
B Education preface

Education is a lifelong activity, delivered both informally (for example, by family, through the community or at work) and formally through the three sectors that comprise Australia's education and training system (school education, vocational education and training (VET) and higher education sectors). Australia's formal system of education and training has a range of objectives, some of which are common across all sectors of education (for example, to increase knowledge) while others are more specific to a particular sector. The objectives of the school education sector, as reflected in the national goals for schooling (box 3.1), include a focus on developing the capacities and talents of all young people so they have the necessary knowledge, understanding, skills and values for a productive and rewarding life. The objectives of the VET sector, as reflected in the National Strategy for VET 1998–2003 (box 4.3), include a focus on equipping Australians for the world of work, enhancing labour mobility and achieving equitable outcomes within VET. The objectives of the higher education sector, as reflected in the *Higher Education Report for the 2003–2005 Triennium*, include advancing and applying knowledge and understanding to benefit the Australian economy and society.

Australian, State and Territory governments provide funding to government and non-government providers to deliver formal education and training services within each of the three education and training sectors. Government providers include government schools (preschool, primary and secondary), technical and further education (TAFE) institutes and universities. Non-government providers include privately operated schools and preschools, and private registered training organisations (RTOs) in the VET sector.

Chapters 3 and 4 cover the performance of the school education and VET sectors. Preschool programs, which provide a variety of educational and developmental experiences for children before full time schooling, are covered in chapter 14. Comparisons between the government and non-government school systems are included.

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
 - adult community education (except VET programs).

Australia's services provided by other government agencies (such as health, housing and community services) influence education outcomes but are not formally part of Australia's education and training system. These services are not covered in the following chapters on school education and VET chapters, but they are discussed in other chapters of the Report.

Indigenous status, language and cultural background, disability status, socioeconomic status, gender and geographic location are also factors that potentially influence educational outcomes. It is a priority of the Review to improve the reporting of data to better assess the influence of these factors on the educational outputs and outcomes reported.

The remainder of this preface provides an overview of Australia's education and training system and its broad outcomes.

Profile of education

Roles and responsibilities

Different levels of government and non-government authorities and stakeholders carry out the roles and responsibilities of administering, funding and determining the objectives of the school education sector. 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 on the performance of government and non-government schools. Membership of MCEETYA includes Australian, State and Territory ministers and the New Zealand minister with responsibility for education, employment, training and youth affairs.

The Australian National Training Authority Ministerial Council (ANTA MINCO) comprises the Australian, State and Territory ministers with responsibility for VET. The ANTA MINCO determines strategic policy and sets national objectives and priorities for the VET sector. It is also responsible for approving funding for State and Territory training systems based on the performance of the jurisdictions in meeting specific service delivery targets negotiated under the ANTA agreement.

The Australian Government's roles and responsibilities in delivering education services include:

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

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

- having constitutional responsibility for the provision of schooling to all children of school age
- having the major financial responsibility for government school education, and contributing funds to non-government schools
- regulating both government and non-government school activities and policies
- determining school curricula, course accreditation, student assessment and student awards for both government and non-government schools
- administering and delivering VET and school education in government schools
- administering and funding TAFE institutes for the delivery of VET programs and services
- funding other RTOs for the delivery of VET programs and services, including community education providers and private providers
- regulating the delivery of VET services, including conducting quality audits, coordinating the registration of training organisations and managing the accreditation of nationally recognised education and training programs
- being responsible for legislation relating to the establishment of universities and the accreditation of higher education courses.

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

Funding

Education and training is a major area of expenditure and activity for Australian, State and Territory governments. Total government operating expenses for all

governments for the three education and training sectors (school education, VET and higher education) were \$37.5 billion (table B.1) in 2001-02, which was equivalent to 5.2 per cent of gross domestic product (GDP). Private household final consumption expenditure on education in 2001-02 was approximately \$10.0 billion, or 1.4 per cent of GDP (ABS 2003a).

Australian Government operating expenses for the three education and training sectors in 2001-02 were \$11.7 billion, with \$10.6 billion (91.0 per cent) comprising grants to other levels of government. State, Territory and local government operating expenditure was \$27.1 billion for the same year. Multijurisdictional (university) operating expenses were \$9.8 billion. The inter-sector transfers, such as grants, were \$11.1 billion (table B.1).

Table B.1 Real Australian, State and Territory (including local) government expenditure on education (2001-02 \$ million)^a

	1999-2000 ^c	2000-01 ^c	2001-02	Average annual real growth (%)
Transfers to other levels of government ^b	(9 973)	(10 143)	(10 645)	3.3
Australian Government operating expenses	10 739	11 161	11 701	4.4
Australian Government expenses less transfers	766	1 018	1 056	18.4
Transfers to other levels of government ^b	(152)	(123)	(125)	-8.6
State and Territory (including local) operating expenses	25 032	25 789	27 068	4.0
State and territory (including local) expenses less transfers	24 880	25 666	26 943	4.1
Transfers to other levels of government ^b	(269)	(255)	(258)	-2.0
Multijurisdictional (university) operating expenses	9 322	9 427	9 806	2.6
Multijurisdictional (university) expenses less transfers	9 053	9 172	9 548	2.7
Total intra-sector transfers	(10 393)	(10 522)	(11 029)	3.0
Total Australia operating expenses	45 093	46 376	48 578	3.8
Total operating expenses net of transfers	34 698	35 856	37 546	4.0

^a Based on accrual operating expenses for education. ^b Payments between levels of government within the public sector. ^c The Australian Bureau of Statistics (ABS) provided nominal figures. Real expenditure was calculated from these figures based on the ABS GDP price deflator 2001-02 = 100 (table A.26).

Source: ABS (2003a); ABS Public Finance Statistics (unpublished).

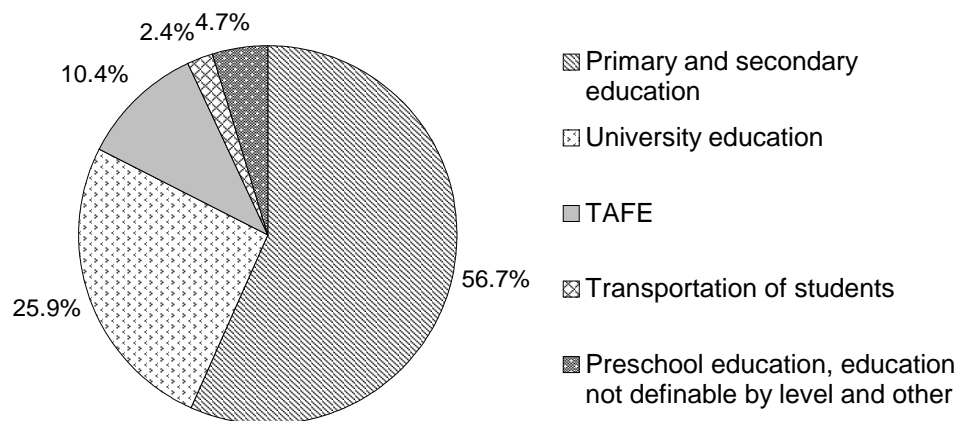
Between 1999-2000 and 2001-02, the average annual real growth rate of total government expenditure on education was 3.8 per cent. With the introduction of

accrual accounting, the education expenditure data between 1999-2000 and earlier years included in previous reports are not comparable.

In 2001-02, schools accounted for the highest proportion of the \$37.5 billion government expenditure on education and training (56.7 per cent), followed by universities (25.9 per cent) and TAFE institutes (10.4 per cent) (ABS 2003a, table B.1, figure B.1). Non-government schools received the highest proportion of Australian Government recurrent funding, accounting for 67.0 per cent of total Australian Government specific purpose payments to schools (table 3A.5). State and Territory governments provided 91.2 per cent of recurrent funding for government schools (table 3A.8). The Australian Government spent an average of \$3583 per student in non-government schools and an average of \$887 per student in government schools in 2001-02 (table 3A.5).

The breakdown of State and Territory government expenditure across the education and training system varied across jurisdictions in 2001-02. The proportion of State, Territory and local government expenditure allocated to total school education (including primary, secondary, preschool and education not definable by level, and other) ranged from 89.1 per cent in Queensland to 78.6 per cent in the NT. The highest proportion of expenditure on TAFE was in the NT (16.7 per cent) and the lowest proportion was in Queensland (10.1 per cent). There was little difference across jurisdictions in the proportion of expenditure on university education, except in the ACT, which had the highest proportion (2.1 per cent) and the NT, which had no expenditure (table B.2).

Figure B.1 **Total government expenditure on education, 2001-02^{a, b, c}**



^a Totals may not add to 100 as a result of rounding. ^b Based on accrual operating expenses for education. ^c Other includes tertiary other.

Source: ABS (2003a).

Table B.2 State, Territory and local government expenditure, 2001-02

	<i>Unit</i>	<i>NSW^a</i>	<i>Vic^b</i>	<i>Qld</i>	<i>WA^c</i>	<i>SA</i>	<i>Tas^d</i>	<i>ACT</i>	<i>NT</i>	<i>Total</i>
Preschool, not definable by level and other ^e	%	6.4	7.5	11.2	5.9	8.6	3.3	5.3	11.5	7.7
Primary and secondary	%	79.6	76.7	77.9	77.0	76.0	84.1	80.2	67.1	77.9
TAFE	%	14.0	15.3	10.1	16.5	14.8	12.3	12.4	16.7	13.9
University	%	–	0.6	0.8	0.6	0.6	0.3	2.1	–	0.4
Other tertiary	%	–	–	–	–	–	–	–	4.5	0.1
Total	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	\$m	8 643	6 747	5 054	2 743	2 226	724	474	462	27 070

^a Most expenditure for preschools in NSW is contained in other budget areas and not included in this table. NSW 'primary and secondary' expenditure includes: some special education expenditure for preschool students; all special education expenditure for school students; and higher education expenditure.

^b Expenditure for preschools in Victoria is contained in other budget areas and is not included in this table.

^c Special education expenditure for WA is included under 'primary and secondary'. ^d Expenditure for preschools and special education in Tasmania is included under 'primary and secondary'.

^e Except where footnotes indicate otherwise, includes expenditure for preschools, special education and other education not definable by level (including transportation of students and education not elsewhere classified). The latter is defined as: adult education courses that are essentially nonvocational, other than those offered by TAFE institutes; migrant education programs; and other educational programs not definable by level. – Nil or rounded to zero.

Source: ABS (2003a).

Size and scope

In 2002, 3.3 million full time school students were attending 9632 schools in Australia, including 6969 government schools (ABS 2003b). Over 1.6 million VET students undertook vocational programs delivered by providers in receipt of public funding allocations for VET. These programs were delivered in 85 public training institutions and associated major campuses, 894 training centres by community education providers and 5402 training locations by other registered providers (ANTA 2003; NCVER 2003). There were 896 621 higher education students, whose courses were delivered by 40 universities, four self-accrediting higher education institutions and approximately 120 other higher education providers accredited by State and Territory educational authorities in 2003. Forty-three of these higher education institutions were eligible for Australian operating grants, with 38 being universities. Thirty-nine universities and three other institutions were eligible for research funds through the Department of Education, Science and Training (ABS 2003d; DEST unpublished).

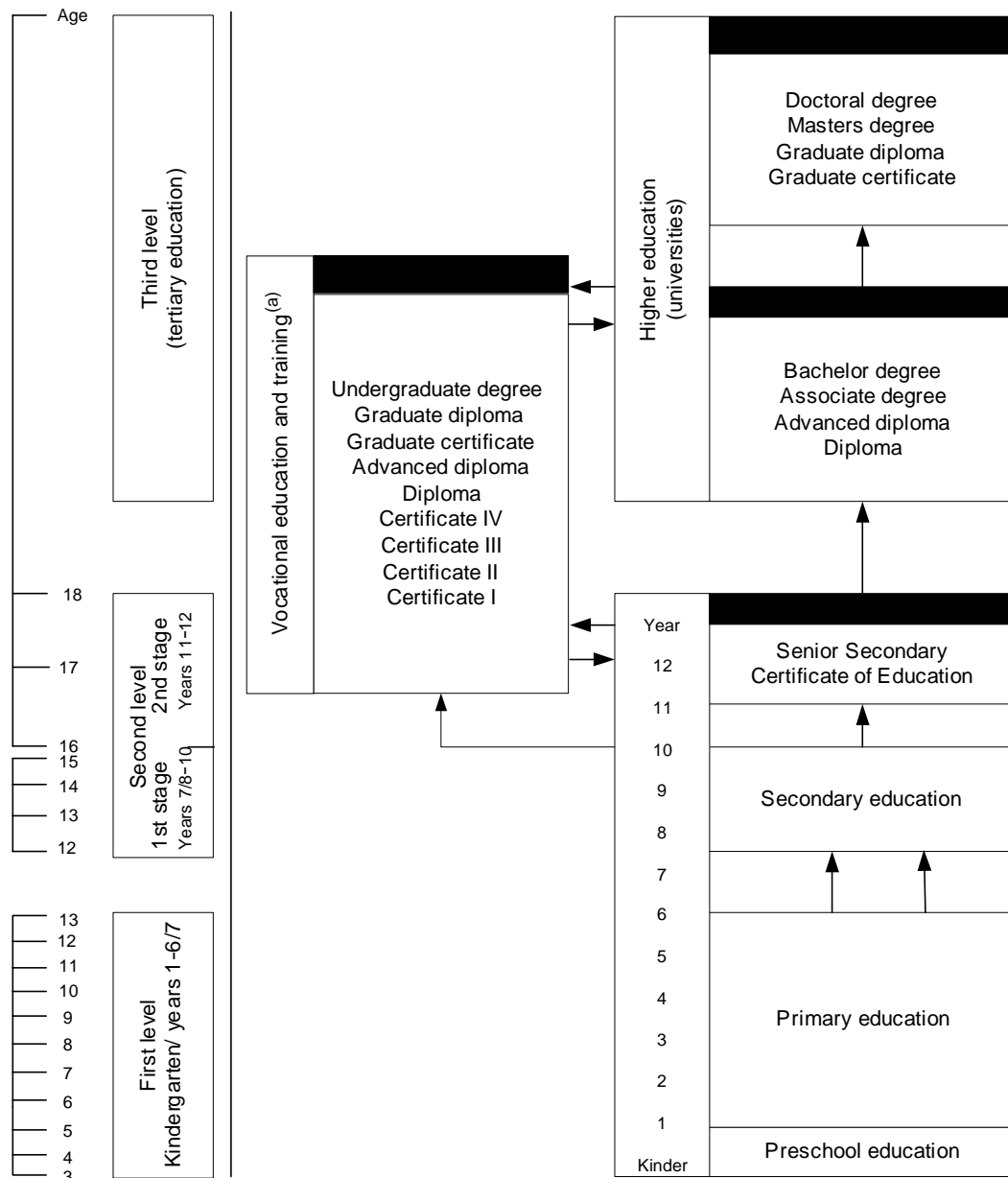
Learning pathways

Box B.1 illustrates the Australian education and training system, indicating the compulsory years of schooling (until 16 years of age in Tasmania and 15 years of age in all other jurisdictions), and the range of pathways and the options available to students in post-compulsory education and training. The Australian Qualifications Framework (AQF) was developed to provide a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training. It was introduced in 1995 and fully implemented by the end of 1999. The AQF encourages flexible learning pathways. Modules from VET certificates, for example, can be integrated with senior secondary certificates, and both VET diplomas and higher education diplomas can gain credit towards a bachelors degree. Similarly, the VET sector recognises some higher education qualifications.

Under the AQF, 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 185 000 students were enrolled in VET in schools programs in 2002, an increase of 9.3 per cent from 2001. This represents a rise from approximately 16 per cent of senior secondary students undertaking VET within their senior secondary certificate in 1996 to 44 per cent in 2002. These VET programs were offered by 1996 schools, or 95.2 per cent of all schools offering senior secondary programs. Enrolments were highest in tourism and hospitality programs, which accounted for 19.7 per cent of all enrolments (MCEETYA unpublished).

In 2002, 60.6 per cent of students participating in VET in schools programs undertook workplace learning. By the end of 2002, nearly 7639 students were involved in a school-based New Apprenticeship, an increase of approximately 32 per cent from 2001 (MCEETYA unpublished). Care needs to be taken in interpreting these data, because data definitions across States and Territories are not yet consistent.

Box B.1 Outline of the Australian education and training system^{a, b}



^a Undergraduate degrees, graduate diplomas and graduate certificates are not offered within the VET system in all jurisdictions. ^b Providers deliver qualifications in more than one sector. Schools, for example, are delivering certificates I–II, universities are delivering certificates II–IV, and VET providers are delivering graduate certificates and graduate diplomas (higher education qualifications in some jurisdictions, but in others also VET), all subject to meeting the relevant quality assurance requirements.

Source: Based on NOOSR (2000).

Role and purpose of VET

The main focus of the VET system is to provide individuals with skills that are needed for employment. The emphasis is on the development of work-related competencies through training that leads to nationally recognised skills and qualifications. Training is delivered in classrooms, workplaces and online. These skills prepare individuals for employment at the technical, trade and professional level, in addition to providing access to general education and literacy programs.

The Australian VET system includes both publicly and privately funded training, delivered by a wide range of institutions and enterprises that are formally registered and periodically audited against established quality standards. Cooperative arrangements between governments, industry partners, community groups and training providers are fostered and promoted.

Measuring the performance of the education and training system

Measuring the effectiveness and efficiency of the Australian education and training system is a complex task. Individual performance indicator frameworks for the school education and VET sectors have been developed for the Review, but there is significant interaction between the two sectors, and between these sectors and the university sector. Socioeconomic factors, geographic location, age, Indigenous status, language background and the performance of other government agencies (particularly health, housing and community services) also influence educational outcomes.

Effectiveness

Participation in education and training

Successive Australian governments have viewed education as a key means to improve economic and social outcomes, as well as to improve the equity of outcomes in society. They have sought, therefore, to increase estimated rates of participation in education and training (estimated participation rates are hereafter referred to as ‘participation rates’).

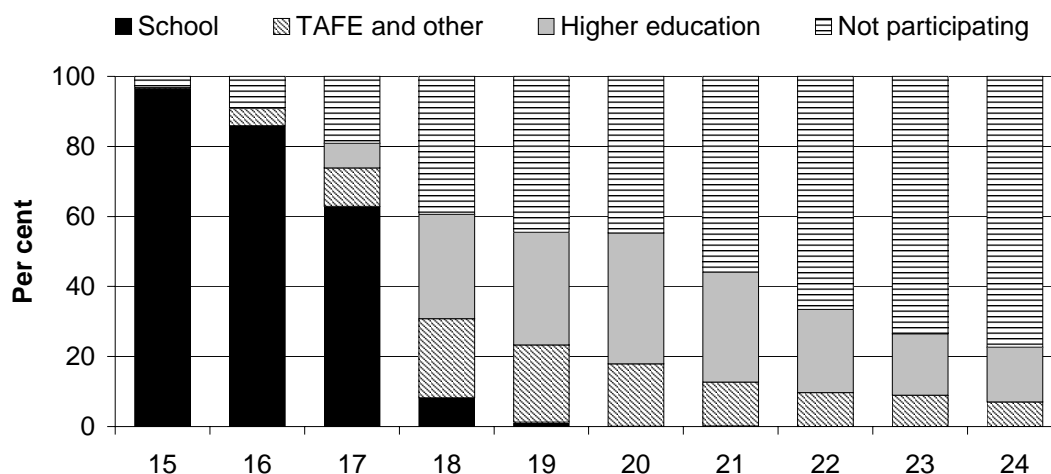
The education and training participation rates quoted in this section are estimates of the proportion of the population in a given age group who were participating in school, TAFE, higher education or some other form of recognised vocational education and training in May each year. These estimates are derived from

unpublished data from the annual Australian Bureau of Statistics (ABS) survey of Education and Work. The precision of estimates referring to small subgroups of the Australian population are potentially restricted by sample size, so jurisdictional comparisons need to be made with care.

To assist with making comparisons between jurisdictions, 95 per cent confidence intervals are presented below the estimates in each participation rate table. Confidence intervals are a standard way of expressing the degree of sampling and measurement error associated with the survey estimates. An estimate of 80 with a confidence interval of ± 2 , for example, means that if the total population had been surveyed rather than a sample, or had another sample been drawn, there is a 95 per cent chance that the result would lie between 78–82. The participation rate for a jurisdiction, therefore, can be thought of in terms of a range. If one jurisdiction's rate ranges from 78–82 and another's from 77–81, then it is not possible to say with confidence that one differs from the other (because there is unlikely to be a statistically significant difference). Where ranges do not overlap, there is a high likelihood that there is a statistically significant difference. To say that there is a statistically significant difference means there is a high probability that there is an actual difference; it does not imply that the difference is necessarily large or important.

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 2002, the participation rate was 96.8 for 15 year olds, 80.9 per cent for 17 year olds, 55.5 per cent for 19 year olds and 22.6 per cent for 24 year olds (figure B.2).

Figure B.2 **Participation in education and training by people aged 15–24 years, by sector, 2002^a**

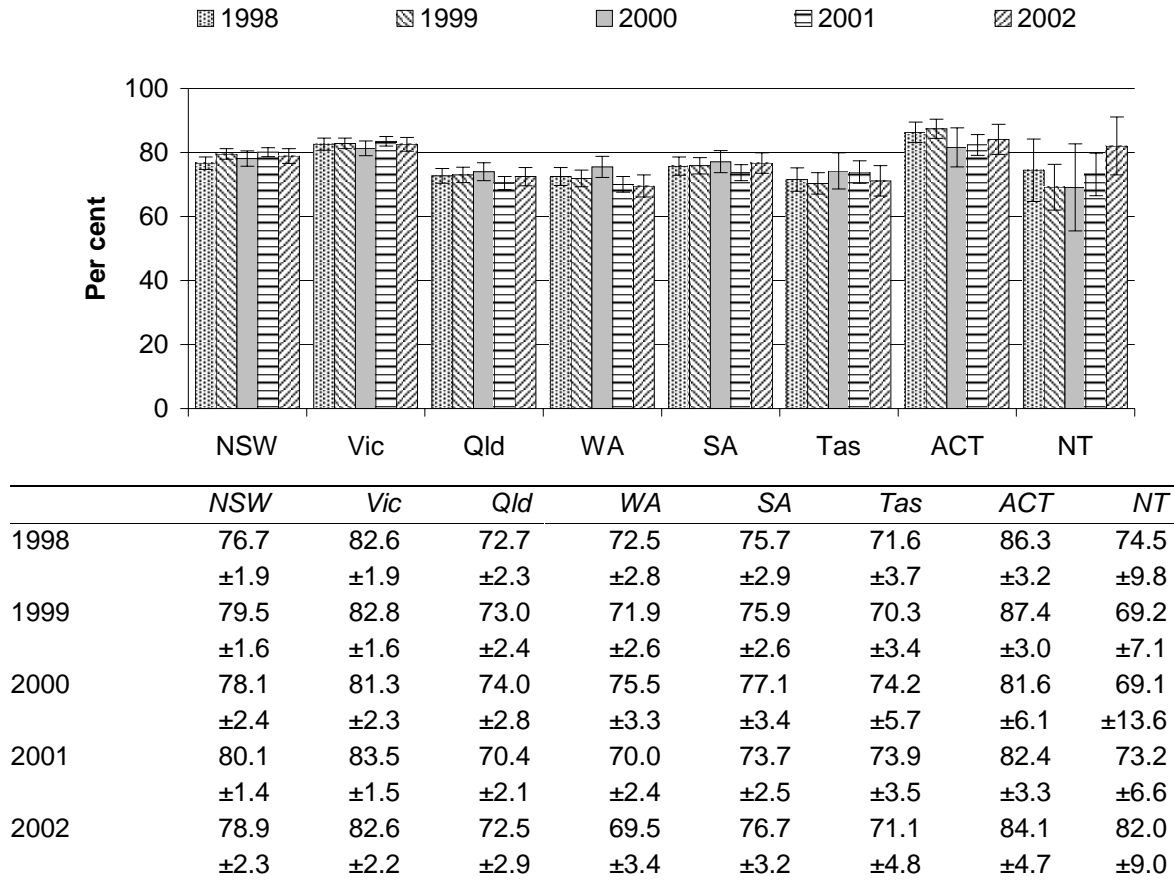


^a 'Other' includes all education or training participation at institutions other than schools, higher education institutions and TAFE institutes.

Source: ABS survey of Education and Work (unpublished).

The rate of participation in education and training for 15–19 year olds was highest in the ACT (84.1 per cent) and lowest in WA (69.5 per cent) in 2002. The participation rate for 15–19 year olds over time was relatively constant within jurisdictions, except in the NT, where participation increased (figure B.3). Participation rates for school education are reported in chapter 3.

Figure B.3 Participation in education and training by people aged 15–19 years^a

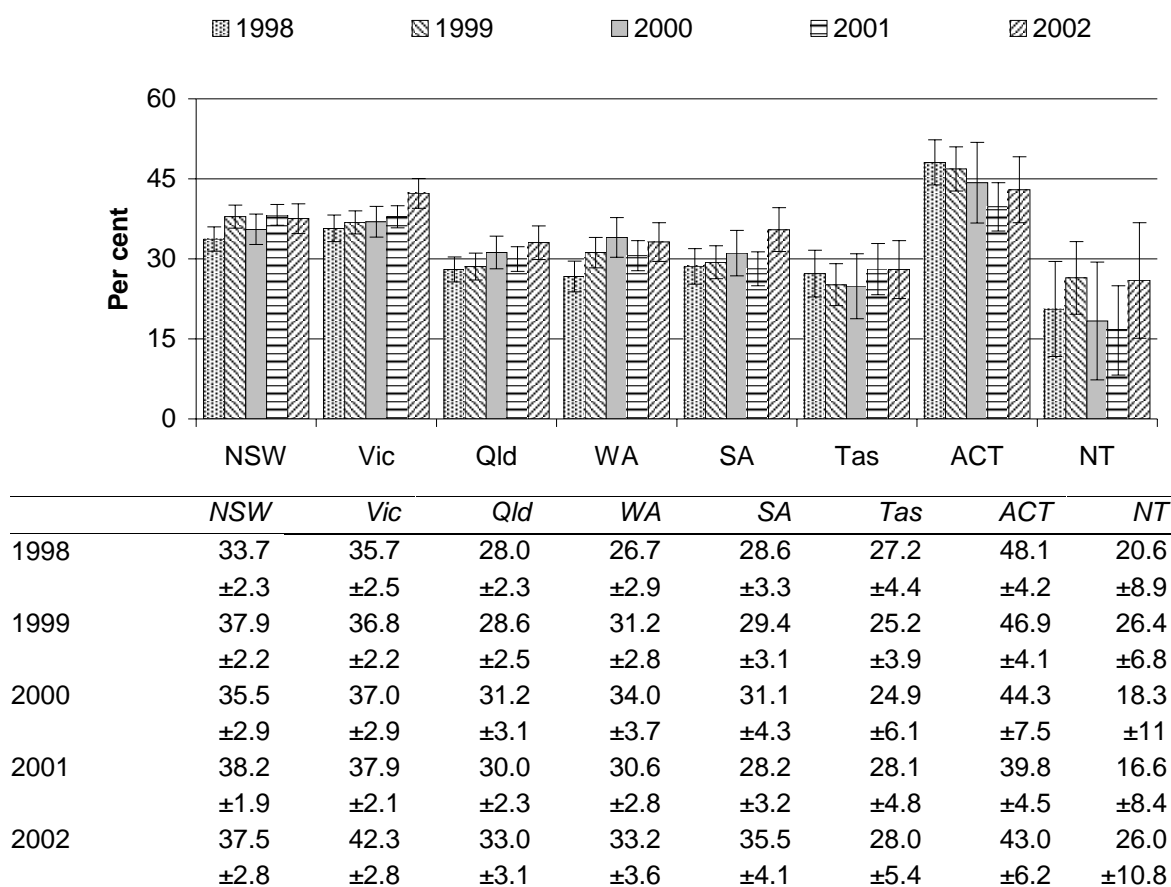


^a Error bars represent the 95 per cent confidence interval associated with each point estimate.

Source: ABS survey of Education and Work and survey of Transition from Education and Work (unpublished).

The participation rate for 20–24 year olds was highest in the ACT (43.0 per cent) and lowest in the NT (26.0 per cent) in 2002. The participation rate for 20–24 year olds over time was relatively constant within NSW and Tasmania between 1998 and 2002, and increased in all other jurisdictions (figure B.4).

Figure B.4 **Participation in education and training by people aged 20–24 years^a**



^a Error bars represent the 95 per cent confidence interval associated with each point estimate.

Source: ABS survey of Education and Work and survey of Transition from Education and Work (unpublished).

Participation in education, training and work

Research undertaken by bodies such as the Dusseldorp Skills Forum and the Australian Council for Educational Research has indicated that young people who are not participating full time in education, training, work or some combination of these activities are more likely to have difficulty in making a transition to full time employment by their mid-twenties. A full time participation measure has been developed to monitor the proportion of the population that is at risk of marginal participation (or nonparticipation) in the labour market. Young people are counted as participating full time if they are engaged in full time education or training, full time work, or a combination of both part time education or training and part time work.

Table B.3 shows that full time participation rates decline from age 15 years through to age 18 years in most jurisdictions, and remain stable from age 18 years through

to age 24 years. The full time participation rate for 15–24 year olds in 2002 was highest in the ACT (87.9 per cent) and lowest in Tasmania (73.4 per cent).

Table B.3 Full time participation rates, 2002 (per cent)^{a, b}

Age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
15	98.4	98.4	95.6	97.6	97.2	98.9	100.0	100.0	97.7
95 per cent CI	±1.7	±1.8	±3.1	±2.8	±3.4	±2.7	±1.0
16	95.0	96.8	92.9	87.8	91.0	93.0	98.3	94.4	93.9
95 per cent CI	±2.8	±2.6	±4.2	±6.0	±5.9	±6.7	±3.2	±8.8	±1.6
17	89.9	94.0	78.0	82.9	93.2	88.0	93.3	81.0	88.0
95 per cent CI	±4.0	±3.6	±6.4	±6.7	±5.2	±8.3	±6.2	±16.9	±2.2
18	75.8	79.4	80.3	73.3	73.2	67.8	81.2	93.6	77.1
95 per cent CI	±5.7	±6.0	±6.2	±8.5	±8.9	±13.3	±9.6	±14.6	±2.9
19	81.5	83.1	76.3	73.4	70.7	75.2	87.9	91.2	79.2
95 per cent CI	±5.1	±5.2	±6.5	±8.1	±9.3	±12.3	±8.1	±18.9	±2.7
20	81.4	85.2	79.2	73.8	71.5	64.4	84.1	58.8	80.0
95 per cent CI	±4.9	±5.2	±6.3	±8.0	±9.3	±14.9	±9.8	±36.2	±2.7
21	77.5	82.7	74.6	77.5	75.4	56.2	89.9	78.6	77.9
95 per cent CI	±5.3	±5.3	±6.8	±8.0	±9.0	±14.7	±8.9	±17.3	±2.8
22	79.9	79.0	76.9	74.6	79.9	67.9	86.0	89.0	78.5
95 per cent CI	±5.3	±5.6	±6.7	±7.9	±8.4	±14.6	±9.7	±17.8	±2.8
23	74.7	83.5	73.2	77.4	76.3	58.2	85.2	91.9	77.1
95 per cent CI	±5.7	±5.3	±6.9	±7.6	±8.9	±15.0	±10.7	±12.8	±2.9
24	75.7	73.5	67.5	71.8	67.5	54.3	77.1	74.3	72.2
95 per cent CI	±5.8	±6.1	±7.4	±8.6	±10.0	±15.3	±11.4	±17.9	±3.1
15–24	82.9	85.2	79.4	78.9	79.6	73.4	87.9	86.1	82.1
95 per cent CI	±1.3	±1.3	±1.7	±2.0	±2.1	±3.2	±2.6	±5.1	±0.7

^a 95 per cent confidence interval (CI) refers to the 95 per cent CI associated with each point estimate. ^b Full time participation is defined as participation in full time education or training or full time work, or a combination of both part time education or training and part time work. .. Not applicable.

Source: ABS survey of Education and Work (unpublished).

School leaver destinations

Approximately 290 600 students left school in the year to May 2002 to work, attend university or VET institutions, or undertake combinations of work and education. Of these students, 28.4 per cent were early school leavers. Males were more likely to be early school leavers, making up 57.9 per cent of the total. Higher education institutions attracted around 94 100 school leavers in 2002, or 32.4 per cent of all school leavers. Institutes of TAFE attracted 61 300 school leavers (21.1 per cent). While 67.8 per cent of year 12 leavers went on to post-school education and training, only 31.0 per cent of early school leavers undertook any further study (table B.4).

Table B.4 School leaver destination (15–24 year olds), 2002^a

Type of institution attended in May 2002	Unit	Year 12 leavers			Early school leavers ^b			All school leavers		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Higher education ^c	%	45.3	44.8	45.0	0.6	0.3	0.5	31.2	33.7	32.4
TAFE institutes	%	20.0	17.6	18.8	34.5	16.4	26.9	24.6	17.3	21.1
Other study ^{d, e}	%	2.0	5.9	4.0	2.3	5.5	3.6	2.1	5.8	3.9
Not attending	%	32.6	31.7	32.2	62.3	78.2	69.0	42.1	43.2	42.6
Total ^f	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	'000	103.6	104.4	208.0	47.8	34.8	82.6	151.3	139.2	290.6

^a Data for people who attended school in 2001 and were not attending school in May 2002. ^b Those who left school earlier than year 12. ^c The estimates for male and female early school leavers have a relative standard error of greater than 50 per cent and are considered too unreliable for general use. ^d Includes business colleges, industry skills centres and other educational institutions. ^e The estimates of male and female year 12 leavers, and male, female and total early school leavers have relative standard errors of 25–50 per cent and need to be used with caution. ^f Totals may not add as a result of rounding.

Source: ABS survey of Education and Work (unpublished).

Education enrolment experience

Nationally, approximately 2.6 million people aged 15–64 years applied to enrol in an educational institution in 2002. Of the people who applied to enrol, 2.4 million (91.8 per cent) were studying in 2002, while 5.1 per cent deferred study and 3.0 per cent were unable to gain placement (table B.5).

Table B.5 Applications to enrol in an educational institution, by people aged 15–64 years

	Unit	1998	1999	2000	2001	2002
Applied to enrol						
Studying in May	%	89.2	89.0	89.3	90.5	91.8
Gained placement but deferred study	%	7.3	7.4	7.3	6.4	5.1
Unable to gain placement ^a	%	3.5	3.6	3.4	3.1	3.0
Study would lead to an educational qualification	%	2.9	3.1	2.9	2.6	2.7
TAFE	%	1.5	1.8	1.6	1.4	1.5
Other ^b	%	0.5	0.5	0.5	0.4	0.3
Higher education	%	1.0	0.8	0.7	0.8	0.9
Study would not lead to a recognised qualification	%	0.5	0.5	0.5	0.5	0.3
Total applied to enrol	'000	2 402.8	2 537.5	2 527.8	2 552.9	2 603.2
Did not apply to enrol	'000	9 938.1	9 945.1	10 124.9	10 235.4	10 323.6
Total^c	'000	12 340.9	12 482.6	12 652.7	12 788.3	12 926.8

^a Reasons included: the course was full; the course was cancelled; the applicant was not eligible/entry score was too low; the applicant applied too late; or other reasons. ^b Includes other educational institutions not separately listed. ^c Totals may not add as a result of rounding.

Source: ABS (1999, 2000a, 2001b, 2002b, 2003c).

Educational attainment in Australia

An important objective of the education system is to improve the skill base of the population, with the benefit of improving worker productivity and facilitating economic growth and employment. Educational attainment of the labour force is used as a proxy indicator for the stock of skills. It understates the skill base, however, because it does not capture skills acquired through partially completed courses or courses not leading to a formal qualification.

There were 5.3 million people aged 15–64 years whose level of highest educational attainment was a nonschool qualification in 2002. Of this group, 43.4 per cent had a postgraduate degree, graduate diploma/graduate certificate or bachelor degree as their highest level of educational attainment. Of the 7.5 million people in this age group without nonschool qualifications, 34.1 per cent had completed the highest level of secondary school (ABS 2003c).

There were 4.4 million employed people whose level of highest educational attainment was a nonschool qualification in 2002, representing 48.3 per cent of employed people aged 15–64 years (ABS 2003c). People with a bachelor or higher degree were more likely to be employed (85.5 per cent), while people who did not complete secondary school were the least likely (56.5 per cent) (table B.6).

Table B.6 Level of highest educational attainment of people aged 15-64 years, by labour force status, 2002^{a, b}

Labour force status	Unit	Bachelor degree or higher	Advanced diploma/ diploma	Certificate III or IV	Certificate I, II or NFD	Year 12	Year 11 or below	Total ^c
Employed	%	85.5	78.5	83.1	61.8	71.1	56.5	70.3
Unemployed	%	2.4	4.0	3.6	8.4	5.4	6.2	4.8
Not in labour force	%	12.1	17.6	13.3	29.8	23.6	37.3	24.9
Total ^d	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	'000	2 296.1	949.4	1 911.1	129.7	2 565.7	4 954.0	12 806.0

NFD = not further defined. ^a At May. ^b School year level estimates include some people with certificate I and II qualifications. ^c Includes people who never attended school and people whose level of highest educational attainment could not be determined. ^d Totals may not add as a result of rounding.

Source: ABS (2003c); ABS survey of Education and Work (unpublished).

People employed as professionals were most likely to have completed a bachelor or higher degree as their level of highest educational attainment in 2002 (69.7 per cent), while the level of highest educational attainment for the majority of tradespeople and related workers was a certificate III or IV (56.1 per cent). People employed as clerical sales and service workers, intermediate production and transport workers, and labourers and related workers were most likely to have year 12 or below as their highest level of educational attainment (table B.7).

Table B.7 Level of highest educational attainment of employed persons aged 15–64 years, by occupation, 2002^{a, b}

<i>Occupation in current job</i>	<i>Bachelor degree or higher</i>	<i>Advanced diploma/ diploma</i>	<i>Certificate III or IV</i>	<i>Certificate I, II or NFD</i>	<i>Year 12</i>	<i>Year 11 or below</i>	<i>Total</i>	<i>Total^c</i>
	%	%	%	%	%	%	%	'000
Managers and administrators	31.4	10.1	16.6	0.7	15.7	25.6	100.0	660.6
Professionals	69.7	13.0	4.6	0.1	7.8	4.8	100.0	1699.5
Associate professionals	20.7	12.7	18.4	0.9	23.3	24.0	100.0	1065.4
Trades people and related workers	2.8	4.1	56.1	0.8	12.1	24.2	100.0	1162.6
Advanced clerical, sales and service workers	11.9	10.6	8.9	1.1	26.6	40.8	100.0	394.9
Intermediate clerical, sales and service workers	10.9	8.9	12.3	1.5	30.6	35.8	100.0	1557.9
Intermediate production and transport workers	2.6	3.0	19.0	0.9	19.0	55.5	100.0	775.8
Elementary clerical, sales and service workers	5.8	5.0	7.9	1.2	32.9	47.3	100.0	916.0
Labourers and related workers	3.4	3.2	12.7	1.1	20.2	59.5	100.0	833.0
Total	21.7	8.2	17.5	0.9	20.1	31.6	100.0	9065.7

NFD = not further defined. ^a At May. ^b School year level estimates include some people with Certificate I and II qualifications. ^c Includes people who never attended school and people whose level of highest educational attainment could not be determined.

Source: ABS (2003c); ABS survey of Education and Work (unpublished).

Efficiency

Comparing unit costs across jurisdictions

Comparing the unit costs of providing a particular service across jurisdictions can help to identify whether States or Territories have scope to improve their efficiency. Special characteristics within jurisdictions, however, mean it would be difficult for all jurisdictions to attain the same level of unit costs while achieving similar outcomes. One way of better understanding how special characteristics may affect costs is to compare the variations in the unit costs across jurisdictions for services that aim to achieve similar outcomes, such as government school education and VET (table B.8). The greater jurisdictional variation in the unit costs of VET

compared with those in 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, or whether the quality of the services or the efficiency of service provision differs more.

Table B.8 Education institution recurrent unit costs, 2001-02^{a, b, c}

	<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 FTE student ^d	\$	7 857	6 835	7 418	7 651	7 695	7 763	7 545	12 492	7 561
Difference from national average	%	3.9	-9.6	-1.9	1.2	1.8	2.7	-0.2	65.2	–
<i>Government secondary schools</i>										
In-school cost per FTE student ^d	\$	10 199	9 174	9 330	10 307	10 134	9 497	10 775	17 770	9 856
Difference from national average	%	3.5	-6.9	-5.3	4.6	2.8	-3.6	9.3	80.3	–
<i>VET^e</i>										
Cost per adjusted annual curriculum hour	\$	13.57	11.16	13.77	14.31	13.89	14.00	13.69	22.59	13.14
Difference from national average	%	3.3	-15.1	4.8	8.9	5.7	6.6	4.2	71.9	–

FTE = Full time equivalent. ^a Based on accrual data. ^b A notional user cost of capital based on 8 per cent of 'total written down value of capital assets as at 30 June 2002' is applied to all jurisdictions. ^c Schools data include payroll tax estimates for WA and the ACT; VET data include payroll tax estimates for the ACT to achieve greater comparability across jurisdictions. ^d Schools data are total government expenditure on government schools divided by average FTE student population in 2001 and 2002. ^e VET data are based on the 2002 calendar year. – Nil or rounded to zero.

Source: tables 3A.7 and 4A.18.

Unit cost differences across education sectors should be used as a starting point for further analysis, rather than interpreted in isolation from the outcomes and outputs of the service areas (see chapters 3 and 4). Further, comparing the performance of education sectors requires a cross-sectoral approach to measuring and classifying educational participation and attainment. Considerable attention is being given to cross-sectoral measurement issues, with the establishment of the National Centre for Education and Training Statistics (within the ABS) and the introduction of the Australian Standard Classification of Education.

References

- ABS (Australian Bureau of Statistics) 1999, *Transition from Education to Work: Australia*, Cat. no. 6227.0, Canberra.
- 2000a, *Transition from Education to Work: Australia*, Cat. no. 6227.0, Canberra.
- 2001a, *Government Finance Statistics, Education, 1999-2000*. Cat. no. 5518.048.001, Canberra.
- 2001b, *Transition from Education to Work: Australia*, Cat. no. 6227.0, Canberra.
- 2002a, *Government Finance Statistics, Education, 2000-01*. Cat. no. 5518.048.001, Canberra.
- 2002b, *Education and Work*, cat. no. 6227.0, Canberra.
- 2003a, *Government Finance Statistics, Education, 2001-02*. Cat. no. 5518.055.001, Canberra.
- 2003b, *Schools Australia, 2002*, Cat. no. 4221.0, Canberra.
- 2003c, *Education and Work*, Cat. no. 6227.0, Canberra.
- 2003d, *Australian Social Trends 2003*, Cat. no. 4102.0, Canberra.
- ANTA (Australian National Training Authority) 2003, *Annual National Report 2002: Vocational Education and Training Performance*, Volume 3, Brisbane.
- NCVER (National Centre for Vocational Education Research) 2003, *Australian Vocational Education and Training, Students and Courses 2002: In Detail*, Adelaide.
- NOOSR (National Office of Overseas Skills Recognition) 2000, *December 2000 Country Education Profiles*, Canberra.

