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## B Education preface

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

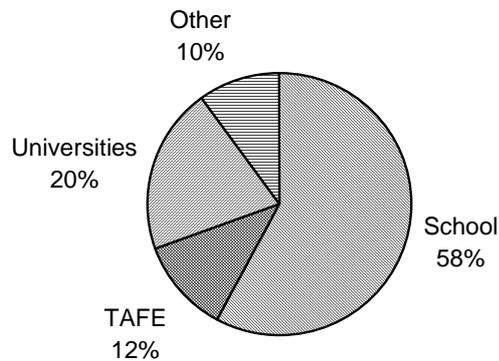
Formal education services are delivered through both government and non-government agencies. Government education agencies include government primary and secondary schools, TAFE institutes and universities. Governments also fund services delivered by non-government providers in the school and VET sectors. Performance indicators for all of these education services (except universities) are included in this Report. Preschool programs, which provide a variety of educational and developmental experiences for children before full time schooling, are included within children's services (see chapter 11).

### **Profile of education**

About 30 per cent of Australians (or 5.3 million persons) were engaged in some form of full time or part time education in 1997. The majority of these students were at school (60 per cent) although significant numbers studied at universities (13 per cent). Approximately 27 per cent of these students undertook VET programs at secondary schools, TAFE institutes or universities.

Education is a major area of government expenditure and activity, and it is of significant social and economic importance to Australia. Government expenditure (current and capital) on education amounted to approximately 4.8 per cent of gross domestic product or approximately \$24 billion in 1996-97; schools received the highest proportion of education expenditure (58 per cent) followed by universities (20 per cent) and TAFE institutes (12 per cent). Other education services not elsewhere classified (such as student transportation) accounted for 10 per cent (figure **B.1**).

**Figure B.2 Total government expenditure on education, 1996-97**



Data source: ABS (1998).

The breakdown of government expenditure between the education sectors varied across jurisdictions in 1996-97. WA (76.8 per cent) had the highest proportion of primary and secondary school education expenditure while NSW (16.2 per cent) had the highest TAFE expenditure (table B.1).

**Table B.2 Estimated Commonwealth, State and Local government expenditure on education, 1996-97<sup>a</sup>**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Cwlth	Aust <sup>b</sup>
Preschool and other special education	%	6.5	6.6	8.9	6.3	7.4	4.7	na	7.6	1.3	5.6
Primary and secondary education	%	71.4	72.1	76.4	76.8	76.5	73.3	na	69.3	10.1	57.7
Technical and further education	%	16.2	13.4	11.0	14.1	13.4	14.1	na	6.7	5.3	11.9
University education	%	0.0	4.0	0.7	0.0	0.1	0.8	na	8.2 <sup>c</sup>	78.8	20.5
Tertiary education (not elsewhere classified)	%	0.0	0.0	0.0	0.0	0.1	0.0	na	6.1 <sup>d</sup>	1.3	0.4
Other <sup>e</sup>	%	5.8	4.0	3.0	2.7	2.6	7.1	na	2.0	3.2	4.0
<b>Total</b>	<b>\$m</b>	<b>6 134</b>	<b>4 090</b>	<b>3 294</b>	<b>1 859</b>	<b>1 434</b>	<b>509</b>	<b>na</b>	<b>342</b>	<b>6439</b>	<b>24 480</b>

<sup>a</sup> State and Territory Government data included Commonwealth Government grants. <sup>b</sup> Total expenditure for Australia included estimates for the ACT. <sup>c</sup> This figure is substantially overstated because the NT University is also a major VET provider. <sup>d</sup> This figure is overstated due to misclassification of expenditures between the TAFE and Tertiary education n.e.c categories. Incorrect classification of expenditures can be attributed to the fact that tertiary institutions in the NT provide a combination of higher education and VET courses. <sup>e</sup> Other included transportation of students and education services not elsewhere classified. **na** Not available.

Source: ABS (1998).

## Increasing options for students

There has been an increasing convergence of general and vocational education in the senior secondary school curriculum, to provide school leavers with a greater number of pathways for work and further learning. Within the Australian Qualification Framework, the school sector and the VET sector both offer certificate level qualifications (box **B.1**). This has enabled schools to provide Dual Award Courses which combine school and VET studies and recognise the achievement with an award from both sectors. Approximately 73 000 students attending secondary school in 1997 were undertaking some kind of VET course or module (NCVER 1998).

Australia's tertiary education sectors (VET and higher education) have also become more integrated in recent years. Both offer courses at the diploma and advanced diploma level, and an evolving system of credit transfers between VET providers and universities has facilitated the flow of students from one sector to the other (box **B.2**). Around 12 000 TAFE students were admitted to university bachelor courses in 1996, and 52 000 university graduates were enrolled in a TAFE module in that year, for example (HRSCEET 1998).

### Box B.3 Choices of educational setting

Both the school and the VET sectors offer courses at certificate levels 1 and 2. The VET and higher education sectors both offer diploma and advanced diploma courses.

#### Australian Qualification Framework

<i>School sector</i>	<i>VET 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 of Education	Certificate 4	
Senior Secondary Certificate of Education	Certificate 3	
Senior Secondary Certificate of Education	Certificate 2	
Senior Secondary Certificate of Education	Certificate 1	

Source: Australian Qualification Framework Advisory Board (1998).

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## Participation in education

Successive Australian governments have viewed education as a valuable service that can improve economic and social outcomes and improve equity across all sections of society. Thus, they have sought to improve rates of participation in education.

However, not all applicants achieved a place in post-secondary education in 1997 — around 75 000 people (3.1 per cent) of 2.4 million applicants were not accepted for entry into a post-school education and training program. Fewer people missed out on gaining a place in post-school education in 1997 than in 1995 (table **B.3**).

Table B.4 **Unmet demand for post-school education and training, 1995–97 (persons)<sup>a</sup>**

	1995	1996	1997
TAFE	60 700	48 300	35 300
Other VET	13 600	13 800	12 800
Total VET	74 300	62 100	48 100
Higher education	28 700	25 300	18 300
Other education institutions	13 700	19 000	8 700
<b>Total</b>	<b>116 700</b>	<b>106 400</b>	<b>75 100</b>

<sup>a</sup> There were 4 reasons why applicants did not achieve a place in post-secondary education: the course was full; the course was cancelled; they were not eligible/their entry score was too low; or they applied too late.

Source: ABS (1997b).

The Ministerial Council on Education, Employment, Training and Youth Affairs agreed in 1995 to monitor participation in post-compulsory education and training using ‘Finn targets’ (box B.2). The targets relate to national participation and qualification attainment for 19–22 year olds in schools, VET and higher education, and indicate overall outcomes for the education sector (figure **B.3**).

### Box B.4 **Finn targets**

By 2001, 95 per cent of 19 year olds:

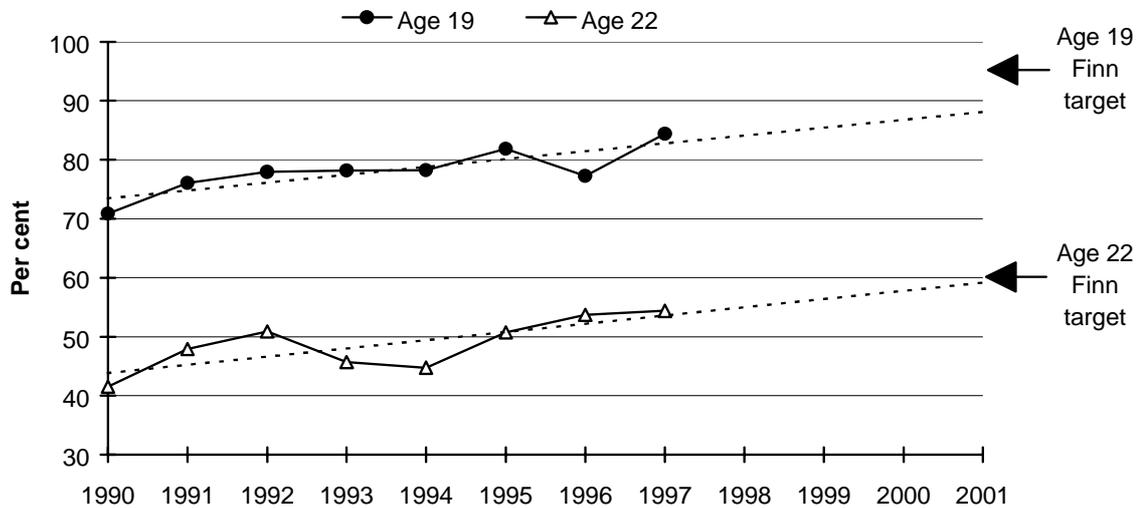
- will be participating in, or have completed, year 12; or
- will have completed years 10 or 11 and be participating in, or have completed, some formally recognised education and training.

By 2001, 60 per cent of 22 year olds:

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

Source: MCEETYA

Figure B.4 Participation and qualification attainment by young people in post-compulsory education — time series



Data source: ANTA (1998).

## Skill profile of Australia

In addition to improving social outcomes, an important objective of education and training 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. In this context, the literacy level and general level of education (qualification) of a society are important determinants of growth and improved living standards.

### Literacy levels

The Australian Bureau of Statistics conducted a national literacy survey (ABS 1997a) designed to assess the literacy skills of people aged 15 years and over. The test ranked literacy skills on a scale from 1 to 5 (higher numbers representing higher skill levels).

About half the adults responding to the ABS survey had a low level (that is, skill level 1 or 2) of literacy skills. However, the skill level varied across jurisdictions: the ACT reported the highest literacy skill level (with 68 per cent of respondents at level 3 or higher) and Tasmania reported the lowest (with 48 per cent of respondents at level 3 or higher) (table B.5).

**Table B.6 Literacy skill level of persons aged 15–74 years, 1996 (per cent)<sup>a</sup>**

<i>Literacy skill level</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>
1	22	22	16	16	17	20	12	12 <sup>b</sup>	19
2	28	26	29	29	27	31	20	28	28
3	35	35	37	36	36	35	40	40	36
4–5	15	17	18	19	19	13	28	20	17

<sup>a</sup> The levels represent a continuum of how well people were able to interpret and use material printed in English for each of the three types of literacy (prose, document and quantitative material). Progression along the continuum was characterised by increased ability to process information (for example, to locate, match and generate information) and to draw correct inferences from the information being used. <sup>b</sup> Sampling variability was too high for comparisons for most practical purposes.

Source: ABS (1997a).

## International comparison of education levels

Fifty-nine per cent of the Australian workforce (population aged 25–64 years) held a post-compulsory school qualification in 1997. This was lower than the proportion in many other industrialised countries such as France (75 per cent), Germany (88 per cent) and Denmark (67 per cent) (table **B.7**). However, the relative qualification level of a country's workforce does not directly reflect its relative skill base, because skills are acquired at different educational levels in different countries.

## Comparing unit costs across jurisdictions

Comparing unit costs of a particular service across jurisdictions can help to identify if States or Territories have scope to improve their performance. However, special characteristics within jurisdictions tend to mean that it would be hard for all jurisdictions to attain the same level of unit costs.

One way of better understanding how special circumstances may affect costs is to compare the variations in unit costs across jurisdictions for services that have some similarities, such as government school education and VET (table **B.8**). The greater variation in unit costs of VET than of schools raises interesting 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 Australian National Training Authority has made some adjustments to data on recurrent costs to allow for that), whether the quality of the services differs more, or whether the results suggest efficiency differences.

**Table B.9 Highest completed level of education — international comparisons, 1997 (per cent of labour force aged 25–64)**

	<i>Post-compulsory school</i>				<i>Total post-compulsory school</i>
	<i>Less than upper secondary</i>	<i>Upper secondary<sup>a</sup></i>	<i>Non-university tertiary education<sup>b</sup></i>	<i>University level education</i>	
United States	11	52	9	28	89
Germany	12	62	11	15	88
Czech Republic	12	76	na	12	88
Norway	15	53	12	20	85
Switzerland	15	61	14	10	85
United Kingdom	19	57	10	14	81
Canada	19	29	32	19	80
Sweden	24	47	14	15	76
France	25	54	9	12	75
Netherlands	31	43	..	27	70
Finland	30	47	10	13	70
Denmark	33	44	7	16	67
New Zealand	36	37	16	12	65
<b>Australia</b>	<b>42</b>	<b>31</b>	<b>12</b>	<b>16</b>	<b>59</b>
Italy	56	33	.. <sup>c</sup>	11	44
Portugal	76	10	4	9	23
<b>Country mean<sup>d</sup></b>	<b>35</b>	<b>42</b>	<b>10</b>	<b>15</b>	<b>67</b>

<sup>a</sup> Includes vocational equivalents, such as apprenticeships and traineeships. <sup>b</sup> Several definitional and data issues which 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 and lasting for four to six years); and variations in survey data (for example, Denmark's 24 to 64 age group actually includes all ages). <sup>c</sup> Data are included in another column of the table. <sup>d</sup> The country mean includes the countries in the table plus South Korea, Austria, Belgium, Greece, Ireland, Luxembourg, Spain, Poland and Turkey. **na** Not available. **..** Not applicable.

Source: ANTA (1998).

Unit cost differences across education sectors should be used as a basis for further analysis rather than interpreted in isolation of other performance indicators such as outcomes and outputs (see chapters 2 and 3). Further, comparing the performance of education sectors requires a comprehensive national system for classifying educational participation and attainment, which does not yet exist in Australia. The Australian Bureau of Statistics is addressing this issue in a review of its Classification of Qualifications and the development of an Australian Standard Classification of Education.

**Table B.10 Education institution unit costs (dollar and percentage differences), 1997-98**

<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>
<i>Government primary schools</i>									
In-school cost per full time student	\$ 4 563	4 510	5 008	4 554	4 734	4 971	5 362	6 458	4 704
• Difference from lowest cost State	% 1.2	<sup>a</sup>	11.0	1.0	5.0	10.2	18.9	43.2	4.3
<i>Government secondary Schools</i>									
In-school cost per full time student	\$ 6 492	6 448	6 309	7 191	6 948	6 247	7 101	9 563	6 578
• Difference from lowest cost State	% 3.9	3.2	0.9	15.1	11.2	<sup>a</sup>	13.7	53.1	5.3
<i>VET</i>									
Cost per adjusted module load completion rate	\$ 17.7	13.2	15.9	17.6	18.3	22.4	21.4	41.2	16.6
• Difference from lowest cost State	% 34.1	<sup>a</sup>	20.5	33.3	38.6	69.7	62.1	212.1	25.8
Cost per adjusted annual curriculum hours	\$ 12.0	8.9	11.7	12.4	12.8	14.6	15.6	26.5	11.4
• Difference from lowest cost State	% 34.8	<sup>a</sup>	31.5	39.3	43.8	64.0	75.3	197.8	28.1

<sup>a</sup> Lowest cost State.

Sources: chapters 2 and 3.