	162.7	140.5	303.2

^a Comprises people who attended school in 1999 and were not attending school in May 2000. Includes those studying in May 2000 for non-recognised qualifications. ^b Those who left school earlier than year 12.

^c Includes business colleges, industry skills centres and other educational institutions.

Source: ABS (unpublished).

Skill profile of Australia

Another important objective of the education system is to improve the skill base of the economy. In turn, this may facilitate higher productivity growth by enhancing the country's overall ability to adapt to technological change. The education attainment of the labour force is used as an indicator for the skill profile of Australia.

There were 4.7 million people in the labour force aged 15–64 years with recognised post-school qualifications in 2000 (of whom 4.5 million were employed representing 51.1 per cent of employed people aged 15–64 years). In the labour force, 18.5 per cent of people had a higher degree, postgraduate diploma or bachelor degree as their highest qualification, 9.1 per cent had an undergraduate diploma or associate diploma, 13.4 per cent had a skilled vocational qualification and 8.8 per cent had a basic vocational qualification (ABS 2000b). Generally, a greater proportion of those with post-school qualifications at May 2000 were employed as managers, administrators and professionals (51.8 per cent), while a greater proportion of those without post-school qualifications were employed as clerical, sales and service workers (40.1 per cent) (table B.5).

Table B.5 Education attainment of employed persons aged 15–64 years, May 2000 ('000)^a

<i>Occupation in current job</i>	<i>Total with post-school qualifications</i>	<i>Total without post-school qualifications^b</i>	<i>Completion of highest level of secondary school</i>	<i>Non-completion of highest level of secondary school</i>	<i>Total^c</i>
Professional ^d	2 332.6	868.9	436.7	432.0	3 207.9
Trades people and related workers	772.2	411.8	133.0	278.2	1 187.6
Clerical, sales and service workers ^e	995.1	1 639.7	770.5	868.3	2 785.4
Intermediate production and transport workers	214.5	563.5	157.9	405.0	790.9
Labourers and related workers	191.4	605.9	167.1	437.4	852.6
Total	4 505.8	4 089.8	1 665.2	2 421.0	8 824.5

^a Educational attainment as defined under the ABS Classification of Qualifications. ^b Includes persons who never attended school. ^c Includes persons still at school. ^d Includes managers, administrators, professionals and associate professionals. ^e Includes advanced, intermediate and elementary clerical, sales and services workers.

Source: ABS (2000b).

International comparison of education levels

In 2000, the proportion of Australia's labour force (population aged 25–64 years) with a post-compulsory school qualification had increased by 4 percentage points (to 63 per cent) from the level reported in 1995 (59 per cent) (OECD 2001). Australia had a lower proportion of the labour force with a post-compulsory school qualification than that of many other industrialised countries in that year, such as France (67 per cent), Germany (85 per cent) and Denmark (83 per cent) (table B.6). The relative qualification level of a country's labour force does not directly reflect its relative skill base, because skills are acquired at different educational levels in different countries.

Table B.6 Highest completed level of education — international comparisons, 2000 (per cent of labour force aged 25–64 years)^a

	Post-compulsory school				
	Less than upper secondary	Upper secondary ^b	Non-university tertiary education ^c	University level education	Total post-compulsory school
Czech Republic	10	78	..	12	90
United States	10	51	9	30	90
United Kingdom	13	60	9	19	88
Norway	13	57	2	27	87
Germany	15	54	11	15	85
Canada	15	28	22	21	84
Switzerland	16	58	10	16	84
Denmark	16	54	22	7	83
Sweden	21	49	16	15	80
New Zealand	22	41	14	14	77
Finland	24	41	19	16	76
Netherlands	28	45	3	24	72
France	32	43	12	12	67
Australia	37	33	10	20	63
Italy	47	34	..	13	53
Portugal	77	12	3	8	23
Country mean^d	31	42	8	16	69

^a The differences in data definitions and variations in collection methods across countries needs to be noted when measuring the gap between Australia's skill base and that of other countries. ^b Includes vocational equivalents such as apprenticeships and traineeships. ^c Several definitional and data issues that may influence the ranking of countries include: the definition used for non-university tertiary (particularly for VET courses); the OECD education classification levels, which are based on UNESCO's International Standard Classification for Education (for example, primary education is defined as beginning at age 5, 6 or 7 years and lasting for four to six years); and variations in survey data (for example, Denmark's 24–64 year old group actually includes all ages). ^d The country mean includes the countries in the table plus the Republic of Korea, Austria, Belgium, Greece, Ireland, Luxembourg, Spain, Poland and Turkey. .. Not applicable or included within another column of this table.

Source: OECD (2001).

Efficiency

Comparing unit costs across jurisdictions

Comparing unit costs of a particular service for a specified outcome across jurisdictions can help to identify whether States or Territories have the scope to improve their performance. However, special characteristics within jurisdictions mean it would be hard for all jurisdictions to attain the same level of unit costs, while achieving similar outcomes. One way of better understanding how special circumstances may affect costs is to compare the variations in the unit costs across jurisdictions for services that have some similarities in outcomes, such as government school education and VET (table B.7). The greater variation in the unit costs of VET than in those of schools raises questions about the likely causes. Further analysis would be necessary to identify, for example, whether the effects of scale or dispersion are greater for VET than for schools, whether the mix of costly and inexpensive courses differs (although the ANTA has adjusted data on recurrent costs to allow for that difference), and whether the quality or efficiency of the services differs.

Table B.7 Education institution recurrent unit costs, 1999-2000^a

	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>AUST</i>
Government primary schools										
In-school cost per FTE student	\$	5 783	5 576	6 057	5 455	6 077	6 583	5 974	9 813	5 866
Difference from national average	%	-1.4	-4.9	3.3	-7.0	3.6	12.2	1.8	67.3	-
Government secondary schools										
In-school cost per FTE student	\$	7 805	7 306	7 691	7 722	8 135	7 501	8 097	13 568	7 729
Difference from national average	%	1.0	-5.5	-0.5	-0.1	5.3	-2.9	4.8	75.6	-
VET ^b										
Cost per adjusted annual curriculum hour ^c	\$	13.82	9.51	15.15	12.84	12.20	14.99	13.64	20.67	12.68
Difference from national average	%	8.9	-25.0	19.4	1.2	-3.8	18.1	7.5	62.9	-

^a Based on accrual data. ^b Vocational education and training data are based on 2000 calendar year.

^c Includes payroll tax estimates for the ACT. FTE = full time equivalent

Sources: chapters 3 and 4.

Unit cost differences across education sectors should be used for further analysis rather than interpreted in isolation from other performance indicators such as

outcomes and outputs (chapters 3 and 4). Further, comparing the performance of education sectors requires a cross-sectoral approach to measuring and classifying educational participation and attainment, and such a system does not yet exist in Australia.

The Australian Bureau of Statistics (ABS) has been partly addressing this issue by reviewing its Classification of Qualifications and developing an Australian Standard Classification of Education that covers all education sectors and can be used in both administrative systems and surveys. This classification was expected to be finalised by early 2000 and introduced into the ABS statistical collections from 2001. In addition, the development of a conceptual framework for education and training statistics is planned following the establishment of a National Centre for Education and Training Statistics.