# Education and Training Indicators 

## Australia

## 2002 (Reissue)

Brian Pink<br>Australian Statistician

```
ABS catalogue no. 4230.0
```

ISSN 1446-3121
(c) Commonwealth of Australia 2002

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights in this publication should be addressed to The Manager, Intermediary Management, Australian Bureau of Statistics, Locked Bag 10, Belconnen ACT 2616, by telephone (02) 6252 6998, fax (02) 62527102 , or email [intermediary.management@abs.gov.au](mailto:intermediary.management@abs.gov.au).

In all cases the ABS must be acknowledged as the source when reproducing or quoting any part of an $A B S$ publication or other product.

Produced by the Australian Bureau of Statistics

## INQUIRIES

- For further information about these and related statistics, contact the National Information and Referral Service on 1300135070 or Kirsty Leslie on Canberra 0262526401.


## CONTENTS

page
GENERAL INFORMATION
TOPICS
CONTEXT
1 Australia's population ..... 12
2 Economic context ..... 14
3 Labour market ..... 16
4 Youth, education and the labour market ..... 18
PROVIDERS
5 Education and training providers ..... 20
FINANCIAL RESOURCES
6 Total expenditure on education ..... 22
7 Expenditure per student-government schools ..... 24
8 Income and expenditure per student-non-government schools ..... 26
9 Household expenditure on education fees ..... 28
HUMAN RESOURCES
10 School teachers ..... 30
11 School student/teacher ratios ..... 32
12 Higher education staff ..... 34
13 Higher education student/teaching staff ratios ..... 36
14 Earnings of educators ..... 38
PARTICIPATION
15 Demand for non-school study ..... 40
16 Participation in education and training ..... 42
17 Education participation-sub-populations ..... 44
18 Preschool students ..... 46
19 School students ..... 48
20 Apparent retention rates ..... 50
21 Vocational education \& training students ..... 52
22 Apprentices and trainees ..... 54
23 Higher education students ..... 56
page
24 Overseas students ..... 58
25 Participation in training ..... 60
OUTPUTS AND OUTCOMES
26 Level of education ..... 62
27 Main field of non-school qualifications ..... 64
28 Reading and numeracy national benchmarks-primary school students ..... 66
29 Literacy of 15 year old students ..... 68
30 Aspects of population literacy ..... 70
31 Recent school leavers in education ..... 72
32 Recent school leavers not in education ..... 74
33 Destinations of recent TAFE graduates ..... 76
34 Earnings of recent TAFE graduates ..... 78
35 Destinations of recent university graduates ..... 80
36 Earnings of recent university graduates ..... 82
37 Labour market indicators by level of education ..... 84
38 Earnings and highest level of educational attainment ..... 86
ADDITIONAL INFORMATION
Related international statistics ..... 88
Explanatory Notes ..... 93
Appendix: Measuring Learning in Australia: A framework for education and training statistics ..... 108
Glossary ..... 112
Bibliography ..... 122

## PREFACE

Education and Training Indicators, Australia is a new biennial publication from the National Centre for Education and Training Statistics within the Australian Bureau of Statistics (ABS).

Education and Training Indicators, Australia presents summary statistics and commentary, using national level data, from a wide range of both ABS and non-ABS sources. The publication includes 38 two-page Topics, grouped according to the structure of the recently developed framework for education and training statistics-Measuring Learning in Australia: A framework for education and training statistics (an overview of which can be found in the Appendix). The Topics cover providers of education and training, human and financial resources, participation, outputs and outcomes, and also the context in which education and training takes place. The sources of the data are outlined in the publication.

In addition, there is an introductory Chapter outlining the structure of education and training in Australia, and a section with some related international statistics.

State/territory level data may be available for some of the Topics covered in this publication. Please use the contact details below if you want to ask about state/territory data.

The development of this publication has involved many people. I would like to express special thanks for the contribution made by the external reference group-Dr John Ainley, Ms Katrina Ball, Ms Jessie Borthwick, Dr Michele Bruniges, Mr Roy Martin, Mr Brendan O'Reilly, and Dr Louise Watson. Also, a number of organisations assisted in providing data and advice for this publication, and their input is gratefully acknowledged. In addition, I thank the many ABS staff from across the organisation who were involved in the production of the publication.

The ABS welcomes suggestions and comments on the content of this publication. To express your views please contact the Director of the National Centre for Education and Training Statistics at the following address:

Australian Bureau of Statistics
Locked Bag 10
Belconnen, ACT 2616
Phone: 0262525936
Email: [ncets@abs.gov.au](mailto:ncets@abs.gov.au)

```
Dennis Trewin
Australian Statistician
```


## ABBREVIATIONS

| \$m | million dollars |
| :---: | :---: |
| ABS | Australian Bureau of Statistics |
| ABSCQ | Australian Bureau of Statistics Classification of Qualifications |
| ACER | Australian Council for Educational Research |
| AEI | Australian Education International |
| ANTA | Australian National Training Authority |
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| AOU | academic organisational unit |
| AQF | Australian Qualifications Framework |
| ASCED | Australian Standard Classification of Education |
| ASCO | Australian Standard Classification of Occupations |
| AVETMISS | Australian Vocational Education and Training Management Information |
|  | Statistical Standard |
| AWOTE | average weekly ordinary time earnings |
| CPI | Consumer Price Index |
| DEST | Department of Education, Science and Training |
| ELICOS | English language intensive courses for overseas students |
| FTE | full-time equivalent |
| GCCA | Graduate Careers Council of Australia |
| GDP | gross domestic product |
| GFS | Government Finance Statistics |
| HECS | Higher Education Contributions Scheme |
| IMF | International Monetary Fund |
| ISCED | International Standard Classification of Education |
| LFS | Labour Force Survey |
| MCEETYA | Ministerial Council on Education, Employment, Training and Youth Affairs |
| n.e.c. | not elsewhere classified |
| n.f.d. | not further defined |
| NCVER | National Centre for Vocational Education Research |
| NESB | non-English speaking background |
| NIPC | National Indigenous Preschool Census |
| NSSC | National Schools Statistics Collection |
| NTF | National Training Framework |
| OECD | Organisation for Economic Co-operation and Development |
| PISA | Programme for International Student Assessment |
| PPP | purchasing power parity |
| SES | socioeconomic status |
| SETIT | Survey of Education, Training and Information Technology |
| SNA93 | System of National Accounts 1993 |
| TAFE | Technical and Further Education |
| VET | vocational education and training |

## INTRODUCTION-EDUCATION AND TRAINING IN AUSTRALIA

## INTRODUCTION

OVERVIEW OF THE
AUSTRALIAN EDUCATION SYSTEM

Preschool and school education

At the broadest level, education and training can be thought of as the lifetime process of obtaining knowledge, attitudes, skills, and socially valued qualities of character and behaviour. In this sense, education is initiated at birth, developed in schooling and other formal pathways of learning, and continued throughout adult life. Education can occur within a variety of environments, some more formal than others.

Formal learning has traditionally taken place within three major sectors: schools, vocational education and training (VET), and higher education. Typically this is characterised by delivery that is systematic, planned and organised ahead of time, and which usually involves some evaluation of achievement. However, in recent years the boundaries between these sectors have become less distinct. Many other kinds of learning can take place outside formal institutions and can continue after a person has completed schooling or gained qualifications. For instance, structured or unstructured learning might be undertaken in the workplace in order to acquire, develop or upgrade work-related skills.

The provision of education and training has undergone significant change in recent years. There has been an increase in the number of multi-sector institutions. There is greater emphasis on appropriate skills formation and entry level training, particularly in the VET sector, and industry now has greater involvement in the development of competency-based training packages and curricula.

The following information provides a brief overview of the Australian education system, and is drawn from the Country Education Profiles work of the National Office of Overseas Skills Recognition, within the Department of Education, Science and Training.

Preschool and school education has a similar structure across Australia with only slight variations among the states and territories. Preschool education is commonly one year in length and is not compulsory. School education is 13 years in most states and territories, and is 12 years in Queensland and Western Australia. It is divided into a preparatory year, primary schooling and secondary schooling. The preparatory year is not compulsory but is almost universally undertaken. Children usually start in the preparatory year at around five years of age although in some states the starting age is closer to four years. Primary schooling is six or seven years-Years 1-6 or 1-7, and secondary schooling is five or six years-Years 7-12 or 8-12. School education is compulsory until the age of 15 except in Tasmania, and (from 2003) South Australia, where it is compulsory until age 16.

Education for students with special education needs

Education for Indigenous Australians

Tertiary education programmes can be divided into two main types-those offered by institutions and industry within the VET sector, and higher education programmes which are mainly offered by universities and other higher education institutions. VET is competency-based and offers a wide variety of programmes under the National Training Framework (NTF). Higher education offers programmes leading to Bachelor degrees and a range of postgraduate awards. Universities also offer some shorter undergraduate programmes.

While the VET and higher education sectors in Australia remain largely distinct, there are an increasing number of connections being forged between the two. A few universities offer programmes under the NTF, and some Bachelor programmes are offered by mainly VET institutions. Articulation from VET programmes into specific degree-level programmes at universities or vice versa is now well developed with the granting of credit in one sector for studies undertaken in the other. In addition, VET programmes are increasingly being offered within secondary schools.

All states and territories offer a range of programmes to address the special education needs of students. Programmes available include those for students with intellectual and physical disabilities, behaviour disorders, special learning needs, for gifted students, and for migrant students. Responsibility for policies and financing of these programmes is often shared between the Federal Government and the states and territories.

Since the late 1980s, all Ministers of Education have undertaken a number of collaborative activities to address the educational needs of Australia's Indigenous people through the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) and its predecessor, the Australian Education Council.

In 1989, the Council introduced the National Aboriginal and Torres Strait Islander Education Policy to come into effect from 1 January 1990. The policy set out twenty-one long-term goals with the objective of achieving educational equality by the year 2000. In July 2000, Australian Ministers for Education agreed to undertake further work to accelerate progress and issued a National Statement of Principles and Standards, and an action framework for more culturally inclusive and educationally effective schooling for Australia's Indigenous peoples in the 21st century. The Principles acknowledge the capacity of all young Indigenous people to reach their full potential in school and the role of Indigenous parents as the first educators of their children. The Standards are described in terms of the rights of Aboriginal and Torres Strait Islander students and their teachers and education workers to access the same level of government services as other Australians and to achieve equitable and appropriate educational outcomes.

The National Indigenous English Literacy and Numeracy Strategy was also launched in 2000. The strategy aims to dramatically raise the levels of Indigenous achievement in literacy and numeracy and other factors that influence the level of achievement, particularly school attendance. The strategy extends across preschool, school systems and vocational education and training providers and supports stronger partnerships between parents, Indigenous communities, schools and the agencies supporting education improvement. Furthermore, Federal, State and Territory Ministers of Training, as members of the Australian National Training Authority (ANTA) Ministerial Council,

Education for Indigenous Australians continued

Administration and finance
agreed to Partners in a Learning Culture, a National Strategy and Blueprint to improve training outcomes for Indigenous people from 2000 to 2005.

The administration and financing of education in Australia is shared between the Federal Government and the states and territories. The Federal Government is mainly concerned with the development of national policies and strategies for education, whereas the states and territories are responsible for delivering education within their borders. The Federal Government provides significant funding for education across the educational sectors and administers some national programmes.

Consultation between the Federal Government and the states and territories occurs at Ministerial level through MCEETYA and at official level through the Commonwealth-State Joint Planning Committees. MCEETYA was established in 1994 from the merging of the Australian Education Council, the Council of Ministers of Vocational Education, Employment and Training and the Youth Ministers Council. Membership of MCEETYA comprises federal, state and territory ministers as well as New Zealand ministers responsible for the portfolios of education, employment, training and youth affairs.

MCEETYA's responsibilities cover national coordination and policy development across issues involving all levels and sectors of education, employment/labour linkages, youth policy and cross-sectoral matters. MCEETYA works closely with the Ministerial Council of the Australian National Training Authority which has responsibility for certain aspects of VET. The Commonwealth-State Joint Planning Committees provide advice to MCEETYA on matters such as national agreements on shared objectives, negotiations on the scope and format of national reporting, coordination and collaboration on national issues, the source and distribution of higher education resources, and cooperation with the VET system.

Private education exists in parallel with government institutions at all levels in Australia.
Non-government schools have always played a very substantial role in Australian school education. The majority of non-government schools are Catholic institutions. Catholic schools may be either systemic (administered by Catholic education offices) or non-systemic independent, such as those run by religious orders. Systemic schools comprise primary schools at the parish level and secondary schools at the diocesan level.

Although a large number of non-Catholic private schools are run by or associated with other Christian denominations, there are also schools associated with other faiths such as Judaism and Islam, or with particular educational philosophies such as Montessori and Steiner. Private schools also include community schools run by parent and teacher groups, including Aboriginal community schools. All non-government schools are registered with the education department of the relevant state or territory and are subject to regular inspection. They generally use the same curricula as government schools and must conform to government requirements in terms of inspection of their premises and teacher registration. Non-government schools derive their income from fees, endowments and financial assistance from both the Federal and state or territory governments.

Private education continued There are large numbers of private Registered Training Organisations within the VET sector, particularly in the areas of English language studies, secretarial, data management and computer studies, business management and air pilot training. The state and territory training authorities are responsible for the registration of these organisations.

There are a number of private higher education institutions.

## AUSTRALIA'S POPULATION

ABOUT THE DATA

ANALYSIS

Changes in the age structure of the Australian population can impact on the demand for education and training. The age structure of the population, including population projections, is presented in the following analysis, with a focus on the age groups which are particularly relevant to participation in education and training. Data are from the ABS's Australian Demographic Statistics, and Population Projections. Population projections are based on a combination of assumptions about future levels of births, deaths and migration, and illustrate the possible size, structure and distribution of the population into the future. The analysis uses Series II of population projections, which assumes a total fertility rate of 1.6 births per woman and net annual overseas migration of 90,000 (see Explanatory Notes).

At June 2001, the Australian population was estimated to be 19.4 million people, with slightly more females than males ( $50.2 \%$ female). Almost two-thirds ( $64 \%$ ) of all Australians lived in one of the eight capital cities and a further $9 \%$ in major population centres of greater than 100,000 people.
POPULATION STRUCTURE

(a) Estimated population.
(b) Estimated resident population, preliminary.
(c) Projected population, Series II (see Explanatory Notes).

Source: ABS, Australian Historical Population Statistics-Population Size and Growth (cat. no. 3105.0.65.001); ABS, Population by Age and Sex, Australian States and Territories, June 2001 (cat. no. 3201.0);
ABS, Population Projections, Australia, 1999 to 2101 (cat. no. 3222.0).

While Australia's population has been increasing from year to year, it has also been ageing. In the past, younger people made up the greater proportion of the population. However, this will not be true into the future. For example, in 1951, $57 \%$ of the population was aged under 35 years; in 2001 they represented $49 \%$; and in 2051 they are projected to comprise only $37 \%$ of the population. These changes can be attributed to the sustained decline in fertility rates which followed the post-war baby boom, and also to increased life expectancy. This trend is also illustrated by comparing the median age of the population, which has increased from 30.3 years in 1951, to 35.4 years in 2001, and is projected to increase further to 38.5 years in 2011 and 46.0 years in 2051.

The main implications of population trends on education and training arise from changes in the size of particular age groups and their relative proportions of the total population. There are three age groups of interest for schooling: 3-4 years for preschool; 5-11 years for primary school; and 12-17 years for secondary school. The 18-24 age group is when many people will undertake study towards any initial non-school qualifications. After the age of 25 years there is a focus on maintaining the relevance of the population's work related skills, and the 25-64 year age group is therefore also of interest.

POPULATION DISTRIBUTION, By age

|  | June 2001(a) |  | June 2011(b) |  | June 2051(b) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age (years) | '000 | \% | '000 | \% | '000 | \% |
| 0-2 | 748.4 | 3.9 | 708.2 | 3.3 | 706.2 | 2.8 |
| 3-4 | 509.1 | 2.6 | 482.3 | 2.3 | 476.8 | 1.9 |
| 5-11 | 1871.8 | 9.7 | 1778.4 | 8.4 | 1708.2 | 6.7 |
| 12-17 | 1602.1 | 8.3 | 1636.5 | 7.7 | 1533.3 | 6.0 |
| 18-24 | 1936.3 | 10.0 | 2024.8 | 9.5 | 1986.8 | 7.8 |
| 25-64 | 10316.8 | 53.2 | 11622.6 | 54.6 | 12368.8 | 48.7 |
| 65 and over | 2402.1 | 12.4 | 3036.0 | 14.3 | 6628.4 | 26.1 |
| Total | 19386.7 | 100.0 | 21288.8 | 100.0 | 25408.5 | 100.0 |

(a) Estimated resident population, preliminary.
(b) Projected population, series II (see Explanatory Notes).

Source: ABS, Population by Age and Sex, Australian States and Territories, June 2001 (cat. no. 3201.0); ABS, Population Projections, Australia, 1999 to 2101 (cat. no. 3222.0).

The number of children in the preschool age group (3-4 years old) is projected to decrease, both in the short term (to 482,000 in 2011) and the longer term (to 477,000 in 2051). A similar trend is projected for the primary school age group (projected to decline to 1.8 million in 2011, and to 1.7 million in 2051). The number of secondary school aged people is projected to increase slightly by 2011, and then decrease to 1.5 million by 2051. The 18-24 year age group is projected to increase to 2.0 million in 2011, and by 2051 they will have decreased slightly in number and will represent only $8 \%$ of the total population. The 25-64 age group is projected to increase in number, and by 2051 they will represent just under half the total population (49\%). The 65 and over age group is projected to experience a large increase-from 2.4 million in 2001 to 6.6 million ( $26 \%$ of the population) in 2051.

Australia has generally experienced growth in the level of economic activity, as indicated by positive annual percentage changes in real GDP. During the 1980-81 to 2000-01 period there were only two years when real GDP decreased-1982-83 (a $2.6 \%$ decrease) and 1990-91 (a $0.1 \%$ decrease). Since 1992-93, annual growth has been quite strong (average increase in GDP of $4.0 \%$ per annum).

REAL GROSS DOMESTIC PRODUCT(a), Percentage change(b)


Real GDP per capita has also grown in most years between 1980-81 and 2000-01, with average annual growth of $2.0 \%$ over this period. There have been three years in this period when real GDP per capita decreased, 1982-83, and 1990-91, continuing into 1991-92. These years correspond with the negative and small positive movements in real GDP shown in the previous graph.

REAL GROSS DOMESTIC PRODUCT PER CAPITA(a)

(a) Chain volume measure; reference year 1999-2000.

Source: ABS, Australian System of National Accounts (cat. no. 5204.0).

Expenditure on education (final consumption expenditure plus gross fixed capital formation) has been around $5 \%$ to $6 \%$ of GDP throughout the last 20 years, and in 2000-01 it was $5.2 \%$, a slight decrease from $5.4 \%$ in 1999-2000. In comparison to expenditure in other areas as a proportion of GDP, education is below health ( $8.8 \%$ of GDP in 2000-01) and is higher than both defence ( $2.1 \%$ in $2000-01$ ) and social security and welfare ( $1.1 \%$ in 2000-01).

EXPENDITURE ON SELECTED COMPONENTS(a) AS A PROPORTION OF GDP(b)

(a) Includes general government final consumption expenditure and general government gross fixed capital formation. Health and education also include household final consumption expenditure and private gross fixed capital formation.
(b) Both expenditure and GDP are in current prices.

Source: ABS, Australian System of National Accounts (cat. no. 5204.0).

LABOUR MARKET

Information about the labour market is important to understand the context in which education and training takes place. The relationship between education and training and the labour market is twofold: the state of the labour market can impact on decisions about participation in education and training; and education and training can also influence labour force participation and outcomes. Participation in education and training and changes in the labour market have had similar cyclical patterns. For information relating educational attainment to labour market outcomes please see the Topic 'Labour market indicators by level of education'.

Data presented are from the ABS's monthly Labour Force Survey, using monthly original data averaged over financial years, except for the graph presenting monthly unemployment rates which uses monthly trend data (see Explanatory Notes).

In 2001-02, there were an average of 9.9 million people in the labour force, an increase of $44 \%$ since 1981-82 ( 6.9 million). Females represented $44 \%$ of the labour force in 2001-02, an increase from $37 \%$ in 1981-82.

The labour force participation rate increased by almost three percentage points between 1981-82 (61.0\%) and 2001-02 (63.7\%). This can be attributed to increased labour force participation by females-their participation rate increased from $44.8 \%$ in 1981-82 to $55.3 \%$ in 2001-02. Over the same period, the male labour force participation rate declined from $77.7 \%$ to $72.4 \%$.

UNEMPLOYMENT RATE(a), Monthly trend estimates(b)


The unemployment rate closely reflects broad movements in the economic cycle (see the Topic 'Economic context'). The pattern of the unemployment rate has also generally been reflected in participation in education and training. Following the economic

ANALYSIS continued
downturn of the early 1990s, the unemployment rate increased, reaching a maximum (in trend terms) of $10.7 \%$ in December 1992, and has generally declined since. School Year 12 apparent retention rates also peaked in 1992 and have also declined since then (see the Topic 'Apparent retention rates'). Prior to October 1990, the unemployment rate for females was higher than for males, but since then this has reversed.

Between 1981-82 and 2001-02, the proportion of employed people working part-time increased from 16\% to $28 \%$ ( 2.6 million in 2001-02). Over the same period, the proportion of employed females working part-time increased from $35 \%$ to $45 \%$, while for males this proportion increased from $5 \%$ to $14 \%$. Females represented $71 \%$ of all those employed part-time in 2001-02.

## LABOUR FORCE STATUS—Average of months over 2001-02

|  | Employed | Unemployed | Labour force | Civilian population aged 15 and over | Employed part-time <br> (a) | Unemployment rate(b) | Labour force participation rate(c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '000 | '000 | '000 | '000 | \% | \% | \% |
| Sex |  |  |  |  |  |  |  |
| Males | 5160.4 | 381.1 | 5541.5 | 7656.5 | 14.4 | 6.9 | 72.4 |
| Females | 4071.6 | 275.7 | 4347.3 | 7867.2 | 45.2 | 6.3 | 55.3 |
| Age (years) |  |  |  |  |  |  |  |
| 15-17 | 315.3 | 76.1 | 391.4 | 808.1 | 82.6 | 19.4 | 48.4 |
| 18-19 | 356.5 | 65.3 | 421.8 | 555.4 | 51.7 | 15.5 | 75.9 |
| Total 15-19 | 671.8 | 141.4 | 813.2 | 1363.6 | 66.2 | 17.4 | 59.6 |
| 20-24 | 1018.2 | 113.8 | 1132.0 | 1384.2 | 29.5 | 10.1 | 81.8 |
| 25-34 | 2201.3 | 152.3 | 2353.7 | 2903.0 | 19.9 | 6.5 | 81.1 |
| 35-44 | 2278.5 | 114.8 | 2393.3 | 2941.5 | 25.4 | 4.8 | 81.4 |
| 45-54 | 2017.0 | 91.8 | 2108.8 | 2653.6 | 23.3 | 4.4 | 79.5 |
| 55-64 | 891.4 | 41.2 | 932.7 | 1856.0 | 30.1 | 4.4 | 50.3 |
| 65 and over | 153.8 | *1.5 | 155.3 | 2421.9 | 52.3 | *0.9 | 6.4 |
| Total | 9232.0 | 656.8 | 9888.8 | 15523.7 | 28.0 | 6.6 | 63.7 |

* estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution
(a) As a proportion of total employed.
(b) Unemployed expressed as a proportion of the labour force.
(c) Labour force expressed as a proportion of the civilian population. Source: ABS data available on request, Labour Force Survey.

The main labour market indicators vary across the different age groups. Generally, the unemployment rate declines with age, with those aged $15-17$ years recording the highest unemployment rate (19.4\%) for 2001-02. This age group also had a relatively low labour force participation rate (48.4\%) and the highest proportion employed part-time ( $83 \%$ ). This reflects the higher rates of participation in education and training by 15-19 year olds.

The labour force participation rate for 20-24 year olds (81.8\%) in 2001-02 was similar to older age groups (to 54 years), although this group generally has higher rates of participation in education than older age groups. This indicates that this age group is combining employment with education and training, with those aged 20-24 years more likely to be employed part-time ( $29 \%$ of the total employed in this age group) than the 25-54 age groups. Part-time employment was also high among the age groups approaching retirement (55 years and over).

## YOUTH, EDUCATION AND THE LABOUR MARKET

Between the ages of 15 and 24 years, most people experience transitions between education and the labour force, including completing initial education and working for the first time. To gain a more complete understanding of youth activity, education participation and labour force status are examined together. In March 2000, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) endorsed a Key Performance Measure (referred to here as the 'fully active' youth population), defined as the proportion of 15-24 year olds (by single year of age) who are either (i) studying full-time; or (ii) employed full-time; or (iii) in both part-time work and part-time study. The purpose of this 'full-time participation' concept is to identify the proportion of the youth population which has a low risk of marginal or non-participation in the labour force, or (conversely) the proportion that is at higher risk. Although the MCEETYA endorsed measures are by single year of age, five-year age groups are presented here. Data are from the ABS's annual Survey of Education and Work.

Between 1991 and 2001, the proportion of males aged 15-19 years who were 'fully active' remained fairly stable, and was $87 \%$ in 2001 . The proportion of females aged $15-19$ years who were fully active was slightly lower than that for males aged $15-19$ years ( $86 \%$ in 2001). The proportion of 20-24 years olds who were fully active was lower than that for 15-19 year olds for both males and females ( $71 \%$ for 20-24 year old females and $81 \%$ for males in 2001). The proportion of females aged 20-24 years who were fully active increased from $68 \%$ in 1991, while the equivalent proportion of males was virtually the same as in 1991.

PROPORTION OF 15-19 AND 20-24 YEAR OLDS, Studying full-time, employed full-time, or in both part-time work \& part-time study


Source: ABS data available on request, Survey of Education and Work; Transition from Education to Work Survey

Within the fully active youth population, the predominant activity was different for the 15-19 and 20-24 year age groups, with the majority of 15-19 year olds studying full-time and the majority of 20-24 year olds employed full-time. For example, in 2001, $76 \%$ of males and $85 \%$ of females aged $15-19$ years who were fully active were studying full-time;

ANALYSIS continued

|  | Employed full-time | Employed part-time | Unemployed | Not in the labour force | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | '000 | '000 | '000 | '000 | '000 |
| Males 15-19 years |  |  |  |  |  |
| Studying full-time | *3.1 | 161.4 | 37.8 | 256.7 | 459.0 |
| Studying part-time | 58.1 | *5.5 | *2.3 | *2.3 | 68.3 |
| Not studying | 77.9 | 29.9 | 35.8 | 18.6 | 162.2 |
| Total | 139.1 | 196.8 | 75.8 | 277.7 | 689.5 |
| Females 15-19 years |  |  |  |  |  |
| Studying full-time | *3.5 | 201.8 | 43.2 | 235.5 | 484.1 |
| Studying part-time | 19.2 | 9.1 | *3.8 | *1.5 | 33.6 |
| Not studying | 57.3 | 38.7 | 21.9 | 25.7 | 143.6 |
| Total | 80.0 | 249.6 | 68.8 | 262.8 | 661.3 |
| Males 20-24 years |  |  |  |  |  |
| Studying full-time | *5.0 | 63.7 | 11.6 | 73.2 | 153.5 |
| Studying part-time | 70.8 | 11.1 | *5.5 | *3.2 | 90.5 |
| Not studying | 321.7 | 40.8 | 53.7 | 24.6 | 440.7 |
| Total | 397.5 | 115.6 | 70.7 | 100.9 | 684.8 |
| Females 20-24 years |  |  |  |  |  |
| Studying full-time | 6.7 | 81.7 | 11.9 | 54.5 | 154.9 |
| Studying part-time | 44.4 | 17.1 | *2.8 | 7.1 | 71.4 |
| Not studying | 261.0 | 70.8 | 39.9 | 70.2 | 442.0 |
| Total | 312.1 | 169.6 | 54.7 | 131.9 | 668.3 |

* estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution Source: ABS data available on request, Survey of Education and Work 2001.

In 2001, a greater proportion of females aged 15-19 years were studying full-time than were males ( $73 \%$ and $67 \%$ respectively). Of $15-19$ year olds not studying ( $24 \%$ of males and $22 \%$ of females), less than half were employed full-time in 2001 ( $48 \%$ of males and $40 \%$ of females not studying).

In the 20-24 year age group, $75 \%$ of males and $72 \%$ of females were employed in 2001. A greater proportion of employed females in this age group were working part-time than males ( $35 \%$ and $23 \%$ respectively in 2001). A similar proportion of both males and females aged 20-24 years were studying in 2001 ( $36 \%$ and $34 \%$ respectively), and over half of these were also employed ( $62 \%$ of males and $66 \%$ of females studying).

Of males aged 20-24 years who were not studying in 2001, $12 \%$ were also unemployed and $6 \%$ were not in the labour force. For females aged 20-24 years who were not studying, $9 \%$ were unemployed and $16 \%$ were not in the labour force. Many of the latter group may have had family responsibilities.

## ABOUT THE DATA

ANALYSIS
Schools

The number and nature of education and training providers differ markedly across the three main education sectors: schools, vocational education and training (VET) and higher education. Changes in the number of (and for VET, type of) providers illustrate some of the changes occurring in the provision of education and training. Information about the number and characteristics of schools is from the National Schools Statistics Collection. Data on the number and type of VET providers are published by the National Centre for Vocational Education Research (NCVER) in Australian Vocational Education and Training Statistics: In detail. Data on the number of higher education institutions have been supplied by the Department of Education, Science and Training (DEST).

In 2001, there were 9,596 schools in Australia, of which almost three quarters (72\% or 6,942 ) were government schools. Between 1991 and 2001 the total number of schools decreased by $4 \%$. Over this period the number of government schools decreased by $7 \%$, while the number of non-government schools increased by $6 \%$. The number of schools with both primary and secondary students (combined schools) increased from 841 in 1991 to 1,051 in 2001, with $77 \%$ of the increase being in non-government combined schools. Combined schools represented 11\% of all schools in 2001.

In 2001, $48 \%$ of all primary schools (including the primary component of combined schools) had 200 students or less, while $29 \%$ of secondary schools were in this size range. Within secondary schools, a greater proportion of government schools had more than 1,000 students than did non-government schools ( $16 \%$ and $9 \%$ respectively).

PRIMARY AND SECONDARY SCHOOLS(a), By size of student enrolments (FTE)(b) - 2001

|  | $1-35$ | $36-200$ | $201-400$ | $401-600$ | $601-1000$ | $1001+$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | no. | no. | no. | no. | no. | no. | no. |
| Government |  |  |  |  |  |  |  |
| Primary | 728 | 1892 | 1744 | 752 | 401 | 27 | 5544 |
| Secondary | 121 | 299 | 186 | 189 | 470 | 244 | 1509 |
| Non-government |  |  |  |  |  |  |  |
| $\quad$ Primary | 148 | 913 | 753 | 297 | 80 | 3 | 2194 |
| $\quad$ Secondary | 100 | 214 | 176 | 178 | 268 | 95 | 1031 |
| Total schools |  |  |  |  |  |  |  |
| $\quad$ Primary | 876 | 2805 | 2497 | 1049 | 481 | 30 | 7738 |
| Secondary | 221 | 513 | 362 | 367 | 738 | 339 | 2540 |

(a) Excludes special schools but includes combined primary and secondary schools, based on the size of their primary and secondary school enrolments respectively.
(b) Full-time equivalent students.

Source: ABS, Schools, Australia, 2001 (cat. no. 4221.0).

Vocational education and training

Vocational education and training in Australia is provided by a variety of organisations including public institutes of technical and further education (TAFE), community-based providers, private providers, and some secondary schools. Data collection in the sector, conducted by the NCVER, relates to publicly funded VET. The scope was expanded to include community education providers in 1995, and then in 1996 to include other private providers in receipt of public funds. Due to the phased implementation of expanded scope, reporting on the number of community and private providers to the NCVER was not considered to have complete coverage until 1999; therefore, only limited time series data are presented here.

In 2001, there were 87 government institutions (such as TAFEs and other government providers) delivering VET programs in 1,322 locations. Government funded VET programs were also provided by 985 community education providers, a decrease from 1,075 in 1999 and 1,139 in 2000, and by 5,645 other registered providers (or private providers), an increase from 2,465 in 1999.

TRAINING PROVIDERS

|  | 1999 | 2000 | 2001 |
| :--- | ---: | ---: | ---: |
|  | no. | no. | no. |
| $\quad$ <br> TAFE and other government providers <br> $\quad$ Institutes |  |  |  |
| $\quad$ Provider locations | 1132 | 1322 | 1322 |
| Community education providers | 1075 | 1139 | 985 |
| Other registered providers | 2465 | 3388 | 5645 |

Source: NCVER, Australian Vocational Education and Training statistics: In detail, 1999-2001.

The majority of the 1,226 TAFE provider locations ( $53 \%$ in 2001) had fewer than 100 students, and a further $15 \%$ had, between 100 and 500 . There were relatively few large TAFE provider locations, with $6 \%$ having more than 5,000 students in 2001.

Higher education Higher education is provided in a relatively small number of institutions, many with several campuses, and with institutions usually having large numbers of students. In the late 1980s and early 1990s the Unified National System of higher education institutions was created. This process involved amalgamations and name changes of many higher education institutions.

There are 47 institutions which report student data to the Higher Education Statistics Collection conducted by DEST, and the majority of students are enrolled in these institutions. Two of these report data for only some students and are not included in the data pertaining to the number of students. There are also approximately 90 recognised private providers for which accurate statistics are not available. These institutions are estimated to be responsible for as much as $10 \%$ of total higher education student load.

Of the 45 major higher education institutions reporting data for all students, 7 had more than 30,000 higher education students in 2001, with a further 5 having between 25,000 and 30,000 . At the other end of the scale, 11 institutions had fewer than 5,000 students, and 4 had between 5,000 and 10,000 students.

## TOTAL EXPENDITURE ON EDUCATION

This topic shows the levels of expenditure on education in Australia by both governments and private sources, including households. The greater emphasis given to government expenditure in analysing these data reflects the relative importance of government in the provision of education services. All data are from the ABS's data report Government Finance Statistics, Education, Australia (cat. no. 5518.0.55.001). The data presented include expenditure on all sectors of education but exclude courses such as vocational training programs not provided by Technical and Further Education institutions. Private expenditure data include items such as school fees, but exclude items such as school books and uniforms. Due to the move to accrual accounting in 1998-99, data are presented for three financial years only. Data are presented in current prices, therefore changes between years include the effect of price changes. The data presented here differ from those presented in the Topic 'Economic context' as they are from different sources which differ in scope (see Explanatory Notes).

TOTAL EXPENDITURE ON EDUCATION(a)

|  | 1998-99 | 1999-2000 | 2000-01 |
| :---: | :---: | :---: | :---: |
|  | \$m | \$m | \$m |
| Government expenditure on education |  |  |  |
| Operating expenses | 31049 | 32323 | 34688 |
| Net acquisition of non-financial assets | 90 | 301 | 486 |
| Sales of goods and services | 4620 | 5149 | 5542 |
| Total government expenditure on education(b) | 26519 | 27475 | 29632 |
| Private expenditure on education |  |  |  |
| Household final consumption expenditure | 8271 | 8756 | 9348 |
| Gross fixed capital formation | 973 | 1109 | 1001 |
| Total private expenditure on education | 9244 | 9865 | 10349 |
| Total expenditure on education | n.a. | n.a. | n.a. |
| Gross Domestic Product (GDP) | 591592 | 629212 | 672046 |
| Government expenditure on education-\% of GDP | 5.2 | 5.1 | 5.2 |
| Private expenditure on education-\% of GDP | 1.6 | 1.6 | 1.5 |
| Total expenditure on education-\% of GDP | n.a. | n.a. | n.a. |

(a) Figures expressed in current prices, therefore changes between years include the effects of price changes (see Explanatory Notes).
(b) Total government expenditure on education derived by adding operating expenses and net acquisition of non-financial assets, then subtracting the sales of goods and services.
n.a. not applicable

Source: ABS, Government Finance Statistics, Education, Australia, 2000-01 (cat. no. 5518.0.55.001).

Total expenditure on education in 2000-01 was comprised of government expenditure of $\$ 29.6$ billion and private expenditure of $\$ 10.3$ billion. Total government expenditure is made up of total operating expenses ( $\$ 34.7$ billion), plus net acquisition
of non-financial assets ( $\$ 486$ million), less sales of goods and services ( $\$ 5.5$ billion). The largest component of operating expenses was employee expenses (which includes teachers' wages and superannuation), totalling $\$ 19.6$ billion.

Government operating expenditure on education amounted to $5.2 \%$ of Gross Domestic Product (GDP) in 2000-01, with total private education expenditure comprising a further $1.5 \%$ of GDP. These relative contributions to GDP by the government and private sectors were similar in both 1998-99 and 1999-2000.

## TOTAL GOVERNMENT EXPENDITURE ON EDUCATION-2000-01

|  | Primany and secondary education | University education | Technical and further education | Tertiary education n.e.c.(a) | Other education(b) | Total expenditur educatio | re on |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Level of government | \$m | \$m | \$m | \$m | \$m | \$m | \%GDP |
| Commonwealth | 5294 | 3848 | 1098 | - | 638 | 10878 | 1.6 |
| State and local | 19108 | 113 | 2723 | 88 | 1842 | 23873 | 3.6 |
| All Australian governments(c) | 19229 | 5053 | 2891 | 88 | 2371 | 29632 | 4.4 |

- nil or rounded to zero (including null cells)
(a) Includes educational programs provided by tertiary education institutions other than universities and Technical and Further Education institutions.
(b) Includes preschool education, education not definable by level, transportation of students, and education not elsewhere classified.
(c) Total expenditure by all Australian governments is not equal to the sum of expenditure by the Commonwealth government and by state and local governments due to inter-governmental grants (see Explanatory Notes).
Source: ABS, Government Finance Statistics, Education, Australia, 2000-01 (cat. no. 5518.0.55.001).

In 2000-01, government expenditure on primary and secondary education was $\$ 19.2$ billion ( $2.9 \%$ of GDP), accounting for $65 \%$ of all government expenditure on education. Government expenditure on tertiary education was $\$ 8.0$ billion ( $1.2 \%$ of GDP), with $\$ 5.1$ billion of this on university education ( $0.8 \%$ of GDP). Another $\$ 2.4$ billion was spent on other education, which includes preschool education, education not definable by level, and transportation of students.

Expenditure on education by the Commonwealth government in 2000-01 was $\$ 10.9$ billion ( $1.6 \%$ of GDP), with $91 \%$ of this constituting grants to other levels of government. Commonwealth grants are made to state and local governments, which in turn fund the majority of preschool, primary and secondary education, and technical and further education. Current monetary transfers to households-payments such as living allowances which are intended to facilitate participation in education but which are not spent on educational services and facilities-accounted for $5 \%$ of Commonwealth government expenditure on education. In 2000-01, $49 \%$ of Commonwealth government expenditure on education was on primary and secondary education ( $0.8 \%$ of GDP), $35 \%$ on university education ( $0.6 \%$ of GDP), and a further $10 \%$ on technical and further education ( $0.2 \%$ of GDP).

Expenditure on education by state and local governments was $\$ 23.9$ billion ( $3.6 \%$ of GDP), with $80 \%$ directed towards primary and secondary education, and $11 \%$ to technical and further education ( $2.8 \%$ and $0.4 \%$ of GDP respectively).

## EXPENDITURE PER STUDENT—GOVERNMENT SCHOOLS

The following data provide information about expenditure per student within government school systems, which is important in understanding government investment in public school education. The data are from the National Report on Schooling in Australia, published annually by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), and are based on data supplied by the Commonwealth, and state and territory education departments.

The data represent expenditure (by governments) on government schools per student, on a full-time equivalent (FTE) student basis, and are presented for financial years. Expenditure data incorporate both salaries and non-salary costs, which include costs such as superannuation, payroll tax and workers compensation, other operating expenses, grants and subsidies, capital charges (only applicable to Victoria, Queensland and the Australian Capital Territory), and depreciation. The data do not represent total government expenditure on school-level education per student in government schools as they specifically exclude items such as Commonwealth direct payments to parents and/or students such as AUSTUDY, expenditure on preschools and Technical and Further Education establishments, sinking fund payments and interest on Commonwealth loans, and teacher housing and student hostel provisions. Funds raised by schools, school councils or community organisations are also excluded.

From 1999-2000 MCEETYA moved to accrual financial reporting (see Explanatory Notes). Data for 1998-99 were recalculated using accrual accounting but no time series are available prior to 1998-99. Data are expressed in current prices; therefore changes between years include the effects of price changes (see Explanatory Notes).

The expenditure data presented below should not be compared to the expenditure of non-government schools per student due to differences in the scope of the data, the reporting period and in the accounting basis used. Inclusions and exclusions for expenditure of non-government schools per student can be found in 'About the data' in the Topic 'Income and expenditure per student-non-government schools'.

On an accrual financial reporting basis, expenditure by governments on government schools was $\$ 17.4$ billion in 1999-2000: \$9.0 billion on primary education (in-school), $\$ 7.5$ billion on secondary education (in-school) and $\$ 921$ million on out-of-school expenditure (which includes payments of salaries and allowances and non-salary costs for other education establishments, expenses paid for by central or regional offices such as freight, postal charges and advertising, and travelling expenses for teachers based at regional branch offices).

|  | $1998-99$ | $1999-2000$ |
| :--- | ---: | ---: |
| Level of Education | $\$$ | $\$$ |
| Primary |  |  |
| $\quad$ Recurrent expenditure per FTE student | 6258 | 6585 |
| $\quad$ Investing expenditure per FTE student | 281 | 333 |
| Secondary |  |  |
| $\quad$ Recurrent expenditure per FTE student | 8328 | 8540 |
| $\quad$ Investing expenditure per FTE student | 354 | 391 |
| All government schools |  |  |
| $\quad$ Recurrent expenditure per FTE student | 7059 | 7344 |
| Investing expenditure per FTE student | 309 | 355 |

(a) Figures expressed in current prices, therefore changes between years include the effects of price changes (see Explanatory Notes). Data do not represent total expenditure on government school-level education.
(b) Presented on an accrual financial reporting basis.

Source: MCEETYA, National Report on Schooling in Australia: 2000.

In 1999-2000, on an accrual accounting basis, average expenditure on government schools per FTE student was $\$ 7,344$ in recurrent expenditure (such as staff salaries, employee related expenses and other operating expenses) and $\$ 355$ in investing expenditure (which represents acquisition and/or disposal of land, buildings, plant and equipment, infrastructure systems and investments). This compares to recurrent expenditure of $\$ 7,059$ and investing expenditure of $\$ 309$ per FTE student in 1998-99.

Expenditure per FTE student was higher for government secondary schools than for government primary schools. In 1999-2000, recurrent expenditure on government secondary schools was $\$ 8,540$ per FTE student compared to $\$ 6,585$ per FTE student on primary schools. Investing expenditure per FTE student was also higher for government secondary schools than for primary schools (\$391 compared to \$333 in 1999-2000). Similarly, in 1998-99, both recurrent and investing expenditure per FTE student was higher for government secondary schools than for primary schools.

INCOME AND EXPENDITURE PER STUDENT-NON-GOVERNMENT SCHOOLS

The data presented provide information about income and expenditure of non-government schools per student, which is important in understanding non-government school education finances. The data are from the National Report on Schooling in Australia, published annually by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), and are based on data supplied by the Department of Education, Science and Training.

The data show the income and expenditure per student of non-government schools, and are based on actual student numbers, not full-time equivalents. Data are presented for calendar years. Expenditure data incorporate both salaries and non-salary costs. These data include capital expenditure, expenditure of funds raised through fees from church or parish grants, and expenditure on, or allowance for, superannuation and long service leave. Commonwealth and state grants for education and payments to staff of salary-related allowances including motor vehicle allowances are also included, as are debt servicing of loans for capital and operating purposes. Non-government school income and expenditure exclude amounts related to boarding facilities and special schools, direct payments by the Commonwealth to students and/or parents, and salaries of staff and operating expenses of boarding houses. 'Capital expenditure' excludes loan principal repayments. Expenditure of system offices is allocated across the schools in proportion to enrolments. Data are expressed in current prices; therefore changes between years include the effects of price changes (see Explanatory Notes).

The expenditure data presented below should not be compared to the expenditure on government schools per student due to differences in the scope of the data, the reporting period and in the accounting basis used. Inclusions and exclusions for expenditure on government schools per student can be found in 'About the data' in the Topic 'Expenditure per student-government schools'.

Expenditure of non-government schools was $\$ 7.4$ billion in 2000 , with $\$ 3.4$ billion spent on combined primary and secondary schools, $\$ 2.1$ billion on secondary schools, and $\$ 1.9$ billion on primary schools.

Expenditure of non-government schools per student was, on average, $\$ 7,323$ in 2000 compared with $\$ 6,777$ in 1999 (in current price terms). Expenditure per student in 2000 was highest for combined schools, at $\$ 9,172$, compared to $\$ 7,999$ for secondary schools and $\$ 5,005$ for primary schools.

Independent non-government schools had higher expenditure per student than did Catholic non-government schools. In 2000, expenditure of independent schools was $\$ 9,251$ per student on average, compared to $\$ 6,251$ for Catholic schools.

## EXPENDITURE PER STUDENT(a), Non-government schools

|  | 1999 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Catholic | Independent | Total nongovernment | Catholic | Independent | Total nongovernment |
| Level of education | \$ | \$ | \$ | \$ | \$ | \$ |
| Primary | 4507 | 5935 | 4648 | 4868 | 6215 | 5005 |
| Secondary | 7150 | 10853 | 7496 | 7726 | 10539 | 7999 |
| Combined | 7102 | 8792 | 8436 | 7807 | 9531 | 9172 |
| Total non-government | 5769 | 8634 | 6777 | 6251 | 9251 | 7323 |

(a) Figures expressed in current prices, therefore Source: MCEETYA, National Report on Schooling in changes between years include the effect of price Australia: 1999 and 2000 changes (see Explanatory Notes).

Recurrent expenditure (such as staff salaries, employee related expenses and other operating expenses) was the major component of expenditure of non-government schools in 2000 ( $\$ 6,251$ per student, or $85 \%$ of total expenditure). For 2000, average expenditure of non-government schools ( $\$ 7,323$ per student) was higher than the income of non-government schools (\$7,179 per student).

INCOME AND EXPENDITURE PER STUDENT, Non-government schools-2000


Source: MCEETYA, National Report on Schooling in Australia: 2000.

In 2000, just over half of income for non-government schools was from government grants: $40 \%$ from the Commonwealth government and around $16 \%$ from state/territory governments. Catholic schools, on average, received higher government grants per student $(\$ 4,525)$ than did independent schools $(\$ 3,251)$. Income from private sources, mostly from fees and charges, represented $43 \%$ of the total income of non-government schools. Independent schools had a higher proportion of private income than Catholic schools in 2000 ( $63 \%$ compared to $28 \%$ ).

## ABOUT THE DATA

ANALYSIS

These data provide insight into an important component of the cost of education to households-they show the average annual direct expenditure by households on education fees paid to educational institutions (see Glossary) and how this varies by income level. The data are from the ABS's Household Expenditure Survey which is conducted every five years. Due to a classification change in 1998-99, expenditure on pre-year 1 education fees are included in expenditure on primary school fees for 1998-99, whereas in 1993-94 they were included in expenditure on childcare. All expenditure data are for only those households that had any expenditure on education fees during the previous 12 months. If average expenditure on education fees were presented for all households, expenditure would be lower. Similarly, the income quintiles presented are derived for only those households that had some expenditure on education fees (see Explanatory Notes). Data for 1993-94 have been adjusted to 1998-99 price levels using the ABS's Consumer Price Index (see Explanatory Notes).

In 1998-99, the average annual expenditure on education fees by households that had some expenditure on education fees was $\$ 1,796$. In 1993-94 expenditure on education fees was $\$ 1,319$ (in 1998-99 prices). In addition to any effect of the classification changes referred to above, changes in expenditure over time may be related to factors such as changes in household composition (for example the number of school age children) and education participation rates.

HOUSEHOLD EXPENDITURE ON EDUCATION FEES(a), By household income quintiles(b)

(a) Average annual expenditure for only those households with any expenditure on education fees.
(b) Quintiles are based on only those households that had expenditure on education fees.
(c) Figures expressed in 1998-99 price levels (see Explanatory Notes).
(d) Includes expenditure on pre-year 1 education fees.

Source: ABS data available on request, Household Expenditure Survey 1993-94 and 1998-99.

Average expenditure on education fees tends to increase with household income. On average, for households that had some expenditure on education fees, the lowest $20 \%$ of households in the household income distribution spent \$1,077 in 1998-99 compared to $\$ 3,011$ for the highest $20 \%$. In 1998-99, the highest 20\% of households spent, on average, $64 \%$ more on education fees than the fourth income quintile group $(\$ 1,838)$.

HOUSEHOLD EXPENDITURE(a), By household income quintiles(b)

|  | $\begin{array}{r} \text { Lowest } \\ 20 \% \end{array}$ | Income Quintile 2 | Income Quintile 3 | Income Quintile 4 | $\begin{array}{r} \text { Highest } \\ 20 \% \end{array}$ | households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993-94(c) |  |  |  |  |  |  |
| Education fees (\$) | 843 | 1072 | 1255 | 1227 | 2196 | 1319 |
| Total goods and services expenditure (\$) | 29126 | 34562 | 43393 | 48368 | 67094 | 44520 |
| Education fees-\% of goods and services expenditure | 2.9 | 3.1 | 2.9 | 2.5 | 3.3 | 3.0 |
| 1998-99(d) |  |  |  |  |  |  |
| Education fees (\$) | 1077 | 1451 | 1597 | 1838 | 3011 | 1796 |
| Total goods and services expenditure (\$) | 29330 | 37012 | 44642 | 53407 | 73476 | 47593 |
| Education fees-\% of goods and services expenditure | 3.7 | 3.9 | 3.6 | 3.4 | 4.1 | 3.8 |
| (a) Average annual expenditure for only those households with any expenditure on education fees. | (c) Figures expressed in 1998-99 price levels (see Explanatory Notes). |  |  |  |  |  |
| (b) Quintiles are based on only those households that had any expenditure on education fees. | (d) Includes expenditure on pre-year 1 education fees. <br> Source: ABS data available on request, Household Expenditure Survey 1993-94 and 1998-99. |  |  |  |  |  |

On average in 1998-99, households with expenditure on education fees spent $3.8 \%$ of their total goods and services expenditure on education fees. This increased from $3.0 \%$ in 1993-94. The highest $20 \%$ of households spent the highest proportion on education fees while the fourth income quintile group spent the lowest.

HOUSEHOLD EXPENDITURE ON EDUCATION FEES-1998-99

| Average annual <br> household expenditure(a) |  |
| :--- | ---: |
| Education fees for primary and secondary schools | $\$$ |
| Government school fees(b) | 1501 |
| Non-government school fees | 255 |
| Catholic school fees | 3568 |
| $\quad$ Other non-government school fees | 2102 |
| Education fees other than primary and secondary school fees(c) | 5996 |
| Higher education institution fees | 1623 |
| Fees paid to other educational institutions nec(d) | 2039 |
| All education fees | 659 |

All education fees ..... 1796
(a) For each type of education: average annual expenditure for only those households that had expenditure on fees for that type of education.
(b) Includes voluntary school fee contributions.
(c) Includes private education tuition fees not included elsewhere.
(d) Includes expenditure on fees to Technical and Further Education institutions, private business colleges, and drama and ballet schools.
Source: ABS data available on request, Household Expenditure Survey 1998-99.

In 1998-99, households that had expenditure on non-government school fees spent an average of $\$ 3,568$ on these fees, while households that had expenditure on government school fees spent $\$ 255$ on such fees (including voluntary school fee contributions). Expenditure of households on Catholic school fees $(\$ 2,102)$ was lower than other non-government school fees $(\$ 5,996)$. Households that had expenditure on higher education institution fees (including HECS payments and university fees) spent more on these fees in 1998-99 (\$2,039) than households that had expenditure on fees for other education institutions such as TAFEs and private business colleges (\$659).

ANALYSIS

Data on the number of teachers provide a measure of the level of teaching resources in Australian schools. The analysis examines changes in teachers' sex and age distribution over time. Most data are from the annual National Schools Statistics Collection (NSSC). In this collection, teaching staff are staff who have teaching duties and spend the majority of their time in contact with students. They include principals, deputy principals and senior teachers mainly involved in administration. Teaching staff are referred to as 'teachers'. Teachers in special schools have been included as either primary or secondary school teachers depending on the level at which they teach for the majority of the time.

Data for the age distribution of teachers are from the ABS's Labour Force Survey and are the average of the months February, May, August and November. Median age is calculated just for the month of November. In this survey, teachers are defined as employees whose occupation is classified to the minor group 'School teachers' in both the Australian Standard Classification of Occupations (ASCO) first edition (data prior to 1995) and second edition (data from 1996). School principals are excluded, as they cannot be separately identified in this survey (see Explanatory Notes).

There were 249,600 teachers in schools in 2001, representing 221,900 full-time equivalent (FTE) teachers. Between 1991 and 2001, the number of FTE primary school teachers increased by $16 \%$ to 112,500 . Over the same period, FTE secondary school teachers increased by $6 \%$ to 109,400 . All further references to the number of teachers are in terms of full-time equivalents, except for the age distribution.

FULL-TIME EQUIVALENT TEACHERS, By level of school


Between 1991 and 2001, the number of FTE teachers increased by 11\%, with females increasing by $21 \%$ (to 148,600 ) and males decreasing by $4 \%$ (to 73,300 ). However, since 1998 there has been a slight increase in the number of male teachers (from 72,100 to 73,300 ). In $2001,67 \%$ of teachers were female compared to $62 \%$ in 1991. Almost $79 \%$ of teachers in primary schools were female in 2001, compared to $55 \%$ in secondary schools.

FULL-TIME EQUIVALENT TEACHERS, By level of school and school affiliation

|  | 1991 |  |  |  | 2001 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary | Secondary | Total |  | Primary | Secondary | Total |  |
|  | '000 | 000 | '000 | \% | '000 | '000 | '000 | \% |
| Government | 74.2 | 71.7 | 145.9 | 73.1 | 82.5 | 69.7 | 152.1 | 68.6 |
| Non-government |  |  |  |  |  |  |  |  |
| Anglican | 1.6 | 4.7 | 6.3 | 3.2 | 2.7 | 6.1 | 8.8 | 3.9 |
| Catholic | 16.3 | 18.3 | 34.6 | 17.4 | 19.3 | 21.5 | 40.8 | 18.4 |
| Other | 4.6 | 8.1 | 12.7 | 6.4 | 8.1 | 12.2 | 20.3 | 9.1 |
| Total | 22.6 | 31.1 | 53.6 | 26.9 | 30.1 | 39.7 | 69.8 | 31.4 |
| All Schools | 96.8 | 102.8 | 199.5 | 100.0 | 112.5 | 109.4 | 221.9 | 100.0 |
| Proportion female \% | 73.7 | 50.4 | 61.7 |  | 78.7 | 54.9 | 67.0 |  |
| . ${ }^{\text {not applicable }}$ |  |  |  | Source: ABS data available on request, National Schools Statistics Collection 1991 and 2001. |  |  |  |  |

## ANALYSIS continued

## AGE DISTRIBUTION

In 2001, the proportion of FTE teachers in non-government schools was $31 \%$, an increase from $27 \%$ in 1991. This increase was more pronounced at the secondary school level: $36 \%$ of secondary teachers in 2001 were in non-government schools, compared with $30 \%$ in 1991. The majority of the increase in the number of teachers between 1991 and 2001 was in non-government schools with a $30 \%$ increase ( $18 \%$ in Catholic schools, $39 \%$ in Anglican schools, and 60\% in other non-government schools).

Due to differences in scope, data from the ABS's monthly Labour Force Survey are not directly comparable with the NSSC, but the overall age distribution is likely to be similar (see Explanatory Notes). The data show that the median age of teachers increased from 39 years in 1991 to 42 years in 2001.

AGE DISTRIBUTION OF SCHOOL TEACHERS(a)

(a) Average of the months February, May, August and November.
(b) Data for 1991 classified to ASCO first edition.
(c) Data for 2001 classified to ASCO second edition.

Source: ABS data available on request, Labour Force Survey.

In $2001,42 \%$ of teachers were aged 45 years or more, compared with $22 \%$ in 1991 . The proportion of teachers in both the 25-34 and 35-44 age groups fell between 1991 and 2001 (from $29 \%$ to $23 \%$, and $40 \%$ to $28 \%$, respectively).

торіс 11

ABOUT THE DATA

ANALYSIS

## SCHOOL STUDENT/TEACHER RATIOS

School student/teacher ratios present a measure of the number of students relative to the number of teachers, and give an indication of changes in teaching resources in schools over time. These ratios are not intended to provide a measure of class size. Ratios are derived by dividing the number of full-time students by the number of full-time equivalent teaching staff. Data are from the annual National Schools Statistics Collection (NSSC). In this collection, teaching staff are defined as those who have teaching duties and spend the majority of their time in contact with students, and include principals, deputy principals and senior teachers mainly involved in administration. School student/teacher ratios are presented for primary and secondary schools, and also for government and non-government schools.

In 1976 there were an average of 18.6 students per teacher within the Australian school systems. The ratio has generally decreased since then, and in 2001 was 14.7. Although there is a relatively long time series of data available, it was not until 1984, when consistent definitions, classifications and coverage were introduced to the NSSC, that the data became fully comparable. Hence, care should be exercised when using data for periods before 1984, and when comparing data for periods before 1984 with data for later periods.

SCHOOL STUDENT/TEACHER RATIOS(a)(b)

(a) 1976-1984: data may not be fully comparable between years or with data from 1984 onwards.
(b) Full-time equivalent teaching staff and full-time students.

Source: ABS, Schools, Australia, 1984-2001 (cat. no. 4221.0); ABS, National Schools Collection: Government Schools, Australia, 1982-83 (cat. no. 4215.0); ABS, Non-government Schools, Australia, 1982-83 (cat. no. 4216.0); ABS, Schools, 1976-81 (cat. no. 4202.0).

Secondary school student/teacher ratios have been consistently lower than primary school ratios. While the student/teacher ratio for secondary schools generally decreased from 14.4 in 1976 to 12.6 in 1987, it has remained at about this level since (although it decreased slightly to 12.4 in 2001). The ratio for primary schools has generally decreased over the period, from 22.5 in 1976 to 17.0 in 2001

ANALYSIS continued

At the primary school level, student/teacher ratios have been lower for government schools than non-government schools (16.8 and 17.6 respectively in 2001 and 18.0 and 19.9 in 1991). For secondary schools, the student/teacher ratio for government schools was also lower than for non-government schools in 1991 (12.3 and 13.2 respectively); however, by 2001 this difference was no longer apparent (both 12.4).

SCHOOL STUDENT/TEACHER RATIOS(a)

(a) Full-time equivalent teaching staff and full-time students.

Source: ABS, Schools, Australia (cat. no. 4221.0).

There are considerable differences between student/teacher ratios for the different affiliations of non-government schools. Catholic schools had the highest student/teacher ratios of all non-government school affiliations in both 2001 ( 18.8 for primary schools and 13.4 for secondary schools) and 1991 (21.0 for primary schools and 14.0 for secondary schools), although the ratio for primary schools showed the largest decrease over this period. The student/teacher ratios for Anglican schools and other non-government schools are generally lower than those for government schools, and both decreased between 1991 and 2001.

SCHOOL STUDENT/TEACHER RATIOS, By level of school

|  | 1991 |  |  | 2001 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary | Secondary | All schools | Primary | Secondary | All schools |
| School |  |  |  |  |  |  |
| affiliation | ratio | ratio | ratio | ratio | ratio | ratio |
| Government | 18.0 | 12.3 | 15.2 | 16.8 | 12.4 | 14.8 |
| Non-government |  |  |  |  |  |  |
| Anglican | 16.0 | 12.3 | 13.3 | 14.9 | 11.3 | 12.4 |
| Catholic | 21.0 | 14.0 | 17.3 | 18.8 | 13.4 | 15.9 |
| Other | 17.2 | 12.0 | 13.9 | 15.6 | 11.2 | 13.0 |
| Total | 19.9 | 13.2 | 16.0 | 17.6 | 12.4 | 14.6 |
| All schools | 18.5 | 12.5 | 15.4 | 17.0 | 12.4 | 14.7 |

Source: ABS data available on request, National Schools Statistics Collection 1991 and 2001.

Staff represent a major component of resources in higher education. The information presented here shows the number and selected characteristics of staff in higher education institutions in Australia. Data are from the annual Higher Education Staff Collection, conducted by the Department of Education, Science and Training (DEST).

Higher education staff are employed on one of three types of work contracts-full-time, fractional full-time, and casual. The first two of these are referred to here as permanent staff (either full-time or part-time). The full-time equivalent (FTE) of staff is measured in addition to the number of staff, and is the number of full-time staff and a fraction for part-time staff based on agreed hours worked compared to the hours for similar full-time staff. DEST also collect FTE data about casual staff, but the latest casual staff data published are for 2000, and casual staff are therefore only included in a small part of this analysis.

In 2001, there were 62,200 full-time and 16,000 part-time permanent staff in higher education institutions, an increase from 60,200 full-time and 10,900 part-time staff in 1991. The number of staff declined between 1996 and 1998, and according to the DEST publication Characteristics and Performance Indicators of Australian Higher Education Institutions, 2000, this was driven by 'changes to the industrial relations environment, in particular the introduction of enterprise bargaining, in conjunction with the end of automatic salary supplementation by the Commonwealth'.

NUMBER OF PERMANENT HIGHER EDUCATION STAFF


Source: DEST, Staff 2000 and 2001: Selected Higher Education Statistics.

In full-time equivalent terms, there was a total of 82,000 staff in 2000. This figure included 12,400 FTE casual staff, representing $15 \%$ of total FTE staff in 2000. The proportion of all FTE staff who were casual has increased from $10 \%$ in 1991.

Staff in higher education are classified as either 'academic' or 'non-academic' depending on the nature of their current duties, with academic staff further classified into four levels, from 'above senior lecturer' to 'below lecturer'. In 2001, less than half

ANALYSIS continued
(43\%) of permanent staff were in an academic classification. Between 1991 and 2001, the number of permanent staff at above senior lecturer level increased by $30 \%$, while the number of lecturers decreased by $10 \%$. Lecturers comprised $34 \%$ of all academic staff in 2001. Of all academic staff in 2001, $37 \%$ were female. However, this proportion varied across the academic levels; for example, females represented $17 \%$ of those at above senior lecturer level and $54 \%$ of those at below lecturer level.

NUMBER OF PERMANENT STAFF, By current duties classification-2001

|  | ACADEMIC CLASSIFICATIONS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above senior lecturer | Senior lecturer | Lecturer | Below lecturer | Total academic classifications | Nonacademic classifications | Total |
| Age (years) | '000 | '000 | '000 | '000 | '000 | '000 | '000 |
| 34 and under | - | 0.2 | 1.7 | 2.9 | 4.9 | 13.0 | 17.9 |
| 35-44 | 1.0 | 2.5 | 4.6 | 2.2 | 10.2 | 12.2 | 22.4 |
| 45-54 | 3.2 | 3.6 | 3.9 | 1.1 | 11.8 | 13.8 | 25.6 |
| 55-64 | 2.7 | 1.9 | 1.3 | 0.3 | 6.1 | 5.4 | 11.5 |
| 65 and over | 0.2 | 0.1 | 0.1 | - | 0.5 | 0.3 | 0.8 |
| Total | 7.0 | 8.4 | 11.6 | 6.4 | 33.4 | 44.8 | 78.2 |
| Proportion female (\%) | 17.2 | 30.5 | 45.6 | 54.1 | 37.5 | 61.5 | 51.2 |
| - nil or rounded to zer | uding null |  |  | EST, Staf tatistics. | 2001: Selected | Education |  |

The median age for permanent academic staff was 46 years in 2001, an increase from 43 years in 1991. The median age within each academic classification also increased between 1991 and 2001. Staff in the higher academic classifications had an older age profile than lower level academic staff. For example, $41 \%$ of staff at above senior lecturer level were aged 55 years or more in 2001, compared with $13 \%$ of lecturers.

Higher education staff are also classified by function-'teaching only', 'research only', 'teaching and research' and 'other'. Staff with 'other' functions (for example, those who work in academic support services or student services) represented $54 \%$ of total FTE permanent staff in 2001, and a further $33 \%$ had a 'teaching and research' function. Within the teaching and research functions, the proportion of FTE staff with a 'research only' function has increased from $19 \%$ in 1991 to $25 \%$ in 2001.

Academic organisational units (AOUs) are units formed within institutions to undertake particular functions with the primary objective of teaching and/or research, and are also referred to as 'schools' or 'departments'. Data are available by AOU group for FTE permanent staff with a 'teaching only' or 'teaching and research' function. In 2001, Society and culture was the AOU group with the highest proportion of FTE permanent staff ( $25 \%$ of all FTE 'teaching only' or 'teaching and research' staff in an AOU), followed by Natural and physical sciences (15\%), Health (14\%), and Management and commerce (12\%). Note that in 2001 the Australian Standard Classification of Education (ASCED) was introduced to the collection for AOU groups. Therefore groups here are different from those presented in the Topic 'Higher education student/teaching staff ratios'.

HIGHER EDUCATION STUDENT/TEACHING STAFF RATIOS

Higher education student/teaching staff ratios provide a measure of the number of students relative to the number of teaching staff. Ratios are derived by dividing the number of students, measured by the equivalent full-time student unit for all students attending a higher education institution in Australia (excluding the full-time equivalent (FTE) study load of work experience students), by the FTE of teaching staff (staff whose function was teaching only or teaching and research) in an academic organisational unit (AOU), which includes full-time, fractional full-time, and casual staff. AOUs are units formed within institutions to undertake particular functions with the primary objective of teaching and/or research, and are also referred to as 'schools' or 'departments'.

Data are from the Higher Education Statistics Collection conducted annually by the Department of Education, Science and Training (DEST), and student/teaching staff ratios are published by DEST in Characteristics and Performance Indicators of Australian Higher Education Institutions. Data for actual (as distinct from estimated) casual staff are not available until some time after the reference year, and the latest year where actual casual staff data have been published is 2000. Therefore, the latest year presented for the student/teaching staff ratio is also 2000.

In 2000, there was an average of 18.3 full-time equivalent students per FTE teaching staff in Australian higher education institutions. The ratio has been generally increasing since 1994 when the ratio was 14.7 FTE students per FTE teaching staff.

HIGHER EDUCATION STUDENT/TEACHING STAFF RATIO(a)

(a) Ratio derived by dividing the equivalent full-time student unit for all onshore students (excluding work experience industry load) by the full-time equivalent of teaching staff in an Academic Organisational Unit.
Source: DEST, Characteristics and Performance Indicators of Australian Higher Education Institutions, 2000; DEST unpublished data, Higher Education Statistics Collection.

ANALYSIS continued

Higher education student/teaching staff ratios vary according to the AOU group (or the field of education). In 2000, the AOU group with the highest student/teaching staff ratio was Administration, business, economics and law (an average of 25.2 FTE students per FTE teaching staff), followed by Mathematics and computing (21.7), and Built environment (20.4). In contrast, the lowest student/teaching staff ratios were in the Health sciences (12.6), Agriculture and renewable resources (13.1), and Sciences (13.6) AOUs.

STUDENT/TEACHING STAFF RATIOS, By academic organisational unit

| Academic Organisational Unit |  |  | Change between |
| :---: | :---: | :---: | :---: |
| Group | 1993 | 2000 | 1993 and 2000 |
| Humanities | 15.2 | 19.0 | 3.8 |
| Social studies | 17.7 | 19.2 | 1.5 |
| Education | 15.3 | 19.0 | 3.7 |
| Sciences | 13.0 | 13.6 | 0.6 |
| Mathematics, computing | 16.3 | 21.7 | 5.4 |
| Visual/performing arts | 11.8 | 14.0 | 2.2 |
| Engineering, processing | 13.3 | 16.5 | 3.2 |
| Health sciences | 11.8 | 12.6 | 0.8 |
| Administration, business, economics, law | 20.6 | 25.2 | 4.6 |
| Built environment | 13.9 | 20.4 | 6.5 |
| Agriculture, renewable resources | 11.7 | 13.1 | 1.4 |
| Total | 15.3 | 18.3 | 3.0 |

Source: DEST unpublished data, Higher Education Statistics Collection 1993 and 2000.

While student/teaching staff ratios increased in all AOUs between 1993 and 2000, the most marked increases were in Built environment, with the ratio increasing from an average of 13.9 FTE students per FTE teaching staff in 1993 to 20.4 in 2000, Mathematics and Computing (an increase from 16.3 in 1993 to 21.7 in 2000), and Administration, business, economics and law (20.6 in 1993 and 25.2 in 2000). Those AOUs which experienced very little change in the student/teaching staff ratios between 1993 and 2000 were Sciences (13.0 in 1993 and 13.6 in 2000) and Health sciences (11.8 in 1993 and 12.6 in 2000). Note that for data from 2001 the classification used for AOU groups changed to the Australian Standard Classification of Education field of education classification; therefore groups here are different from those presented in the Topic 'Higher education staff'.

This topic provides information about the earnings of educators, differences in earnings between different types of educators, and comparisons with the earnings of all employees. The data are from the Survey of Employee Earnings and Hours, conducted by the ABS every two years. Educators are defined as employees whose occupation is classified to the sub-major group 'Education professionals' in the Australian Standard Classification of Occupations (ASCO) second edition (data for 1996 onwards) and the minor groups 'School teachers' and 'Other teachers and instructors' in the ASCO first edition (1995 and before). 'Education managers' (e.g. school principals) have been excluded. 'Average weekly ordinary time earnings' refers to the average gross weekly ordinary time earnings of full-time adult non-managerial employees.

Earnings of educators have increased consistently between 1986 and 2000. In 1986 the average weekly ordinary time earnings of all educators was $\$ 510$ and by 2000 this had increased by $83 \%$ to $\$ 934$. Over the same period average weekly ordinary time earnings of all employees increased by $92 \%$ from $\$ 384$ to $\$ 737$. While there has been an increase in earnings for each of the four main groups within educators, the amount by which each group has increased differs. For example, average weekly ordinary time earnings of University lecturers and tutors increased by 95\% (from $\$ 601$ in 1986 to $\$ 1,172$ in 2000), compared to a $68 \%$ increase in earnings of Vocational education teachers (from $\$ 539$ in 1986 to $\$ 904$ in 2000). Average weekly ordinary time earnings of Secondary school teachers increased by $76 \%$ over this period to $\$ 918$ in 2000 , and earnings of Primary school teachers increased by $75 \%$ to $\$ 875$.

AVERAGE WEEKLY EARNINGS(a)

(a) Ordinary time earnings of full-time adult non-managerial employees.

Notes: In 1996 the occupation classification changed to ASCO 2nd edition. Survey not conducted in 1997 and 1999.
Source: ABS data available on request, Survey of Employee Earnings and Hours.

While average weekly ordinary time earnings have been increasing over time, movements in earnings can be affected both by changes in wage and salary rates for given job classifications, and by changes in the relative proportions of the various job classifications in the workforce. For example, in recent years the number of university senior lecturers has increased at a greater rate than the number of lecturers and tutors. These types of compositional effects cannot be identified from the data. Further, the nature of the teaching profession, such as the qualification requirements of teachers, has changed over time. For example, where previously school teachers needed only a teaching Diploma they now require a Bachelor degree or a Post-graduate diploma. These changes could have changed the duties and responsibilities of teachers, and may also impact on the earnings of educators. As with compositional effects, these types of effects cannot be identified from this data source.

Average weekly ordinary time earnings of educators has consistently been around $30 \%$ higher than for all employees (\$934 compared to $\$ 737$ in 2000). However, when comparing the earnings of all educators to those of all Professionals, average weekly ordinary time earnings of educators has ranged from being about the same (from 1992 to 1994) to just below the average for all Professionals ( $98 \%$ of the earnings of all Professionals in 2000—\$934 compared to \$954).

RATIO OF AVERAGE WEEKLY EARNINGS(a) OF EDUCATORS TO OTHER EMPLOYEES

(a) Ordinary time earnings of full-time adult non-managerial employees.

Note: Survey not conducted in 1997 and 1999.
Source: ABS data available on request, Survey of Employee Earnings and Hours.

Average weekly ordinary time earnings of educators was higher for males than for females ( $\$ 989$ and $\$ 894$ respectively) in 2000 . This may be partly due to the fact that a higher proportion of male educators are University lecturers and tutors, who have higher average weekly earnings than other educators.

There was relatively little difference between average weekly ordinary time earnings of educators working for public sector and private sector employers (\$937 and $\$ 925$ respectively in 2000). However, the difference between male and female earnings was larger among those working for private sector employers (\$1,003 for males and $\$ 878$ for females).

DEMAND FOR NON-SCHOOL STUDY

Information about people who apply to attend an educational institution and whether or not they gain a place provides an insight into the relative supply and demand for education. For this Topic, 'total demand' represents those people who applied to attend an educational institution other than a school. Those who were able to gain a place at a non-school educational institution (not necessarily in the course of their choice) represent 'met demand', and people unable to gain a place (at the time of the survey) represent 'unmet demand'. Met demand includes those who were studying or had deferred their study at the time of the survey and who, in the previous year, were either not studying or were studying at a different type of institution to their current institution. Met demand data for 1994 to 1996 include only those studying for a recognised qualification. Data are from the ABS's Survey of Education and Work, conducted in May each year, and relate to people aged 15-64 years.

Of people aged 15-64 years, 840,400 had applied to attend an educational institution other than a school for 2001, an increase of $14 \%$ from 1994 . There was a marked increase in demand for non-school study between 1998 and 1999 which coincided with the replacement of AUSTUDY and youth unemployment benefits with Youth Allowance (July 1998) with the aim of removing disincentives for young people to participate in education. Also in 1998, universities were able to offer some fee-paying undergraduate places, and the New Apprenticeships Scheme was introduced. Some 762,100 people applied to attend a non-school educational institution and gained a place in 2001, representing $91 \%$ of total demand. Of these, 653,500 people were studying in May 2001, with the remainder deferring their study. In 2001, 78,400 people were unable to gain a place, representing 9\% of total demand. Between 1994 and 2001, unmet demand as a proportion of total demand for study decreased from $16 \%$ in 1994 to $9 \%$ in 2001.

TOTAL AND MET DEMAND FOR NON-SCHOOL STUDY(a)

(a) For 1994-96 met demand only includes those studying for a recognised qualification.
(b) People who applied to attend at a non-school educational institution.
(c) People who were studying or deferred their study at the time of the survey, and, in the previous year, were either not studying or were studying at a different type of institution to their current institution.

Source: ABS data available on request, Transition from Education to Work Survey 1994-2000; Survey of Education and Work 2001.

ANALYSIS continued

Females accounted for just over half (55\%) of total demand for non-school study in 2001. Female demand increased by $22 \%$ between 1994 and 2001, while male demand increased by only $6 \%$ over the same period. In 2001, 43,300 females and 35,100 males were unable to gain a place, with females representing $55 \%$ of all unmet demand.

In 2001, $40 \%$ of demand for non-school study was for study at TAFE institutions, $38 \%$ for study at higher education institutions, and $21 \%$ for study at other non-school institutions, such as adult or community education centres and private training providers. Across institutions, the proportion of demand for TAFE study declined from $46 \%$ in 1994 to $40 \%$ in 2001, while demand for study at non-school institutions other than TAFE or higher education institutions increased from $15 \%$ to $21 \%$ over the same period. Unmet demand in 2001 was highest for TAFE study ( $12 \%$ of total demand for TAFE study), while unmet demand for study at higher education institutions was $7 \%$.

TOTAL AND UNMET DEMAND FOR NON-SCHOOL STUDY, By age

|  | 1994(a) |  |  | 2001 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total demand for study(b) | Unmet demand(c) | Unmet demand as a proportion of total demand | Total demand for study(b) | Unmet demand(c) | Unmet demand as a proportion of total demand |
| Age |  |  |  |  |  |  |
| 15-24 | 347.3 | 46.7 | 13.4 | 380.5 | 22.6 | 5.9 |
| 15-19 | 213.0 | 23.6 | 11.1 | 223.6 | 8.1 | 3.6 |
| 20-24 | 134.4 | 23.1 | 17.2 | 156.9 | 14.5 | 9.2 |
| 25-34 | 187.1 | 34.6 | 18.5 | 190.8 | 21.1 | 11.1 |
| 35-44 | 125.3 | 19.9 | 15.9 | 150.3 | 17.6 | 11.7 |
| 45-64 | 75.5 | 13.4 | 17.7 | 118.9 | 17.0 | 14.3 |
| Total | 735.3 | 114.6 | 15.6 | 840.4 | 78.4 | 9.3 |

(a) Met demand for 1994 represents only those people studying for a recognised qualification.
(b) People who applied to attend a non-school educational institution.
(c) People unable to gain a place at a non-school educational institution.

Source: ABS data available on request, Transition from Education to Work Survey 1994; Survey of Education and Work 2001.

In 2001, $45 \%$ of total demand for non-school study was from people aged 15-24 years, while this age group represented $29 \%$ of unmet demand. Some $94 \%$ of $15-24$ year olds' demand for non-school study was met in 2001. Between 1994 and 2001, unmet demand for 15-24 year olds declined from 46,700 to 22,600, with unmet demand as a proportion of total demand declining from $13 \%$ to $6 \%$ over the period. Both total demand and unmet demand in the 45-64 year old age group increased between 1994 and 2001 (by $57 \%$ and $27 \%$ respectively), but unmet demand as a proportion of total demand declined from $18 \%$ to $14 \%$. While unmet demand as a proportion of total demand increased with age in 2001, the proportion decreased for all age groups between 1994 and 2001.

Over one-third (38\%) of unmet demand in 2001 consisted of people who did not yet know at the time of the survey if they had obtained a place. Of those who reported that they had failed to gain a place, the most common main reason was that the course was full (39\%), followed by the course being cancelled (14\%) and applying too late (14\%).

PARTICIPATION IN EDUCATION AND TRAINING

Participation in Education and Training provides information about people aged 15-64 years who are undertaking formal education and training. Data are from the ABS's Survey of Education and Work. All data are at May, and include participation in both recognised and non-recognised study, except for 1993 and 1994 when people studying for non-recognised qualifications were excluded.

Between 1991 and 2001 the number of people aged 15-64 years participating in education and training increased by $21 \%$ to $2,311,100$. Over $18 \%$ of the total population aged 15-64 years were participating in education and training in 2001, a similar proportion to 1991 (17\%). In 2001, $77 \%$ of $15-19$ year olds were participating in education and training, up from $71 \%$ in 1991. Almost $35 \%$ of $20-24$ year olds and $8 \%$ of 25-64 year olds were participating in education and training in 2001, compared to $25 \%$ and $7 \%$ respectively in 1991.

PARTICIPATION IN EDUCATION AND TRAINING(a), Proportion of age group

(a) Excludes persons studying for a non-recognised tertiary qualification in 1993 and 1994.

Source: ABS, Education and Work, Australia (cat. no. 6227.0); ABS, Transition from Education to Work, Australia (cat. no. 6227.0).

Over the last decade, the number of females participating in education and training increased by $27 \%$ to $1,187,400$ in 2001. In $2001,19 \%$ of all females aged $15-64$ years were participating in education and training. Participation rates were higher in the lower age groups, with $78 \%$ of all females aged $15-19$ years participating and $34 \%$ of females aged $20-24$ years. While females represented about half (51\%) of all students aged 15-64 years in 2001, they represented 56\% of students aged 25-64 years.

Of all people aged 15-64, 6\% were studying for a Bachelor degree or above in 2001, $5 \%$ were studying for an Advanced diploma, diploma or certificate level course, and a further $6 \%$ were studying a school level course.

PARTICIPATION IN EDUCATION AND TRAINING-2001

|  | SEX |  | AGE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | 15-19 | 20-24 | 25-64 | Total |
| Level of education | '000 | '000 | '000 | '000 | '000 | '000 |
| Graduate diploma, graduate certificate or above(a) | 92.9 | 94.6 | *2.7 | 27.3 | 157.6 | 187.6 |
| Bachelor degree | 279.2 | 320.4 | 164.8 | 270.0 | 164.8 | 599.6 |
| Advanced diploma or diploma | 96.9 | 116.0 | 38.2 | 50.6 | 124.1 | 212.9 |
| Certificate(b) | 221.5 | 183.9 | 115.4 | 90.2 | 199.7 | 405.4 |
| Year 12 | 118.5 | 113.9 | 223.4 | *3.9 | 5.1 | 232.3 |
| Year 11 or below | 226.5 | 233.6 | 458.9 | **0.2 | *1.0 | 460.1 |
| Level not determined | 36.0 | 36.7 | 15.4 | 14.5 | 42.8 | 72.7 |
| Other education not leading to a qualification | 42.3 | 79.0 | 7.1 | 13.4 | 100.7 | 121.3 |
| Total participating in education and training(c) | 1123.7 | 1187.4 | 1044.9 | 470.3 | 795.8 | 2311.1 |
| All persons | 6407.3 | 6381.1 | 1350.7 | 1353.1 | 10084.6 | 12788.3 |

* estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution
** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use
(a) Includes Postgraduate degree, Graduate diploma and graduate certificate.
(b) Includes Certificate I, II, III or IV, and Certificate not further defined.
(c) Total includes boarding school pupils for whom level was not collected.
Source: ABS, Education and Work, Australia, 2001 (cat. no. 6227.0).


## ANALYSIS continued

In 2001, $67 \%$ of all students (i.e. those participating in education and training) aged $15-19$ years were studying a school level course. Of students aged $20-24$ years, $57 \%$ were studying for a Bachelor degree and $19 \%$ were studying Certificate level courses. Of students aged 25-64 years, 25\% were studying Certificate level courses, $21 \%$ were studying for a Bachelor degree and 20\% were studying for a Graduate diploma, graduate certificate or higher level course. There were more females than males studying at or above the Advanced diploma or diploma level; however, more males were studying Certificate and Year 12 level courses.

Other than Mixed field programmes, which includes study for school level courses, the most common main field of education studied in 2001 by students aged 15-64 was Management and commerce (16\% of all students), followed by Society and culture (11\%) and Engineering and related technologies (7\%).

In 2001, $62 \%$ of all students aged $15-64$ were participating in education and training on a full-time basis. Part-time participation was greater in the 25-64 age group (77\%) than in either the $15-19$ or $20-24$ age groups ( $10 \%$ and $34 \%$ respectively).

Almost 58\% of all students aged 15-64 in 2001 were employed, with over half (54\%) of these working part-time. Over $72 \%$ of employed students aged $15-24$ years were working part-time, compared to $28 \%$ of employed students aged 25-64 years.

Building on the information about the general population's participation in education presented in the Topic 'Participation in education and training', participation by a number of sub-populations is examined here to explore selected equity issues. Sub-populations examined are Indigenous people, people who speak a language other than English at home, and people with a disability. Data presented are from a number of ABS sources. The five-yearly Census of Population and Housing provides data about Indigenous status and language spoken at home. The Survey of Education, Training and Information Technology (2001) provides some data about disability status, and the Survey of Disability, Ageing and Carers provides such data for 1998 and 1993. As the population scope, timing, and methodology for these collections are slightly different from the annual Survey of Education and Work, the education participation rates shown here for the total population may differ slightly from those presented in the Topic 'Participation in education and training'.

In 2001, $2 \%$ of the total population aged 15-64 years identified themselves as Indigenous and $16 \%$ of the total population stated that they spoke a language other than English at home (but note that these two groups are not mutually exclusive since $16 \%$ of people who identified themselves as Indigenous also indicated they spoke a language other than English at home). In 2001, 37\% of Indigenous people aged 15-24 years were participating in education, an increase from $32 \%$ in 1991. Of people aged $15-24$ years who spoke a language other than English at home, $68 \%$ were participating in education in 2001, an increase from $59 \%$ in 1991. For the 15-24 year age group the proportion of Indigenous people participating in education was lower than for the population as a whole in each of 1991, 1996 and 2001, while the proportion of people who spoke a language other than English at home was higher than for the whole population.

PROPORTION PARTICIPATING IN EDUCATION, Persons aged 15-24 years

(a) A proportion of Indigenous people also spoke a language other than English at home, therefore these two categories are not mutually exclusive.
(b) Includes Indigenous status not stated.
(c) Includes language spoken at home not stated, inadequately described and non-verbal so described.
Source: ABS data available on request, Census of Population and Housing 1991, 1996 and 2001.

ANALYSIS continued
The Indigenous population had a younger age profile than the population as a whole, as shown by a higher proportion of people aged 15-24 years ( $32 \%$ of those aged 15-64 years, compared with $21 \%$ of those aged 15-64 years for the total population, in 2001). Among the total population, this age group had the highest proportion of people participating in education. As a result, the education participation rate of Indigenous people aged 15-64 years ( $21 \%$ in 2001) was slightly higher than that for all people aged 15-64 years (20\%), although Indigenous people had a lower education participation rate in each of the age groups up to 34 years. The proportion of people who spoke a language other than English at home participating in education was higher than for the population as a whole in the younger age groups (up to 34 years).

PARTICIPATION IN EDUCATION, By age and selected sub-populations-2001

|  | $15-19$ | $20-24$ | $25-34$ | $35-44$ | $45-54$ | $55-64$ | Total................ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |
| Selected sub-population | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | 000 |
| Indigenous(a) | 52.1 | 18.6 | 15.3 | 13.7 | 10.7 | 8.2 | 20.8 | 49.5 |
| Language other than English spoken at home(a) | 85.5 | 51.6 | 19.0 | 11.1 | 6.4 | 3.7 | 22.5 | 453.7 |
| Total(b)(c) | $\mathbf{7 6 . 0}$ | $\mathbf{3 5 . 7}$ | $\mathbf{1 6 . 2}$ | $\mathbf{1 1 . 5}$ | $\mathbf{8 . 0}$ | $\mathbf{5 . 4}$ | $\mathbf{2 0 . 2}$ | $\mathbf{2 5 2 1 . 2}$ |

(a) A proportion of Indigenous people also indicated they spoke a language other than English at home, therefore these two categories are not mutually exclusive.
(b) Includes Indigenous status not stated.
(c) Includes language spoken at home not stated, inadequately described and non-verbal so described. Source: ABS data available on request, Census of Population and Housing 2001.

Of Indigenous students (i.e. those participating in education) who stated the type of institution they attended (note that a large proportion did not state institution type), the majority of $15-19$ year olds were attending school ( $74 \%$ ) in 2001. Across all other age groups the greatest proportion of Indigenous students were attending a Technical and Further Education institution. For the population as a whole, attendance at a university or other tertiary institution was reported most often in the 20-44 year age groups.

As disability status is not collected in the Census, the Survey of Education, Training and Information Technology has been used to provide information about education participation and disability status. Across all age groups between 15 and 64 years, the proportion of people with a disability participating in education was lower than that for the population as a whole; in 2001, $13 \%$ of those aged 15-64 years who had a disability were participating in education compared with $20 \%$ of all people aged $15-64$ years. Of those aged 15-24 years with a disability, $49 \%$ were studying in 2001, compared with $58 \%$ of all people aged $15-24$ years.

Of all people aged 15-64 years with a disability who were participating in education in $2001,36 \%$ were studying at the Certificate level, $23 \%$ were studying at school level and $20 \%$ were undertaking a Bachelor degree.

Over time, the proportion of people with a disability participating in education has increased slightly. Data from the Survey of Disability, Ageing and Carers indicate that $10 \%$ of those aged 15-64 years with a disability were participating in education in 1993, and $11 \%$ in 1998.

## PRESCHOOL STUDENTS

It is important to understand children's early learning in order to monitor improvements in access to early childhood education. Preschool generally refers to education provided for children in the year prior to the first year of full-time primary school, is largely sessional, and operates only during school terms for children three years of age to school-starting age. Preschools may be operated by government, community organisations or the private sector. Preschool programs may also be provided in long day child care centres. Data are from the ABS's Child Care Survey which is conducted every three years. There are limitations with this data due to the undercounting of the number of children attending preschool in the survey. Reasons for this include differences in terminology and starting ages of preschool among states and territories (see Explanatory Notes), and the fact that children who are attending a preschool program within a child care centre may not be separately identified in the survey. Some of the variation with these data over time may be associated with the changing timing of when the survey was conducted as well as sampling variability within the survey.

Data on Indigenous preschool students are from the National Indigenous Preschool Census (NIPC) which is conducted annually by Data Analysis Australia on behalf of the Department of Education, Science and Training. The purpose of the NIPC is to allocate Commonwealth funding to preschools for Indigenous students. The two data sources are not directly comparable due to differences in scope and collection methodology.

In 1999, 231,600 children attended preschool, with four year olds representing $56 \%$ of all preschool students. This compares with 267,200 attendees in 1990, of whom $44 \%$ were four year olds.

PRESCHOOL PARTICIPATION(a)

(a) Shown as a proportion of the relevant age group.
(b) Does not take into account five year olds attending school.

Note: The survey was conducted in November 1990, June 1993, March 1996 and June 1999.
Source: ABS, Child Care, Australia, 1990, 1993, 1996 \& 1999 (cat. no. 4402.0).

There is no national policy on the provision of preschool education, with the responsibility for this lying with individual states and territories. The age at which children may attend preschool varies, reflecting the different school commencement ages in each jurisdiction.

The proportion of three year olds attending preschool increased from $15 \%$ in 1990 to $25 \%$ in 1996 , then decreased slightly to $22 \%$ in 1999. There was some fluctuation in the proportion of four year olds attending preschool between 1990 and 1999, with a high of $57 \%$ in 1993 and a low of $46 \%$ in 1996. In 1990, $42 \%$ of five year olds attended preschool (however, this does not take into account five year olds attending school). This proportion dropped between 1990 and 1996, then increased to $17 \%$ in 1999. The 1990 Child Care Survey was conducted in November which may account for the higher proportion of five year olds that year, while the 1996 survey was conducted in March which may account for the higher proportion of three year olds in 1996.

## PARTICIPATION OF FOUR YEAR OLDS

|  | November $1990$ | $\begin{gathered} \text { June } \\ 1993 \end{gathered}$ | March $1996$ | $\begin{array}{r} \text { June } \\ 1999 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| Type of care | \% | \% | \% | \% |
| Preschool | 47.4 | 56.6 | 45.9 | 49.2 |
| Long day care | 10.3 | 11.8 | 14.0 | 21.7 |
| Source: ABS, Child Care, Australia, 1990, 1993, 1996 \& 1999 (cat. no. 4402.0). |  |  |  |  |

The changing focus of long day care to include an educational component may account for some of the changes in the participation of four year olds at preschool. While the proportion of four year olds attending preschool has fluctuated somewhat between 1990 and 1999, the proportion attending long day care centres has increased steadily (from $10 \%$ in 1990 to $22 \%$ in 1999).

INDIGENOUS PRESCHOOL PARTICIPATION(a), By age

|  | 3 years <br> and under | 4 years | 5 years <br> and over | Total <br> children |
| :--- | ---: | ---: | ---: | ---: |
| Year | $\%$ | $\%$ | $\%$ | 000 |
| 1996 | 15.9 | 49.2 | 47.0 | $\mathbf{1 0 . 0}$ |
| 2000 | 15.8 | 47.6 | 31.9 | $\mathbf{1 1 . 8}$ |
| . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |  |

(a) Shown as a proportion of the relevant age group.

Source: Data Analysis Australia, National Indigenous
Preschool Census, 1996 \& 2000.

In 2000, Indigenous students represented 5\% of all preschool enrolments, as counted in the NIPC. The number of Indigenous children attending preschool increased by $18 \%$ from 10,000 in 1996 to 11,800 in 2000. As with all children, the highest preschool participation rate for Indigenous children was for four year olds ( $48 \%$ in 2000).

ANALYSIS

## SCHOOL STUDENTS

School education is a fundamental building block for further study and future work and life experiences. Changes in the number of students, and the distribution of students between government and non-government schools are examined, as are changes in the number of Indigenous school students. Data are from the National Schools Statistics Collection (NSSC). School students do not include persons undertaking school level courses at non-school institutions, e.g. Technical and Further Education institutions.

In 2001 there were 3.3 million students (both full-time and part-time) in Australian schools, a 9\% increase from just over 3.0 million in 1986. In both 1986 and 2001, just over half the student population was male (51\%). In 2001, 28, 400 students attended school on a part-time basis, an increase of $7 \%$ over the previous year. However, part-time students represented less than $1 \%$ of all school students.

## FULL-TIME SCHOOL STUDENTS



Note: 1986-1989 excludes students attending special schools.
Source: ABS, Schools, Australia (cat. no. 4221.0).

In 1986, there were 1.3 million full-time secondary students, with $24 \%$ of these in Year 11 and Year 12. By 2001 the number of full-time secondary students had increased to almost 1.4 million, with the proportion in Year 11 and Year 12 increasing to $30 \%$. This shows a trend, since the late seventies, for a greater proportion of students to participate in the final years of schooling.

The proportion of full-time students attending government schools decreased from $74 \%$ in 1986 to $69 \%$ in 2001 . This change was the result of a $29 \%$ increase in the number of full-time students attending non-government schools, compared with a $2 \%$ increase in the number of students attending government schools. The change was slightly greater at the secondary school level, where the proportion of students attending government schools fell from $70 \%$ in 1986 to $64 \%$ in 2001.

ANALYSIS continued

There has been an overall increase in the number of full-time students attending non-government schools; however, there has also been a change in the distribution of students across the different affiliations of non-government schools. In 1986 the proportion of non-government full-time students in Catholic schools was $73 \%$, but by 2001 this proportion had fallen to $64 \%$. Students in non-government schools other than Catholic and Anglican schools comprised 26\% of all non-government school students in 2001 compared to 18\% in 1986.

SCHOOL STUDENTS(a), By level of school and school affiliation

|  | 1986(b) |  |  | 2001 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary | Secondary | $\begin{array}{r} \text { All } \\ \text { schools } \end{array}$ | Primary | Secondary | $\begin{array}{r} \text { All } \\ \text { schools } \end{array}$ |
|  | '000 | '000 | '000 | '000 | '000 | '000 |
| Government | 1279.8 | 907.7 | 2187.5 | 1384.9 | 863.4 | 2248.2 |
| Non-government |  |  |  |  |  |  |
| Anglican | 20.4 | 51.2 | 71.6 | 40.0 | 68.5 | 108.5 |
| Catholic | 331.1 | 249.3 | 580.5 | 361.7 | 287.1 | 648.8 |
| Other | 57.3 | 81.2 | 138.6 | 125.8 | 136.9 | 262.7 |
| Total | 408.8 | 381.8 | 790.6 | 527.5 | 492.4 | 1019.9 |
| All Schools | 1688.7 | 1289.5 | 2978.1 | 1912.4 | 1355.7 | 3268.1 |

(a) Full-time students only.
(b) Excludes students in special schools.

Source: ABS data available on request, National Schools Statistics Collection 1986 and 2001.

Between 1996 and 2001 the number of Indigenous full-time students increased by $25 \%$ from 92,700 ( $3 \%$ of all students) to 115,500 ( $4 \%$ of all students). The increase has been more marked at secondary school level, where there has been a $31 \%$ increase in the number of Indigenous full-time students. This is considered to be the result of a combination of increased retention of Indigenous students in school and a greater tendency to identify or be identified as an Indigenous student. In addition, the methodology for identifying Indigenous students in the NSSC is considered to have become more consistent since 1996.

INDIGENOUS STUDENTS(a), By level of school

|  | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '000 | '000 | '000 | '000 | '000 | '000 |
| Primary(b) | 64.9 | 67.1 | 70.5 | 73.2 | 76.7 | 78.9 |
| Secondary |  |  |  |  |  |  |
| Year 7/8 to Year 10 | 20.9 | 22.2 | 23.6 | 24.4 | 25.4 | 26.8 |
| Years 11 and 12 | 4.6 | 5.1 | 5.4 | 6.1 | 6.5 | 7.0 |
| Total Secondary(b) | 27.8 | 29.7 | 31.6 | 33.4 | 34.8 | 36.5 |
| Total | 92.7 | 96.8 | 102.2 | 106.6 | 111.5 | 115.5 |
| (a) Full-time students only. |  |  |  |  |  |  |
| (b) Includes ungraded students. |  |  |  |  |  |  |
| Source: ABS, Schools, Aust | alia, 20 | (cat. | . 4221 |  |  |  |

In 2001, the apparent retention rate of full-time school students from Year $7 / 8$ to Year 12 was $73.4 \%$, an increase from $72.3 \%$ in 2000 . Although the rate remained relatively stable between 1995 and 2000, in the late 1980s and early 1990s the Year $7 / 8$ to Year 12 apparent retention rate showed a period of rapid increase, from $48.7 \%$ in 1986 to a peak of $77.1 \%$ in 1992 . The Year 10 to Year 12 apparent retention rate has shown a similar trend, increasing from $51.9 \%$ in 1986 to $78.6 \%$ in 1992 , then falling to around $74 \%$ in the late 1990s, and rising slightly to $75.4 \%$ in 2001.

APPARENT RETENTION RATES(a)

(a) To Year 12. Full-time students only. See Explanatory Notes.

Source: ABS, Schools, Australia (cat. no. 4221.0).

ANALYSIS continued

(a) To Year 12. Full-time students only. See Explanatory Notes.

Source: ABS, Schools, Australia (cat. no. 4221.0).

Apparent retention rates for full-time Indigenous students have risen over the last five years, although they remain markedly lower than those for non-Indigenous students. The apparent retention rate for Indigenous students from Year $7 / 8$ to Year 10 increased from $75.8 \%$ in 1996 to $86.0 \%$ in 2001, and the rate to Year 12 increased from $29.2 \%$ to $36.3 \%$. There has consistently been a larger difference between the Year 10 and Year 12 apparent retention rates for Indigenous students than for non-Indigenous students. That is, proportionately fewer Indigenous students continue in secondary school beyond Year 10 , which generally corresponds with the end of compulsory schooling.

APPARENT RETENTION RATES(a)

|  | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| To Year 9 |  |  |  |  |  |  |
| $\quad$ Indigenous | 96.8 | 96.2 | 95.0 | 93.9 | 95.7 | 96.5 |
| $\quad$ Non-Indigenous | 99.6 | 99.8 | 99.7 | 99.9 | 99.8 | 100.0 |
| To Year 10 |  |  |  |  |  |  |
| $\quad$ Indigenous | 75.8 | 80.6 | 83.1 | 82.0 | 83.0 | 86.0 |
| $\quad$ Non-Indigenous | 97.3 | 97.6 | 97.5 | 97.9 | 98.0 | 98.2 |
| To Year 11 |  |  |  |  |  |  |
| $\quad$ Indigenous | 47.2 | 49.6 | 52.5 | 56.0 | 53.6 | 56.1 |
| $\quad$ Non-Indigenous | 84.3 | 85.3 | 85.4 | 86.4 | 86.2 | 87.6 |
| To Year 12 |  |  |  |  |  |  |
| $\quad$ Indigenous | 29.2 | 30.9 | 32.1 | 34.7 | 36.4 | 35.7 |
| $\quad$ Non-Indigenous | 72.4 | 72.9 | 72.7 | 73.2 | 73.3 | 74.5 |

(a) From Year $7 / 8$. Full-time students only. See Explanatory Notes.

Source: ABS, Schools, Australia, 2001 (cat. no. 4221.0).

Over the past decade there have been numerous changes in the VET sector. Until the mid-1990s only Technical and Further Education (TAFE) institutions received public funding for the provision of VET. More recently, some private training and community education providers have been able to receive public funding, resulting in students attending these institutions being included in the VET Statistics Collection.


Notes: Time series data excludes fee-for-service by private providers, including full-fee paying overseas students.
1995 inclusion of community education providers receiving public funding for VET phased in. 1996 inclusion of private providers receiving public funding for VET.
2001 persons includes those where sex was not stated.
Source: NCVER, VET in Australia 1991 to 2000; NCVER, Australian VET Statistics 2001: In Detail.

Between 1991 and 2001, the number of VET students increased by 78\%, from 985,900 to 1,756,800. The largest annual increase occurred between 1994 and 1995 coinciding with community education providers receiving public funding for VET. There was a $97 \%$ increase recorded between 1994 and 1995 in the number of VET students studying at community education providers. There was a $12 \%$ increase in the total number of VET students over this one year period. Prior to 1995 the number of male and female students grew at about the same rate. Since 1995, the number of females has grown more quickly ( $43 \%$ between 1995 and 2001 compared with $33 \%$ for males). In 2001, $51 \%$ of VET students were male, $21 \%$ were born overseas, $12 \%$ spoke a language other than English at home, 5\% reported having a disability, and $4 \%$ identified themselves as Indigenous.

In 2001, the most common level of school completed prior to commencing VET study was Year 12 ( $42 \%$ ), but the majority of VET students did not move directly to VET from school. In 2001, $79 \%$ of students had left school two or more years earlier, which corresponds with $75 \%$ of students being aged 20 years or over. There has been an

ANALYSIS continued
increase in the number of VET students undertaking courses while still attending secondary school. In 2001, there were 151,300 VET students who were still at school ( $13 \%$ of all VET students), an increase from 102,600 in 2000 ( $10 \%$ of VET students).

AGE DISTRIBUTION OF VET STUDENTS


Note: Includes fee-for-service by private providers, including full-fee paying overseas students. Source: NCVER, Australian VET Statistics 1996 and 2001: In Detail.

The intensity of study in VET is not prescribed, therefore students can choose the number of subjects to enrol in to suit their needs. In 2001, 39\% of students were enrolled in only one or two subjects. This highlights the part-time nature of VET study, and that many students do not study to complete a qualification. In 2001, $15 \%$ of students were enrolled in non-award courses, with a further $6 \%$ enrolled in a subject only. The most common qualification level was Certificate level III or equivalent (21\% of students).

VET STUDENTS, By selected field of study

|  | Art, humanities \& social sciences | Business, administration, economics | Engineering, surveying | Health, community senvices | Science | Services, hospitality, transport | Total (a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 |  |  |  |  |  |  |  |
| Number ('000) | 108.0 | 290.4 | 197.4 | 97.6 | 93.5 | 132.3 | 1347.4 |
| Proportion female (\%) | 67.3 | 60.3 | 8.8 | 73.0 | 58.0 | 52.5 | 47.5 |
| 2001 |  |  |  |  |  |  |  |
| Number ('000) | 119.3 | 342.2 | 203.4 | 157.1 | 142.9 | 231.4 | 1756.8 |
| Proportion female (\%) | 62.2 | 66.4 | 12.4 | 67.2 | 46.3 | 48.6 | 48.9 |

(a) Includes: Land and marine resources, animal husbandry; Architecture and building; Education; Law and legal studies; Vet science, animal care; VET multi-field education.

Source: NCVER unpublished data, Australian VET Statistics 1996; NCVER, Australian VET Statistics 2001: In Detail.

The number of females in VET increased by 37\% between 1996 and 2001. Despite this overall increase, specific fields of study showed different patterns. In 1996, females represented $67 \%$ of students in Art, humanities and social sciences, but by 2001 they represented $62 \%$. Conversely, there was an increase in female representation in areas such as Business, administration and economics ( $60 \%$ in 1996, 66\% in 2001); this was the most common field of study in 2001 ( 342,200 students). A popular field with both males and females in 2001 was Services, hospitality and transport (231,400 students, with $49 \%$ females).

ANALYSIS

Apprenticeships and traineeships are an important part of Australia's education and training system. Data are from the annual Apprentice and Trainee Statistics Collection conducted by the National Centre for Vocational Education Research (NCVER). Since 1995, apprentices and trainees have not been separately identified in the collection. Apprenticeships generally last four years while traineeships are usually one or two years. 'Apprentices and trainees' include all people employed under contracts of training.

Following a decline in the early 1990s, there was an increase in the number of apprentices and trainees coinciding with a number of government initiatives such as Working Nation (1994) and New Apprenticeships (1998). The New Apprenticeships Scheme includes both traineeships and apprenticeships, and was introduced to make the system more flexible for both apprentices and employers. This encouraged the participation of people in older age groups and those still attending school. This is reflected by the percentage of apprentices and trainees who were aged 25-64 years increasing from $28 \%$ to $33 \%$ between 1998 and 1999.

## APPRENTICES AND TRAINEES



Overall, the number of apprentices and trainees increased steadily from 1995 to 2001, with an $18 \%$ increase following the introduction of the New Apprenticeships Scheme in 1998 (216,900 in 1998 to 255,200 in 1999). This increase was largely due to the expanded scope of apprenticeships and traineeships beyond the traditional trade areas. Apprenticeships and traineeships have consistently been male dominated. This was the case in 2001 when $66 \%$ of the 329,600 apprentices and trainees were male. In 2001, $74 \%$ of apprentices and trainees undertook training in Australian Qualifications Framework (AQF) Certificate III, $22 \%$ of apprentices and trainees undertook part-time training, and $3 \%$ were still at school.

The number of apprentice and trainee commencements (representing those people who are entering contracted training in a particular vocation for the first time) increased

ANALYSIS continued
substantially between 1995 and 2001 (from 64,600 to 228,500). In 2001, 96,300 apprentices and trainees formally completed their contracted training, and there were 92,500 cancellations or withdrawals (apprentices and trainees who had their contracts terminated after or during the probationary period).

APPRENTICES AND TRAINEES


Source: NCVER, Australian Apprentice and Trainee Statistics: Annual 2000 and 2001.

The distribution of apprentices and trainees across occupation groups changed considerably between 1996 and 2001. In 1996, $75 \%$ of apprentices and trainees were in the broad occupational group Tradespersons and related workers. By 2001, this group represented $39 \%$ of all apprentices and trainees. The number of apprentices and trainees in Intermediate and Elementary clerical, sales and service groups increased from 25,100 in 1996 ( $15 \%$ of all apprentices and trainees) to 106,400 in 2001 ( $32 \%$ of all apprentices and trainees).

APPRENTICES AND TRAINEES, By occupation

|  | 1996 |  |  | 2001 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '000 | \% | \% female | '000 | \% | \% female |
| Managers and administrators | 2.6 | 1.6 | 18.9 | 5.9 | 1.8 | 51.3 |
| Professionals | 0.4 | 0.2 | 30.6 | 5.0 | 1.5 | 48.0 |
| Associate professionals | 3.7 | 2.3 | 23.3 | 14.3 | 4.3 | 47.6 |
| Tradespersons and related workers |  |  |  |  |  |  |
| Mechanical and fabrication engineering tradespersons | 20.8 | 12.7 | 1.3 | 15.8 | 4.8 | 2.2 |
| Automotive tradespersons | 23.1 | 14.2 | 1.8 | 22.5 | 6.8 | 1.5 |
| Electrical and electronics tradespersons | 16.1 | 9.8 | 1.8 | 14.9 | 4.5 | 1.6 |
| Construction tradespersons | 24.9 | 15.2 | 1.2 | 29.6 | 9.0 | 1.0 |
| Food tradespersons | 16.3 | 10.0 | 23.0 | 19.2 | 5.8 | 25.6 |
| Skilled agricultural and horticultural workers | 3.2 | 2.0 | 11.8 | 5.2 | 1.6 | 12.3 |
| Other tradespersons and related workers | 18.5 | 11.3 | 51.1 | 19.6 | 5.9 | 53.1 |
| Sub total | 122.9 | 75.3 | 12.1 | 126.9 | 38.5 | 13.5 |
| Advanced clerical and service workers | 0.2 | 0.1 | 69.6 | 3.0 | 0.9 | 79.9 |
| Intermediate clerical, sales and service workers | 19.1 | 11.7 | 66.6 | 58.9 | 17.9 | 72.2 |
| Intermediate production and transport workers | 1.9 | 1.2 | 7.7 | 39.3 | 11.9 | 10.1 |
| Elementary clerical, sales and service workers | 6.0 | 3.7 | 54.5 | 47.6 | 14.4 | 57.1 |
| Labourers and related workers | 6.5 | 4.0 | 11.7 | 28.8 | 8.7 | 27.3 |
| Total(a) | 163.3 | 100.0 | 20.4 | 329.6 | 100.0 | 34.4 |

(a) Includes Tradespersons and related workers n.f.d. Due to rounding, some figures may not sum to total.

Source: NCVER unpublished data, Australian Apprentice and Trainee Statistics 1996 and 2001.

The number of higher education students in Australia increased from 31,700 in 1951 to 614,100 in 2001. Over this time there have been periods of rapid growth related to specific changes to the higher education system. The 1960s saw the development of a system of higher education which consisted of universities and advanced education institutions. In 1974, the federal government abolished tuition fees, having assumed full funding responsibility for higher education. Following this, there was a $91 \%$ increase in student numbers between 1973 and 1974. In 1989, colleges of advanced education combined with existing universities or amalgamated to make new universities. The Higher Education Contribution Scheme (HECS) was also introduced in 1989. There was a $10 \%$ increase in the number of higher education students between 1989 and 1990.

HIGHER EDUCATION STUDENTS


Note: Excludes overseas students after 1988.
Source: DEST, Higher Education Students Time Series Tables, 2000: Selected Higher Education Statistics; DEST, Students 2001: Selected Higher Education Statistics.

Since the 1950s there have been changes in the relative proportion of males and females in the higher education student population. In 1951, $20 \%$ of students were female. In 1987 females outnumbered males for the first time. Since then, the number of females as a percentage of all students in higher education has continued to rise. By 2001, females represented $56 \%$ of the student population.

The age distribution of higher education students remained concentrated within younger age groups between 1991 and 2001. In 2001, $44 \%$ of students were aged $20-29$ years, and a further $30 \%$ were aged 19 and under.

AGE DISTRIBUTION OF HIGHER EDUCATION STUDENTS


Note: Excludes overseas students.
Source: DEST unpublished data, Higher Education Student Collection 1991; DEST, Students 2001: Selected Higher Education Statistics.

In 2001, there were 7,340 Indigenous students in higher education ( $1 \%$ of all students). Between 1992 and 1999, the number of Indigenous students increased from 5,100 to 8,000. However, there was a decrease of $8 \%$ between 1999 and 2000 (to 7,350).

LEVEL AND FIELD OF EDUCATION—2001

|  | POSTGRAD. DEGREE |  | BACHELOR DEGREE |  | TOTAL (a) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% |  | \% |  | \% |
|  | '000 | female | '000 | female | '000 | female |
| Natural and physical sciences | 6.6 | 43.9 | 48.8 | 53.9 | 57.0 | 52.3 |
| Information technology | 3.8 | 28.7 | 33.2 | 24.3 | 41.6 | 25.5 |
| Engineering and related technologies | 4.5 | 19.8 | 37.7 | 15.3 | 44.2 | 15.7 |
| Architecture and building | 1.0 | 43.3 | 11.0 | 38.6 | 12.7 | 38.4 |
| Agriculture, environmental and related studies | 2.1 | 45.1 | 11.0 | 48.1 | 16.0 | 46.1 |
| Health | 9.7 | 68.2 | 58.9 | 72.9 | 75.7 | 72.9 |
| Education | 9.4 | 67.2 | 52.1 | 78.4 | 71.6 | 75.8 |
| Management and commerce | 19.3 | 37.1 | 100.4 | 52.3 | 133.3 | 49.1 |
| Society and culture | 16.9 | 60.2 | 129.9 | 67.4 | 159.3 | 66.2 |
| Creative arts | 3.2 | 63.1 | 33.8 | 66.2 | 39.6 | 65.9 |
| Total (b) | 76.5 | 50.4 | 472.0 | 57.6 | 614.1 | 56.4 |

(a) Includes: Graduate diploma \& graduate certificate; Adv. diploma \& diploma; Certificate; and Other.
(b) Includes: Food, hospitality \& personal services; Mixed field programs; and Non-award courses. Students may participate in more than one field of education, therefore totals may not sum.
Source: DEST, Students 2001: Selected Higher Education Statistics.

In 2001, Bachelor degrees were the most common level of higher education, with $77 \%$ of all higher education students participating at that level. In 2001, $12 \%$ of students were studying for a Postgraduate degree, while another 7\% were studying for a Graduate diploma or graduate certificate. The majority of Bachelor degree students were female in 2001 (58\%), while $50 \%$ of Postgraduate degree students were female. The most common fields of education in 2001 were Society and culture ( 159,300 students) and Management and commerce $(133,300)$. The majority of students in Society and culture were female (66\%), and studying at the Bachelor degree level (82\%). Less common fields in 2001 were Architecture and building $(12,700)$ and Agriculture, environmental and related studies $(16,000)$. Fields with the lowest proportion of females were Engineering and related technologies (16\%) and Information technology (26\%).

These data provide an insight into the impact of overseas students in Australia on Australian education systems. Data presented are from Australian Education International's (AEI) Overseas Student Statistics Collection (see Explanatory Notes for details on how this collection is conducted). 'Overseas students' refers only to overseas students attending education institutions within Australia. All overseas students attending Australian higher education institutions offshore have been excluded (34,900 in 2000).

In 2000, there were 153,400 overseas students in Australia, compared to 111,300 in 1995. Between 1999 and 2000, overseas student numbers increased by $15 \%$. The slight decline between 1996 and 1998 was mainly due to decreased enrolments in English Language Intensive Courses for Overseas Students (ELICOS), reported by AEI to have been associated with the financial crisis experienced in some Asian countries (see Explanatory Notes).

Of overseas students in 2000, $47 \%$ participated in higher education, $20 \%$ participated in vocational education, 24\% were enrolled in ELICOS and 9\% participated in school education (see Glossary). Note that overseas students only include those on student visas and not necessarily all students from overseas who may be on different types of visas. This is particularly relevant for school level education which is therefore not identified separately on the graph (see Explanatory Notes).

OVERSEAS STUDENTS(a), By type of education

(a) Excludes overseas students attending Australian education institutions offshore.
(b) Total includes school education (see Explanatory Notes).

Source: AEI, Overseas Student Statistics 2000.

In $2000,71 \%$ of all overseas students in Australia came from the top ten countries of origin, and these countries are all in the Asian region. While the proportion of overseas students coming from these ten countries decreased between 1995 and 2000, the number of overseas students from China and India more than tripled over this period.

|  | 1995 |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Country of origin | '000 | \% | '000 | \% | female |
| Indonesia | 14.3 | 12.9 | 17.4 | 11.4 | 49.1 |
| China | 3.9 | 3.5 | 13.9 | 9.1 | 47.0 |
| Malaysia | 10.2 | 9.1 | 11.6 | 7.6 | 50.5 |
| Korea | 18.5 | 16.6 | 11.4 | 7.4 | 47.7 |
| Hong Kong | 11.6 | 10.4 | 10.8 | 7.1 | 46.6 |
| India | 2.6 | 2.3 | 10.5 | 6.8 | 9.9 |
| Japan | 11.8 | 10.6 | 10.1 | 6.6 | 61.3 |
| Singapore | 6.9 | 6.2 | 9.8 | 6.4 | 49.7 |
| Thailand | 6.5 | 5.9 | 7.9 | 5.1 | 52.6 |
| Taiwan | 8.2 | 7.3 | 5.9 | 3.8 | 53.7 |
| Total top ten countries | 94.5 | 84.9 | 109.4 | 71.3 | 46.5 |
| Total all countries | 111.3 | 100.0 | 153.4 | 100.0 | 45.0 |

(a) Excludes overseas students studying in Australian education institutions offshore.
Source: AEI unpublished data, Overseas Student Statistics Collection.

Some $45 \%$ of all overseas students were female. Of the top ten countries of origin of overseas students, the proportion of female students was highest for Japan (61\%) and lowest for India (10\%).

In 2000, $43 \%$ of overseas students were aged 20-24 years, reflecting the high proportion studying in higher education. Students aged 19 and under represented a further 30\%, while $17 \%$ were aged $25-29$ years.

Bachelor degrees were the most common level of course undertaken by overseas students participating in higher education in 2000 (64\%). Among overseas students undertaking vocational education, $75 \%$ studied at the Diploma level.

OVERSEAS STUDENTS (a), By selected field of study-2000

|  | Arts, <br> humanities and social science | Business, administration, economics | Education | Engineering, surveying | Health, community services | Science | Total (b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% | \% | \% | '000 |
| Higher education | 12.4 | 43.7 | 2.1 | 9.9 | 5.5 | 17.0 | 72.7 |
| Vocational education | 7.8 | 58.0 | 0.8 | 2.3 | 2.6 | 21.4 | 30.8 |

(a) Excludes overseas students attending Australian education institutions offshore.
(b) Total includes Architecture, building; Land, marine resources, animal husbandry; Law, legal studies; Veterinary science; and Other courses.
Source: AEI, Overseas Student Statistics 2000.

The most common field of study for overseas students was Business, administration and economics ( $44 \%$ for higher education and $58 \%$ for vocational education), followed by Science ( $17 \%$ and $21 \%$ respectively). Of those who studied Science, the majority studied Computer science and Information systems ( $69 \%$ for higher education and $96 \%$ for vocational education).

PARTICIPATION IN TRAINING

The data presented here provide an insight into people's participation in work-related training and the incidence of training over time. 'Training' includes on-the-job training, and internal and external training courses undertaken to obtain, maintain or improve work-related skills or competencies. Unless otherwise stated, data cover people either in the labour force, or marginally attached to the labour force (see Glossary) who are aged 15-64 years, excluding people aged 15-20 years still at school. Data are from the ABS's Survey of Education, Training and Information Technology (2001), Survey of Education and Training (1997) and Survey of Training and Education (1993).

In each of 1993, 1997 and 2001, about three-quarters of people who were either in the labour force or marginally attached to the labour force, participated in some work-related training. The proportion of males participating in training was higher than females in 2001 ( $77 \%$ and $74 \%$ respectively). Although the overall proportion of people participating in some training remained about the same between 1993 and 2001, there were differences in the types of training (training courses and on-the-job training). The proportion of people completing training courses increased from $30 \%$ in 1993 to $45 \%$ in 2001, however the proportion who did on-the-job training fell from $71 \%$ in 1993 to $66 \%$ in 1997, then increased again in 2001 (69\%). In each year of the survey, a considerably higher proportion of people undertook on-the-job training than completed training courses.

TRAINING, Persons in, or marginally attached to, the labour force(a)

|  | 1993 | 1997 | 2001 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons | Persons | Persons | Males | Females |
| Type of training | \% | \% | \% | \% | \% |
| Did some training in last 12 months |  |  |  |  |  |
| Age group (years) |  |  |  |  |  |
| 15-24 | 79.5 | 81.7 | 81.9 | 83.2 | 80.5 |
| 25-34 | 77.3 | 76.6 | 78.2 | 80.9 | 75.2 |
| 35-44 | 76.1 | 73.1 | 74.8 | 76.6 | 72.8 |
| 45-54 | 69.6 | 68.2 | 74.1 | 75.2 | 72.9 |
| 55-64 | 51.8 | 52.0 | 59.3 | 59.4 | 59.0 |
| Total 15-64(b) | 73.8 | 72.8 | 75.2 | 76.6 | 73.7 |
| Completed a training course | 29.8 | 41.6 | 44.6 | 44.2 | 45.1 |
| Did on-the-job training | 70.7 | 65.5 | 68.8 | 70.0 | 67.4 |

(a) Excludes persons aged 15-20 years who were still at school.
(b) This item is less than the sum of 'Completed a training course' and 'Did on-the-job training', as a person may have completed a training course and also done on-the-job training.
Source: ABS data available on request, Survey of Education, Training and Information Technology 2001; Survey of Education and Training 1997; Survey of Training and Education 1993.

In 2001, the proportion of the population participating in some training decreased as age increased. Of people aged $15-24$ years, $82 \%$ did some training, while $74 \%$ of those aged 45-54 years and 59\% of those aged 55-64 years did some training. This pattern by age was also similar for 1993 and 1997. Although a smaller proportion of people aged 55-64 years undertook training than the younger age groups, the rate of participation for this age group experienced the largest increase over time, rising from 52\% in 1993 to $59 \%$ in 2001.

PERSONS PARTICIPATING IN TRAINING(a), By current labour force status-2001

|  | Employed full-time | Employed part-time | Total employed | Unemployed | With marginal attachment | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% | \% | \% | '000 |
| Did some training in last 12 months(b) | 83.1 | 78.0 | 81.7 | 46.5 | 22.7 | 75.2 | 7762.3 |
| Completed a training course | 51.4 | 41.8 | 48.6 | 26.1 | 12.1 | 44.6 | 4602.8 |
| Did on-the-job training(c) | 76.7 | 72.6 | 75.5 | 36.0 | 15.8 | 68.8 | 7097.7 |
| Did not do any training in last 12 months | 16.9 | 22.0 | 18.3 | 53.5 | 77.3 | 24.8 | 2557.0 |

(a) Excludes persons aged 15-20 years who were still at school.
(b) This item is less than the sum of 'Completed a training course' and 'Did on-the-job training', as a person may have completed a training course and also done on-the-job training.
(c) Persons may have done on-the-job training in the last 12 months with a previous employer, and be currently unemployed.
Source: ABS data available on request, Survey of Education, Training and Information Technology 2001.

In 2001, of all people employed full-time at the time of the survey, $83 \%$ did some training in the previous 12 months; 51\% completed a training course and $77 \%$ did on-the-job training. Some $87 \%$ of females employed full-time at the time of the survey did some training, compared to $81 \%$ of males. Of those who were unemployed at the time of the survey, $47 \%$ did some training in the previous 12 months. A higher proportion of unemployed males undertook training than did unemployed females ( $49 \%$ and $43 \%$ respectively).

Of the nine broad occupation groups in the Australian Standard Classification of Occupations, Professionals had the highest proportion of workers participating in some training in 2001 (95\%), followed by Managers and administrators (92\%) and Associate professionals (90\%).

Of the 17 broad groupings used to classify industry within the Australian and New Zealand Standard Industrial Classification, Electricity, gas and water supply had the highest proportion of workers reporting some training (95\%), followed by Education (93\%) and Government administration and defence (93\%).

Based on details of the four most recent training courses individuals had completed (see Explanatory Notes), the 2001 survey found that there was a total of 9.8 million training course completions in the 12 months prior to interview. Of all training course completions, $63 \%$ were internal and $37 \%$ were external to the employer organisation. The most common fields for training courses (of 16 fields, see Explanatory Notes) were Management and professional ( $29 \%$ of all courses) followed by Health and safety (16\%), Technical and para-professional (12\%) and Computing skills (10\%).

## торіс 26

ABOUT THE DATA

ANALYSIS

## LEVEL OF EDUCATION

The level of educational attainment of the population provides an indication of Australia's stock of knowledge and skills derived from the formal education process. Data presented are from the ABS's Survey of Education and Work, and relate to people aged 15-64 years. In 2001, this survey introduced the Australian Standard Classification of Education (ASCED) to classify data on education (see Explanatory Notes).

In 2001, $47 \%$ of all people aged 15-64 years held at least one non-school qualification compared to $41 \%$ in 1991. Half of all males aged 15-64 years had a non-school qualification in 2001, as did $44 \%$ of females. This compares with $46 \%$ of males and $35 \%$ of females in 1991.

HIGHEST LEVEL OF NON-SCHOOL QUALIFICATION, Persons aged 15-64 years


Breaks in series: 1993 ABSCQ; 1997 computer assisted coding; 2001 ASCED (see Explanatory Notes). Source: ABS, Transition from Education to Work (cat. no. 6227.0); ABS, Education and Work, Australia (cat. no. 6227.0).

The proportion of 15-64 year olds with a Bachelor degree or above increased from $9 \%$ in 1991 to $17 \%$ in 2001. The increase was greater for females (from $7 \%$ to $18 \%$ ) than for males (from $11 \%$ to $16 \%$ ). In 2001, $33 \%$ of males and $25 \%$ of females held an Advanced diploma, diploma or certificate level qualification, compared to $35 \%$ of males and $28 \%$ of females in 1991. The inclusion of Certificate I and Certificate II (and equivalent) level qualifications has not been consistent over the period 1991-2001, and this may have had a small impact on the proportion of people with lower level non-school qualifications (see Explanatory Notes).

Combining information about highest year of school completed and non-school qualifications gives a more complete picture of educational attainment. In 2001, 44\% of all 15-64 year olds had completed Year 12 ( $44 \%$ of males and $45 \%$ of females). Of those who had completed Year 12, $63 \%$ also held a non-school qualification. However, only $35 \%$ of those who had not completed Year 12 had a non-school qualification. Of those with a Certificate as their highest level of non-school qualification, $68 \%$ had not completed Year 12.

HIGHEST LEVEL OF NON-SCHOOL QUALIFICATION, By highest year of school completed-2001

|  | Year 12 | Year 11 | Year 10 | Year 9 or below | Total(a) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Highest level of non-school |  |  |  |  |  |
| qualification | '000 | '000 | '000 | '000 | '000 |
| Postgraduate degree | 268.5 | 7.7 | 6.8 | **0.8 | 283.9 |
| Graduate diploma or graduate <br> $\begin{array}{llllll}\text { certificate } & 262.8 & 15.9 & 18.1 & * 3.6 & 300.3\end{array}$ |  |  |  |  |  |
| Bachelor degree | 1463.7 | 46.6 | 75.0 | 10.2 | 1595.5 |
| Advanced diploma or diploma | 588.9 | 89.4 | 145.7 | 30.6 | 854.6 |
| Certificate III or IV | 508.1 | 283.4 | 789.7 | 217.3 | 1798.6 |
| Certificate I or II | 306.7 | 127.7 | 339.1 | 100.1 | 873.6 |
| Certificate not further defined | 89.6 | 34.1 | 54.6 | 13.4 | 192.1 |
| Persons without a non-school qualification | 2113.5 | 938.8 | 2158.1 | 1489.3 | 6747.1 |
| Total (b) | 5664.1 | 1561.6 | 3636.0 | 1878.9 | 12788.3 |

** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use

* estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution
(a) Includes those who never attended school.
(b) Includes those whose level was not determined and boarding school pupils.

Source: ABS data available on request, Survey of Education and Work 2001

The remainder of the analysis uses highest level of educational attainment which identifies the highest educational level a person has attained, including both school and non-school attainment (see Explanatory Notes). In 2001, 20\% of people aged $25-64$ years (this age range is used as many people aged 15-24 years are still studying) had a Bachelor degree or above as their highest level of educational attainment, and the proportion decreases as age increases (from 24\% for 25-34 years to $13 \%$ for 55-64 years). The proportion of people whose highest level of educational attainment was a Certificate III or IV was largest in the 35-44 year age group (17\%). Over half of 55-64 year olds had Year 11 or below as their highest level of educational attainment.

HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT, By age-2001


ABOUT THE DATA

ANALYSIS

The main field of educational qualifications held by the population provides an indication of the areas in which Australia's stock of non-school qualifications are held. Data presented are from the ABS's annual Survey of Education and Work. In 2001 this survey introduced the Australian Standard Classification of Education to classify data on education (see Explanatory Notes), with data on main field of education for 2001 not comparable with previous years. As a result, only 2001 data are presented in this Topic. The data below present the main field of the highest non-school qualification at May 2001 of people aged 15-64 years. Data on people with multiple non-school qualifications are from the ABS's Survey of Education, Training and Information Technology, conducted in 2001.

In 2001, 6.0 million people aged 15-64 years had a non-school qualification. Of these, Management and commerce (22\%), and Engineering and related technologies (21\%) were the most common main field of education for a person's highest non-school qualification. A further $12 \%$ had their main field in Society and culture.

MAIN FIELD OF EDUCATION OF HIGHEST NON-SCHOOL QUALIFICATION, 15-64 years-2001

|  | SEX |  | AGE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | Total |
|  | \% | \% | \% | \% | \% | \% | \% | \% |
| Natural and physical sciences | 3.8 | 3.5 | 3.5 | 4.1 | 3.3 | 3.9 | 3.3 | 3.7 |
| Information technology | 3.4 | 2.5 | 4.6 | 4.3 | 3.0 | 1.8 | *0.6 | 3.0 |
| Engineering and related technologies | 37.7 | 2.8 | 15.5 | 18.7 | 23.4 | 22.5 | 25.8 | 21.3 |
| Architecture and building | 12.1 | 0.9 | 5.0 | 6.8 | 6.7 | 6.9 | 9.0 | 6.8 |
| Agriculture, environmental and related studies | 3.7 | 1.5 | 4.1 | 2.7 | 2.6 | 2.2 | 2.4 | 2.7 |
| Health | 4.2 | 17.2 | 6.1 | 9.2 | 11.7 | 11.0 | 12.4 | 10.3 |
| Education | 3.4 | 11.9 | 4.4 | 5.5 | 7.5 | 9.9 | 9.8 | 7.4 |
| Management and commerce | 14.6 | 30.1 | 25.0 | 23.5 | 21.1 | 21.2 | 18.5 | 21.9 |
| Society and culture | 8.1 | 16.0 | 12.0 | 12.7 | 11.3 | 12.0 | 9.9 | 11.8 |
| Creative arts | 3.3 | 4.8 | 5.8 | 4.6 | 3.5 | 3.4 | 3.1 | 4.0 |
| Food, hospitality and personal services | 5.0 | 7.9 | 13.2 | 7.2 | 5.2 | 4.2 | 4.7 | 6.4 |
| Total(a) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total ('000) | 3210.0 | 2831.2 | 665.0 | 1681.6 | 1607.7 | 1350.2 | 736.7 | 6041.2 |

* estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution
(a) Total includes Mixed field programmes, Field not stated and Field inadequately described.

Source: ABS data available on request, Survey of Education and Work 2001.

The highest non-school qualifications of males and females were concentrated in different fields of education in 2001. The three most common main fields of education accounted for almost two-thirds of qualifications for both males (64\%) and females ( $63 \%$ ). For males, the most common fields were Engineering and related


#### Abstract

ANALYSIS continued technologies (38\%), Management and commerce (15\%), and Architecture and building (12\%). For females, the most common were Management and commerce (30\%), Health (17\%), and Society and culture (16\%).

The proportion having their main field of education in Management and commerce declined as age increased (for example, $25 \%$ for those aged $15-24$ years compared to 18\% for 55-64 years), while the proportion for Engineering and related technologies increased with age ( $16 \%$ for $15-24$ years to $26 \%$ for 55-64 years). The proportion with their main field as Architecture and building, and those with their main field as Education, also increased as age increased, while fields such as Food, hospitality and personal services, and Information technology, declined as age increased.


HIGHEST NON-SCHOOL QUALIFICATION, Main field of education by level-15-64 years-2001

|  | Postgraduate degree | Graduate diploma or graduate certificate | Bachelor degree | Advanced diploma or diploma | Certificate III or IV | Certificate I or II | Certificate not further defined | Level not determined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% | \% | \% | \% | \% |
| Natural \& physical sciences | 13.6 | 3.0 | 8.5 | 2.0 | *0.2 | 1.4 | *0.9 | *2.4 |
| Information technology | 3.0 | 3.4 | 3.8 | 4.3 | 1.1 | 3.1 | 7.5 | *2.4 |
| Engineering \& related technologies | 7.5 | 2.7 | 9.3 | 11.2 | 47.6 | 13.1 | 9.9 | 17.9 |
| Architecture \& building | *1.1 | *1.3 | 1.9 | 2.1 | 17.9 | 2.4 | 3.1 | 6.6 |
| Agriculture, environmental \& related studies | *1.9 | *1.5 | 2.0 | 3.0 | 2.3 | 4.4 | 4.2 | 4.6 |
| Health | 15.2 | 14.4 | 17.4 | 14.5 | 3.3 | 5.7 | 5.5 | 11.0 |
| Education | 8.1 | 34.9 | 12.4 | 11.4 | 0.6 | *0.6 | *1.8 | *3.3 |
| Management \& commerce | 22.0 | 18.8 | 17.4 | 27.2 | 7.7 | 50.6 | 37.1 | 29.4 |
| Society \& culture | 23.7 | 16.3 | 20.9 | 11.7 | 4.3 | 5.9 | 10.8 | 8.0 |
| Creative arts | 3.2 | 2.8 | 5.1 | 7.7 | 1.7 | 2.8 | 5.2 | 6.1 |
| Food, hospitality \& personal services | - | **0.1 | *0.3 | 3.7 | 13.1 | 9.3 | 12.7 | 4.6 |
| Total (a) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total ('000) | 283.9 | 300.3 | 1595.5 | 854.6 | 1798.6 | 873.6 | 192.1 | 142.7 |

estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution

- nil or rounded to zero (including null cells)
** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use
a) Total includes Mixed field programmes, Field not stated and Field inadequately described.

Source: ABS data available on request, Survey of Education and Work 2001.

For all levels of highest non-school qualification except Certificates III or IV, a high proportion were in the field of Management and commerce, with the highest concentration for this field being in Certificates I or II (51\%). Almost $48 \%$ of people with a Certificate III or IV had studied Engineering and related technologies, and a further $18 \%$ Architecture and building, coinciding with some of the major fields of traditional trade-related occupations. Over a third (35\%) of people with Graduate diplomas or Graduate certificates had their qualification in the field of Education.

Some 2.3 million people held at least two non-school qualifications in 2001, with $60 \%$ of these having their two highest qualifications in the same field. Of the 810,000 people who had at least three non-school qualifications, $37 \%$ held all of their three highest qualifications in the same field.

## READING AND NUMERACY NATIONAL

 BENCHMARKS-PRIMARY SCHOOL STUDENTSThe benchmarks that underpin the reporting of achievement in reading and numeracy are based on the nationally agreed minimum acceptable standards for students at Years 3 and 5 in primary school. These national benchmarks are important in helping to identify the proportion of students who do not reach a minimum level of competence. Not reaching the national benchmark may affect students' progress through school. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) determined that the national goal for reading and numeracy should be that all students will achieve at least a benchmark level of performance. Performance against the national benchmarks for reading and numeracy are assessed for Year 3 and Year 5 students through state and territory testing programs. MCEETYA is responsible for the collection and reporting of the national benchmarks data and these are published in the National Report on Schooling in Australia. Results show the number of students who have achieved the reading or numeracy benchmark as a proportion of all primary school students participating in the testing. Information on the literacy of 15 year old students is in the Topic 'Literacy of 15 year old students', while information on the literacy of 15-74 year olds can be found in the Topic 'Aspects of population literacy'.

Students who achieved the reading benchmark could read and understand a range of texts suitable for their year of school. For Year 3 students these texts generally used straightforward, everyday language and had predictable text and sentence structures. Texts suitable for Year 5 students included varied sentence beginnings, new vocabulary, some long groups of words and some use of figurative language.

STUDENTS ACHIEVING NATIONAL READING BENCHMARK

|  | YEAR 3 |  | YEAR 5 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1999(a) | 2000 | 1999(a) | 2000 |
|  | \% | \% | \% | \% |
| Males | 87.9 | 90.9 | 83.4 | 85.2 |
| Females | 92.0 | 94.3 | 88.4 | 89.6 |
| Indigenous(b) | 73.4 | 76.9 | 58.6 | 62.0 |
| Non-English speaking background(b) | 89.3 | 90.8 | na | 84.9 |
| Total | 89.7 | 92.5 | 85.6 | 87.4 |

na not available
(a) In 1999, student subgroup data did not include Queensland students who were formally exempted from testing (see Explanatory Notes).
(b) Methods used to identify Indigenous and non-English speaking background students varied between jurisdictions. There is likely to be some overlap between these two groups.
Source: MCEETYA, National Report on Schooling in Australia: 1999 and 2000.

Reading benchmark continued

Numeracy benchmark

In 2000 , $93 \%$ of Year 3 students and $87 \%$ of Year 5 students achieved the reading benchmark. This means that approximately $7 \%$ of Year 3 students and $13 \%$ of Year 5 students were unable to achieve the minimum level of competence for reading in 2000. Reading benchmark data have only been available since 1999, therefore there is little information to indicate change over time. However there was a small decrease in the proportion of students not reaching the benchmark in 2000 compared to 1999.

In both 1999 and 2000, a higher proportion of female than male students reached the reading benchmark. In 2000, a substantially lower proportion of Indigenous students reached the national reading benchmark than did all students ( $77 \%$ of Year 3 and $62 \%$ of Year 5 Indigenous students compared with $93 \%$ of all Year 3 and $87 \%$ of all Year 5 students). A smaller proportion of students from non-English speaking backgrounds (NESB) achieved the benchmark than did all students (91\% of Year 3 and $85 \%$ of Year 5 NESB students in 2000).

The national numeracy benchmark was introduced in 2000. Examples of some of the numeracy skills required by Year 3 students include reading and writing whole numbers up to 999 , adding up coins, and recognising and naming familiar shapes. Year 5 students were required to read, write and use whole numbers up to 9,999, show an understanding of simple fractions and the use of decimals, and perform simple multiplication and division.

STUDENTS ACHIEVING NATIONAL NUMERACY BENCHMARK-2000

|  | Year 3 | Year 5 |
| :--- | ---: | ---: |
|  | $\%$ | $\%$ |
| Males | 92.7 | 89.4 |
| Females | 92.8 | 89.8 |
| Indigenous(a) | 73.7 | 62.8 |
| Non-English speaking background(a) | 90.3 | 87.1 |
| Total | $\mathbf{9 2 . 7}$ | $\mathbf{8 9 . 6}$ |

(a) Methods used to identify Indigenous and non-English speaking background students varied between jurisdictions. There is likely to be some overlap between these two groups.
Source: MCEETYA, National Report on Schooling in Australia: 2000.

As with the reading benchmark, a high proportion of students in Years 3 and 5 achieved the numeracy benchmark in 2000 ( $93 \%$ and $90 \%$ respectively). This means that $7 \%$ of Year 3 students and 10\% of Year 5 students did not achieve the minimum level of competence for numeracy. There was virtually no difference between the proportion of male and female students achieving the numeracy benchmark, and only a small difference between all students and those from non-English speaking backgrounds (around 2.5 percentage points). However, there was a notable difference between Indigenous and all students, with $74 \%$ of Indigenous Year 3 students and $63 \%$ of Indigenous Year 5 students achieving the benchmark, compared with $93 \%$ of all Year 3 students and $90 \%$ of all Year 5 students.

## торıс 29

## LITERACY OF 15 YEAR OLD STUDENTS

ABOUT THE DATA

ANALYSIS

Literacy has long been recognised as providing the basic skills needed for functioning in everyday life. The Programme for International Student Assessment (PISA) is an initiative of the Organisation for Economic Co-operation and Development (OECD), with the Australian Council for Educational Research (ACER) responsible for the program in Australia. PISA was run for the first time in 2000, assessing a sample of 5,200 15 year old school students in Australia. PISA uses the term 'literacy' to encompass a broad range of competencies relevant to coping with adult life. Three core domains of literacy were measured: reading, mathematical, and scientific literacy (see Glossary). For each literacy domain, scores were standardised such that the mean score across all OECD countries was 500 and the standard deviation was 100.

Internationally, Australia scored above the OECD average of 500 for all three literacy scales. In 2000, 15 year old Australian school students scored an average of 528 on the reading literacy scale, 533 on the mathematical literacy scale and 528 on the scientific literacy scale. Only Finland scored significantly higher than Australia on the reading literacy scale, while Japan was significantly higher on the mathematical literacy scale. Japan and Korea were the only countries to score significantly higher than Australia on the scientific literacy scale. On average, Australian female students scored higher than Australian males on the reading literacy scale (546 and 513 respectively), while males (539) scored slightly higher than females (527) on the mathematical scale (although this was not a statistically significant difference), and there was virtually no difference between males (526) and females (529) on the scientific literacy scale.

AVERAGE ACHIEVEMENT SCORES OF 15 YEAR OLD STUDENTS-2000

|  | INTERNATIONAL COMPARISONS |  |  |  | INDIGENOUS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | SEX (a) |  | STATUS(a) |  | LANGUAGE(a) (b) |  |
|  | $\begin{array}{r} \text { OECD } \\ \text { average(c) } \end{array}$ | Lowest scoring country | Highest scoring country | Australia | Male | Female | Indigenous | NonIndigenous | English | Other than English |
| Literacy |  |  |  |  |  |  |  |  |  |  |
| Domain | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean |
| Reading | 500 | 396 | 546 | 528 | 513 | 546 | 448 | 531 | 535 | 506 |
| Mathematical | 500 | 334 | 557 | 533 | 539 | 527 | 449 | 535 | 537 | 522 |
| Scientific | 500 | 375 | 552 | 528 | 526 | 529 | 448 | 529 | 534 | 497 |

(a) Australian students only.
(b) Main language spoken at home. Indigenous students may also be included in language other than English spoken at home.
(c) Scores were standardised such that the mean score across all OECD countries was 500 and the standard deviation was 100.

Source: OECD, Knowledge and Skills for Life: First results from PISA 2000; Lokan, J., Greenwood, L. \& Cresswell, J., Fifteen-up and counting, reading, writing, reasoning: How literate are Australia's students?

Approximately 500 Australian Indigenous students were assessed in PISA 2000. On average, scores for Indigenous students were lower than non-Indigenous students for

ANALYSIS continued
each of the literacy domains. Indigenous students scored an average of 448 on the reading literacy scale while non-Indigenous students scored 531. On the mathematical literacy scale, Indigenous students scored 449, while non-Indigenous students scored 535; on the scientific literacy scale Indigenous students scored 448, while non-Indigenous students scored 529.

On average, Australian students whose main language at home was not English scored significantly lower on the reading and scientific literacy scales (506 and 497) than students whose main language was English (535 and 534 respectively). While these students also scored lower on average on the mathematical literacy scale, the difference was not statistically significant.

AVERAGE SCORES OF 15 YEAR OLD AUSTRALIAN STUDENTS, By socioeconomic status(a)—2000


Source: ACER unpublished data, The PISA 2000 Survey of Students' Reading, Mathematical and Scientific Literacy Skills.

In 2000, PISA collected more detailed information about reading literacy. The focus will turn to mathematical and scientific literacy in future studies. Three reading sub-scales were combined to gain an overall measure of reading literacy: retrieving information, interpreting texts, and reflecting on and evaluating texts. Combined reading literacy scores were divided into five levels of proficiency (see Explanatory Notes). Students proficient at Level 5 on the reading scale were capable of completing sophisticated reading tasks, while students proficient at Level 1 could deal with only the least complex reading tasks. In 2000, 18\% of 15 year old students in Australia demonstrated skills at Level 5 on the reading scale, and $12 \%$ at Level 1 or below. Overall, $68 \%$ demonstrated skills at Level 3 or above (Level 3 includes the standardised international average of 500 points, and students at this level can deal with moderately complex reading tasks). On average, $75 \%$ of females reached Level 3 or above on the combined reading literacy scale, compared with $62 \%$ of males.

Literacy skills are necessary for work and everyday life, and one measure of people's literacy skills—prose literacy-is presented here. The relationship between literacy skills and other characteristics such as sex, age, labour force status, educational attainment and occupation (if employed) is explored.

Data are from the Survey of Aspects of Literacy conducted by the ABS in 1996, which is the latest source of such information, and relates to the population aged 15-74 years. The survey objectively assessed three types of literacy: Prose literacy-the ability to understand and use information from various kinds of prose texts, including texts from newspapers, magazines and brochures; Document literacy-the ability to locate and use information contained in materials such as tables, schedules, charts, graphs and maps; and Quantitative literacy-the ability to perform arithmetic operations using numbers contained in printed texts or documents. Skill levels were assigned to a five point scale from Level 1 (very poor skills) through to Level 5 (very good skills) for each type of literacy. These levels are different from those used in the Topic 'Literacy of 15 year old students' (see Explanatory Notes).

The proportion of the population whose prose literacy was at Level 3 or above is used here, as it represents the proportion who have the skills to at least enable them to cope with a variety of material found in daily life. Prose literacy has been used, as this generally aligns with the notion of literacy among the population.

In 1996, $53 \%$ of the population aged 15-74 years were at Level 3 or above for prose literacy. Females had slightly higher literacy skills than males, with $55 \%$ at Level 3 or above compared with $51 \%$ for males.

Generally, people in the older age groups ( 55 years and above) tended to have lower literacy skills, as shown by smaller proportions at Level 3 or above ( $34 \%$ of people aged 55-64 years and $24 \%$ of those aged 65-74 years). The proportion at Level 3 or above was lower for the 15-19 year age group ( $55 \%$ ) than for the other age groups up to age 44 years (between $61 \%$ and $64 \%$ ). However, many $15-19$ year olds may not have completed their initial education or may have had limited work experience, which may have impacted on their literacy skills.

There was a clear relationship between literacy skills and labour force status. A higher proportion of employed people had better literacy skills ( $62 \%$ at Level 3 or above) than both the unemployed (43\%) and those not in the labour force (35\%). Among the unemployed, females had far better literacy skills than males ( $54 \%$ and $36 \%$ at Level 3 or above respectively).

Literacy skills varied according to educational attainment, with people with higher levels of educational attainment generally having higher literacy skills. For example, $85 \%$ of those with a Bachelor degree or above were at Level 3 or above, whereas for those who

ANALYSIS continued
did not have a non-school qualification and had not completed the highest level of secondary school, the proportion was $33 \%$. A greater proportion of those who had completed the highest level of secondary school and did not have a non-school qualification were at Level 3 or above (65\%), than were those with vocational qualifications (54\%). This may be related to the latter group's comprising both people with basic vocational qualifications and skilled vocational qualifications, with many of those with basic vocational qualifications having left school without completing Year 12.

Among employed people, the broad occupation groups with the highest literacy skills were Professionals and Para-professionals ( $88 \%$ and $80 \%$ at Level 3 or above respectively). The occupation group Plant and machine operators, and drivers had the lowest proportion at Level 3 or above (35\%).

PROSE LITERACY SKILL LEVEL 3 OR ABOVE—1996

|  | Males | Females | Persons |
| :--- | ---: | ---: | ---: |
|  |  | $\%$ | $\%$ |
| Age (years) |  | $\%$ |  |
| 15-19 | 50.8 | 59.2 | 54.9 |
| 20-24 | 56.5 | 70.6 | 63.5 |
| 25-34 | 58.6 | 63.3 | 61.0 |
| 35-44 | 59.0 | 65.5 | 62.3 |
| 45-54 | 51.6 | 51.7 | 51.6 |
| 55-64 | 36.8 | 32.2 | 34.5 |
| 65-74 | 25.3 | 23.4 | 24.3 |
| Labour force status |  |  |  |
| Employed | 57.6 | 66.9 | 61.6 |
| Unemployed | 35.7 | 53.6 | 42.7 |
| Not in the labour force | 31.7 | 36.6 | 34.9 |
| Educational attainment |  |  |  |
| Bachelor degree or above | 83.5 | 86.2 | 84.8 |
| Undergraduate or associate diploma | 72.2 | 71.1 | 71.8 |
| Vocational qualifications(a) | 46.6 | 63.2 | 53.6 |
| Completed secondary school and without non-school qualifications | 65.7 | 65.3 | 65.5 |
| Did not complete secondary school(b) | 29.4 | 35.5 | 32.8 |
| Occupation(c)(d) |  |  |  |
| Managers and administrators | 65.6 | 65.0 | 65.4 |
| Professionals | 86.1 | 89.7 | 87.7 |
| Para-professionals | 76.5 | 85.2 | 80.4 |
| Tradespersons | 43.7 | 45.1 | 43.9 |
| Clerks | 73.9 | 73.0 | 73.2 |
| Salespersons and personal service workers | 64.0 | 59.6 | 61.0 |
| Plant and machine operators, and drivers | 34.1 | 38.3 | 34.5 |
| Labourers and related workers | 40.7 | 42.0 | 41.2 |
| Total | 51.0 | 54.6 | 52.8 |

(a) Basic vocational and skilled vocational qualifications, regardless of whether or not secondary school has been completed.
(b) Without non-school qualifications. Includes those still at school.
(c) Of employed persons only.
(d) Classified to the Australian Standard Classification of Occupations, first edition. Source: ABS data available on request, Survey of Aspects of Literacy 1996.

Indigenous people living in urban areas (people living in remote and sparsely settled areas were excluded from the survey) and who spoke English as their first language, had lower literacy skills (30\% at Level 3 or above) than other people who also spoke English as their first language (58\%).

These statistics provide insight into the immediate educational pathways after leaving school, which is an important point of transition into further education. 'Recent school leavers' are defined as people aged 15-24 years who attended school at some time in the year prior to the survey, and who left school before May in the year of the survey. These data cover those attending an educational institution in May of the year of the survey. Data are from the ABS's annual Survey of Education and Work and include participation in all study, except for 1993 and 1994 when information was not collected for persons studying for non-recognised qualifications. Those studying a course not leading to a recognised qualification and those studying a school level course are included only in the total number of persons participating in further education. This publication also includes the Topic 'Recent school leavers not in education', which identifies the immediate labour market outcomes of recent school leavers who are not studying.

Of the 271,600 recent school leavers who were at school in 2000 but not in 2001, $163,600(60 \%)$ were in further study in May 2001. This compares with $55 \%$ of the 275,600 recent school leavers in May 1992. Generally, the proportion of recent school leavers studying has increased between 1992 and 2001, peaking at $62 \%$ in 1999.

PROPORTION OF RECENT SCHOOL LEAVERS IN EDUCATION(a), By level of education

(a) For 1993 and 1994, only study leading to a recognised qualification.
(b) Includes school level courses and courses not leading to a recognised qualification (except for 1993 and 1994). For 2001 includes level not determined.
Source: ABS data available on request, Transition from Education to Work Survey 1992-1996;
ABS, Transition from Education to Work, Australia, 1997-2000 (cat. no. 6227.0);
ABS, Education and Work, Australia, 2001 (cat. no. 6227.0).

Since 1997, the proportion of recent school leavers studying for a Bachelor degree or above has been greater than the proportion studying for an Advanced diploma, diploma or certificate. In 2001, the proportions were $29 \%$ and $25 \%$ respectively. This compares with $25 \%$ of all recent school leavers studying for a Bachelor degree or above and $27 \%$ studying for the equivalent of an Advanced diploma, diploma or certificate in 1992.

## RECENT SCHOOL LEAVERS IN EDUCATION, By level of education

|  | 1992 |  |  | 2001 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bachelor degree or above | Advanced diploma, diploma or certificate | Total in education in May (a) | Bachelor degree or above | Advanced diploma, diploma or certificate | Total in ed May(a) | on in |
|  | \% | \% | \% | \% | \% | \% | '000 |
| Sex |  |  |  |  |  |  |  |
| Males | 21.3 | 28.4 | 52.7 | 22.8 | 28.6 | 58.7 | 85.7 |
| Females | 29.6 | 24.6 | 57.3 | 36.1 | 21.6 | 62.1 | 77.9 |
| Highest year of school completed |  |  |  |  |  |  |  |
| Year 12 | 35.9 | 27.5 | 66.4 | 42.3 | 24.9 | 71.1 | 132.0 |
| Year 11 or below | - | 24.7 | 27.8 | - | 26.4 | 36.7 | 31.6 |
| Type of school last attended |  |  |  |  |  |  |  |
| Government | 19.6 | 27.1 | 49.2 | 21.3 | 27.2 | 54.6 | 100.2 |
| Non-government | 41.6 | 26.6 | 73.0 | 44.9 | 21.6 | 72.1 | 63.4 |
| Total | 25.2 | 26.6 | 54.9 | 28.9 | 25.4 | 60.2 | 163.6 |

- nil or rounded to zero (including null cells)
(a) Includes school level courses, and study not leading to a qualification. For 2001 includes level not determined.

Source: ABS data available on request, Transition from Education to Work Survey 1992; Survey of Education and Work 2001.

ANALYSIS continued

In 2001, a slightly higher proportion of female recent school leavers were in education than were males ( $62 \%$ compared to $59 \%$ ). While a higher proportion of female school leavers were studying for a Bachelor degree or above ( $36 \%$ compared to $23 \%$ of males in 2001), a higher proportion of males were studying for an Advanced diploma, diploma or certificate ( $29 \%$ compared to $22 \%$ of females). The proportion of females studying for an Advanced diploma, diploma or certificate decreased from $25 \%$ in 1992 to $22 \%$ in 2001, while the proportion of females studying for a Bachelor degree or above increased from $30 \%$ to $36 \%$ over the same period.

A higher proportion of recent school leavers who had completed Year 12 were in further study in 2001 (71\%) than were those who had not completed Year 12 (37\%). In 2001, $42 \%$ of those who completed Year 12 were studying for a Bachelor degree or above, an increase from 36\% in 1992.

A higher proportion of recent school leavers who had last attended a non-government school were in further study in 2001 than were those who had last attended a government school ( $72 \%$ and $55 \%$ respectively). A higher proportion of recent school leavers from non-government schools were studying for a Bachelor degree or above in 2001 (45\%) than were those from government schools (21\%). Some of the differences in further education participation between non-government and government recent school leavers may be related to a number of factors such as the higher proportion of non-government recent school leavers who had completed Year 12 ( $84 \%$ compared to $61 \%$ of government recent school leavers in 2001). As noted earlier, a higher proportion of recent school leavers who had completed Year 12 were in further education than those who had not completed Year 12.

These statistics describe the immediate labour market outcomes after leaving school for those not participating in further education, and provides insights into this important point of transition to the labour market. 'Recent school leavers' are defined as people aged 15-24 years who attended school at some time in the year prior to the survey and left school before May in the year of the survey. Data are from the ABS's annual Survey of Education and Work. This publication also includes the Topic 'Recent school leavers in education' which identifies the immediate educational pathways of recent school leavers.

Of the 271,600 recent school leavers who were at school in 2000 but not in 2001, 108,000 ( $40 \%$ ) were not in further study in May 2001, a decrease from $45 \%$ of the 275,600 recent school leavers in May 1992. In 2001, $41 \%$ of male and $38 \%$ of female recent school leavers were not in further study, compared to $47 \%$ and $43 \%$ respectively in 1992.

In 2001, $63 \%$ of recent school leavers not in further study were employed compared to $53 \%$ in 1992, while the proportion employed full-time remained around $34 \%$. The proportion of recent school leavers not in further study who were employed part-time increased from $19 \%$ in 1992 to $30 \%$ in 2001. Over the same period, the proportion unemployed decreased from $38 \%$ to $22 \%$.

RECENT SCHOOL LEAVERS NOT IN EDUCATION(a), Proportion employedBy highest year of school completed

(a) For 1993 and 1994, not in education leading to a recognised qualification.

Source: ABS data available on request, Transition from Education to Work Survey 1992-1996;
ABS, Transition from Education to Work, Australia, 1997-2000 (cat. no. 6227.0);
ABS, Education and Work, Australia, 2001 (cat. no. 6227.0).

Notwithstanding some year to year variations which may be associated with sampling variability, since 1992 a higher proportion of recent school leavers not in further study who had completed Year 12 were employed than were those who did not complete Year 12. In 2001, $75 \%$ of those who had completed Year 12 were employed, compared with $52 \%$ of those who had not. The equivalent proportions were $62 \%$ and
$44 \%$ in 1992. Further, the proportion of recent school leavers not in further study who were employed part-time was higher for those who had completed Year 12 ( $36 \%$ compared with $23 \%$ for Year 11 or below in 2001). The proportion unemployed was lower for those who had completed Year 12 than for those who had not.

## LABOUR MARKET OUTCOMES OF RECENT SCHOOL LEAVERS NOT IN EDUCATION

|  | 1992 |  |  | 2001 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employed full-time | Employed part-time | Unemployed | Employed full-time | Employed part-time | Unemployed | Total(a) |
| Not in education in May | \% | \% | \% | \% | \% | \% | '000 |
| Sex |  |  |  |  |  |  |  |
| Males | 39.9 | 16.2 | 37.2 | 32.5 | 28.3 | 24.1 | 60.4 |
| Females | 27.0 | 22.2 | 38.9 | 34.8 | 31.6 | 19.8 | 47.6 |
| Highest year of school completed |  |  |  |  |  |  |  |
| Year 12 | 35.0 | 26.7 | 32.8 | 38.6 | 36.5 | 16.3 | 53.6 |
| Year 11 or below | 33.4 | 10.3 | 43.6 | 28.4 | 23.2 | 28.0 | 54.4 |
| Type of school last attended |  |  |  |  |  |  |  |
| Government | 32.4 | 18.8 | 39.9 | 32.3 | 28.6 | 24.1 | 83.4 |
| Non-government | 44.4 | 19.7 | 27.4 | 37.6 | 33.8 | 15.7 | 24.6 |
| Total | 34.2 | 18.9 | 38.0 | 33.5 | 29.8 | 22.2 | 108.0 |

Source: ABS data available on request, Transition from Education to Work Survey 1992; Survey of Education and Work 2001.

A higher proportion of female recent school leavers not in further study were employed in 2001 than were males ( $66 \%$ and $61 \%$ respectively), and between 1992 and 2001, the proportion of females employed increased from $49 \%$ to $66 \%$. Over the same period, male recent school leavers employed part-time increased from $16 \%$ to $28 \%$. The proportion unemployed was lower for female recent school leavers not in further study than for males in 2001 ( $20 \%$ and $24 \%$ respectively), with the proportion of females unemployed declining from $39 \%$ in 1992.

Between 1992 and 2001, the proportion of recent school leavers who last attended a government school who did not go on to further study decreased from $51 \%$ to $45 \%$, while the proportion from a non-government school remained about the same ( $27 \%$ in 1992 and $28 \%$ in 2001). A lower proportion of recent school leavers from government schools not in further study were employed in 2001 (61\%) compared to those from a non-government school ( $71 \%$ ). Recent school leavers from government schools also had a lower proportion working part-time ( $29 \%$ compared to $34 \%$ for non-government in 2001). Between 1992 and 2001, the proportion employed increased for both government and non-government recent school leavers. The proportion of recent school leavers not in further study who were unemployed declined between 1992 and 2001, although the proportion unemployed was higher for government recent school leavers in both years.

Some of the differences in the labour market outcomes between government and non-government recent school leavers may be related to a number of factors, such as the lower proportion of government recent school leavers not in further study who had completed Year 12 ( $43 \%$ compared to $71 \%$ for non-government). As noted earlier, those who completed the highest year of school generally had better labour market outcomes.

The participation of recent Technical and Further Education (TAFE) graduates in the labour market and/or in further study provides information on some of the outcomes of study at TAFE. Data for 1995 are from the ABS's Vocational Education and Training Graduate Destination Survey. Data for 1997 to 2001 are from the National Centre for Vocational Education Research (NCVER) Student Outcomes Survey (formerly the TAFE Graduate Destination Survey). No comparable data were obtained in 1996. Data were collected in May of each year and refer to people who graduated with a qualification from a course undertaken in the previous year. Proportions are based on stated responses only, and therefore differ slightly from those published by the NCVER. There was a slight break in the series between 1999 and 2000 as the definition of a TAFE graduate changed between these years-from 2000, all people who completed a qualification were considered graduates, regardless of the number of hours of their course (see Explanatory Notes).

In 2001, there were 127,800 recent TAFE graduates. Of these, $88 \%$ were employed and/or in further study in May in the year after their course ended, the same proportion as in 1995. Approximately three-quarters of recent TAFE graduates were employed when surveyed between 1995 and 2001. Nearly $78 \%$ of recent male graduates and $70 \%$ of recent female graduates were employed in May 2001. The proportion of employed graduates working in their first full-time job fell slightly from 31\% in 1995 to $27 \%$ in 2001.

RECENT TAFE GRADUATES(a), Labour force and study status

(a) Break in series between 1999 and 2000 as the definition of a TAFE graduate changed slightly.
Note: No comparable survey was conducted in 1996.
Source: ABS, Graduate Outcomes-TAFE, Australia, 1995 (cat. no. 4225.0); NCVER, TAFE Graduate Destination Survey 1997-1998; NCVER, Student Outcomes Survey 1999-2001.

Almost half ( $47 \%$ ) of all recent TAFE graduates in May 2001 were employed full-time, with a further $25 \%$ employed part-time, compared with $52 \%$ and $18 \%$ respectively in May 1995. In 2001, $61 \%$ of recent male graduates and $35 \%$ of female graduates were employed full-time, while $15 \%$ of male graduates and $34 \%$ of female graduates were
employed part-time. The proportion of all recent TAFE graduates who were unemployed decreased from $15 \%$ in 1995 to $12 \%$ in 2001. There was little change in the proportion of male graduates who were unemployed ( $12 \%$ in 1995 to $11 \%$ in 2001); however, the proportion of female graduates who were unemployed fell ( $17 \%$ in 1995 to $12 \%$ in 2001).

LABOUR FORCE STATUS BEFORE AND AFTER TAFE COURSE(a)

|  | LABOUR FORCE STATUS AFTER COURSE |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Employed | Unemployed | Not in labour force | Total |
| Labour force status before course | \% | \% | \% | \% |
| 1997 |  |  |  |  |
| Employed | 88.1 | 6.5 | 5.4 | 100.0 |
| Unemployed | 46.3 | 39.7 | 14.0 | 100.0 |
| Not in the labour force | 40.6 | 19.3 | 40.1 | 100.0 |
| Total | 71.1 | 15.1 | 13.8 | 100.0 |
| 2001 |  |  |  |  |
| Employed | 88.6 | 5.6 | 5.8 | 100.0 |
| Unemployed | 45.7 | 36.4 | 17.8 | 100.0 |
| Not in the labour force | 39.2 | 16.4 | 44.4 | 100.0 |
| Total | 75.1 | 11.6 | 13.3 | 100.0 |

(a) Proportions are derived based on stated responses only.

Source: NCVER unpublished data, TAFE Graduate Destination Survey 1997; NCVER unpublished data, Student Outcomes Survey 2001.

In May 2001, $89 \%$ of recent TAFE graduates who were employed before their course were also employed after, a similar proportion to May 1997 (88\%). In both 1997 and $2001,46 \%$ of graduates unemployed before their course were employed in May the year after completing their course. In both years, over one-third of those who were unemployed before their course were also unemployed in May the year after.

Almost $39 \%$ of recent graduates were in further study in 2001, of whom $64 \%$ were employed and $14 \%$ were unemployed. Of recent graduates not in further study in 2001, $80 \%$ were employed and $11 \%$ were unemployed. The most common level of course being studied by recent TAFE graduates undertaking further study in 2001 was Bachelor degree or higher (21\%), followed by Diploma and Certificate IV (both $18 \%$ ).

Generally the proportion of graduates employed increases with the level of qualification completed. Almost $78 \%$ of recent TAFE graduates with an Advanced diploma, Diploma or Associate diploma were employed in May 2001, compared to $65 \%$ with a Certificate II and $57 \%$ with a Certificate I.

In 2001, of the 12 fields of study (see Explanatory Notes), the lowest proportions of recent TAFE graduates employed were those with qualifications in the fields of Science (61\%), and Arts, humanities and social science (59\%). These two fields also had the highest proportions of graduates not in the labour force ( $20 \%$ and $26 \%$ respectively). In all other fields, the proportion employed was greater than $70 \%$ in 2001.
topic 34

ABOUT THE DATA

ANALYSIS

EARNINGS OF RECENT TAFE GRADUATES

Completion of a vocational education and training (VET) qualification is thought to improve students' labour market outcomes, such as earnings. Data for 1997 to 2001 are from the Student Outcomes Survey (formerly the TAFE Graduate Destination Survey), conducted by the National Centre for Vocational Education Research (NCVER). Comparable data for 1995 are from the ABS's Vocational Education and Training Graduate Destination Survey. No comparable data were obtained in 1996. Data were collected in May and refer to people who graduated with a qualification from a course in the reference year. Unless otherwise stated, data refer to full-time graduate employees.

Average weekly earnings of recent TAFE graduate employees increased between 1995 and 2001, with male full-time earnings increasing by $31 \%$ and female full-time earnings by $36 \%$. Female graduates consistently earned less than males (for example, $\$ 602$ and $\$ 686$ respectively in 2001). On average, between 1995 and 2001 females earned $15 \%$ less than males. For recent graduates employed part-time, however, female and male earnings were similar ( $\$ 295$ and $\$ 286$ respectively in 2001).

AVERAGE WEEKLY EARNINGS OF RECENT TAFE GRADUATES(a)(b)

(a) Full-time graduate employees only.
(b) Survey not conducted in 1996.

Source: ABS, Graduate Outcomes-TAFE, Australia, 1995 (cat. no. 4225.0); NCVER, TAFE
Graduate Destination Survey 1997-1998; NCVER, Student Outcomes Survey 1999-2001.

The difference in earnings between recent male and female graduates partly reflects their respective occupational profiles, with males tending to dominate higher paid occupations. In 2001, the highest paid occupation group of TAFE graduates was Managers and administrators (\$868) while the lowest paid was Elementary clerical, sales and service workers (\$537).

In 2001, recent TAFE graduate employees working in the Mining industry reported the highest average weekly earnings (\$1051). The lowest reported earnings were for graduates working in the Retail trade (\$514) and Accommodation, cafes and restaurants industries (\$531). The lowest ratio of female to male earnings was in the Personal and other services industry (55\%).

ANALYSIS continued
Earnings varied by level of qualification. In 2001, recent graduates with an Advanced certificate-post trade reported the highest average weekly earnings (\$1,157), while the lowest reported earnings were for recent graduates with a Certificate I (\$556).

AVERAGE WEEKLY EARNINGS OF RECENT TAFE GRADUATES(a)—2001
$\left.\begin{array}{lrrrr} & & & \begin{array}{r}\text { Female } \\ \text { to male } \\ \text { earnings }\end{array} \\ \text { ratio }\end{array}\right\}$
(a) Full-time graduate employees only.

Source: NCVER, Student Outcomes Survey 2001: National Report.

In 2001, recent TAFE graduates from the Education field of study reported the highest average weekly earnings (\$900), while those from Veterinary science and animal care reported the lowest (\$493). In 2001, the ratio of female to male earnings ranged from $101 \%$ in Architecture and building, to $74 \%$ in Health and community services.

AVERAGE WEEKLY EARNINGS, Recent TAFE graduates and all persons

(a) Full-time graduate employees only.
(b) Full-time, average for calendar year.

Source: ABS, Average Weekly Earnings, Australia, 1995-2001 (cat. no. 6302.0); ABS, Graduate Outcomes-TAFE, Australia,

1995 (cat. no. 4225.0); NCVER, TAFE Graduate Destination Survey 1997-1998; NCVER, Student Outcomes Survey 1999-2001.

The ratio of recent TAFE graduate earnings to average weekly ordinary time earnings for the full-time adult population (see Explanatory Notes) was 71\% in 1995 and 76\% in 2001.

DESTINATIONS OF RECENT UNIVERSITY
GRADUATES ....................................................

ANALYSIS

The participation of recent university graduates in the labour market and/or in further study provides information on some of the immediate outcomes of study at university. Data are from the Graduate Destination Survey conducted by the Graduate Careers Council of Australia (GCCA), which collects data on people who graduated from university in the previous calendar year. The survey is conducted throughout the year and sent to graduates around four months after the completion of their qualification. 'University graduate' refers to all those who graduated from a university in the previous year. 'Bachelor graduate' refers to those individuals who completed a Bachelor degree (Pass, Honours or Graduate) or three-year Diploma; 'postgraduate' refers to those individuals who completed a Doctorate, Masters (by coursework or research), Graduate or Postgraduate diploma, or Graduate certificate.

Of the 158,200 recent university graduates in $2001,67 \%$ were employed around four months after completing their qualification. This proportion has remained relatively constant in recent years, after falling below $60 \%$ between 1992 and 1994. Since 1991, the proportion of university graduates unemployed around four months after their course ended has declined (from $15 \%$ in 1991 to $11 \%$ in 2001), while the proportion of those not in the labour force remained relatively constant ( $23 \%$ in 1991 and $22 \%$ in 2001).

## RECENT UNIVERSITY GRADUATES(a), Labour force status


(a) Includes bachelor graduates and postgraduates.

Source: GCCA unpublished data, Graduate Destination Survey.

A greater proportion of recent postgraduates were employed in 2001 than recent bachelor graduates ( $82 \%$ compared with $62 \%$ ), and of these, $31 \%$ of bachelor graduates and $15 \%$ of postgraduates were working in their first full-time job. In all years between 1991 and 2001, a higher proportion of postgraduates were employed full-time than were bachelor graduates: $72 \%$ and $56 \%$ respectively in $2001 ; 71 \%$ and $53 \%$ respectively in 1991. In all years, a higher proportion of postgraduates were also employed part-time
(10\% of postgraduates and $6 \%$ of bachelor graduates in 2001). In 2001, a greater proportion of recent bachelor graduates were unemployed and not in the labour force than were postgraduates ( $12 \%$ and $8 \%$ unemployed respectively, and $26 \%$ and $10 \%$ not in the labour force respectively). However, many bachelor graduates not in the labour force may be in further study.

## LABOUR FORCE STATUS OF RECENT UNIVERSITY GRADUATES

|  | Employed full-time | Employed part-time | Employed total | Unemployed | Not in labour force | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% | \% | \% |
| 1991 |  |  |  |  |  |  |
| Bachelor graduates | 53.4 | 4.0 | 57.4 | 16.3 | 26.3 | 100.0 |
| Postgraduates | 70.7 | 6.3 | 77.0 | 12.7 | 10.2 | 100.0 |
| All university graduates | 57.5 | 4.6 | 62.0 | 15.4 | 22.5 | 100.0 |
| 2001 |  |  |  |  |  |  |
| Bachelor graduates | 55.6 | 6.0 | 61.6 | 12.0 | 26.4 | 100.0 |
| Postgraduates | 71.9 | 9.8 | 81.6 | 7.9 | 10.5 | 100.0 |
| All university graduates | 60.0 | 7.0 | 67.0 | 10.9 | 22.1 | 100.0 |

Source: GCCA unpublished data, Graduate Destination Survey.

Of all recent bachelor graduates in 2001, similar proportions of males and females were employed full-time ( $57 \%$ and $55 \%$ respectively), while $4 \%$ of males and $7 \%$ of females were employed part-time. In 2001, a greater proportion of male recent postgraduates were employed full-time than were female postgraduates ( $80 \%$ compared with $66 \%$ ), while a greater proportion of females were employed part-time ( $15 \%$ compared with $3 \%$ of males).

The proportion of recent bachelor graduates who were unemployed was the same for both males and females in 2001 (12\%), a slight decrease from 1991, when $15 \%$ of males and $17 \%$ of females were unemployed. The proportion of female recent postgraduates unemployed fell from $14 \%$ in 1991 to $9 \%$ in 2001, while the proportion of male recent postgraduates unemployed fell from $9 \%$ to $7 \%$ over the same period.

In 2001, $19 \%$ of all recent university graduates were undertaking further full-time study. A higher proportion of bachelor graduates were undertaking full-time study in 2001 than were postgraduates ( $23 \%$ compared with $7 \%$ ), with a slightly higher proportion of males than females studying ( $20 \%$ compared with $19 \%$ ). The most common level of course being undertaken by recent bachelor graduates was a Bachelor degree (57\%), which includes those progressing to an Honours year as well as those doing a second degree. A further $12 \%$ were studying for a Graduate diploma or Postgraduate diploma. For recent postgraduates undertaking further full-time study, $37 \%$ were studying for a Masters, $16 \%$ for a Doctorate, and $13 \%$ for a Graduate diploma or Postgraduate diploma. Of recent bachelor graduates who were in further full-time study, $44 \%$ were employed, compared with $47 \%$ of postgraduates.

ANALYSIS

Information about the earnings of recent university graduates provides a perspective on immediate financial outcomes of higher education. Data are from the annual Graduate Destination Survey, conducted by the Graduate Careers Council of Australia (GCCA). The survey collects information about gross annual salaries, which have been converted to weekly equivalents. 'Bachelor graduate' refers to individuals who completed a Bachelor degree (Pass, Honours or Graduate), or a three year Diploma; 'postgraduate' refers to those who completed a Doctorate, Masters, Graduate or Postgraduate diploma, or Graduate certificate. The data refer to university graduates from the previous year who were employed full-time at the time of the survey. In comparisons with average weekly earnings (from the ABS's Survey of Average Weekly Earnings), self-employed graduates have been excluded to match the population included in the ABS survey.

Recent postgraduates reported consistently higher average weekly earnings than recent bachelor graduates, with male earnings exceeding female earnings in both groups. Between 1991 and 2001, recent postgraduates reported a greater increase in earnings than did recent bachelor graduates. Over this decade, male postgraduate earnings increased by $62 \%$ and female earnings by $49 \%$; male bachelor graduate earnings increased by $37 \%$ and female earnings by $33 \%$. Differences between male and female graduate earnings are related to differences in fields of study.

AVERAGE WEEKLY EARNINGS OF RECENT UNIVERSITY GRADUATES(a)

(a) University graduates employed full-time only.

Source: GCCA unpublished data, Graduate Destination Survey.

Within the same occupations, male bachelor graduates earned more than female graduates. In 2001, recent bachelor graduates working as Managers and administrators reported the highest weekly earnings (males $\$ 1,230$ and females $\$ 987$ ). The lowest reported earnings were for the group of occupations including Intermediate and Elementary clerical, sales and service workers and Intermediate production and transport workers (males $\$ 624$ and females $\$ 582$ ). This pattern is essentially the same as that for the full-time employed population.

In 2001, recent bachelor graduates working in the Mining industry reported the highest earnings (\$994) while those working in a group consisting of Cultural and recreational services and Accommodation, cafes and restaurants reported the lowest (\$619).

AVERAGE WEEKLY EARNINGS OF RECENT UNIVERSITY GRADUATES (a) -2001

|  |  |  | Female <br> to male <br> earnings <br> ratio |  |
| :--- | ---: | ---: | ---: | ---: |
| Level of Qualification | Males | Females | Persons | $\$$ |
| Postgraduates | $\$$ | $\$$ | $\$$ | $\%$ |
| Doctorate | 1288 | 979 | 1119 | 76.1 |
| Masters (research, course work) | 1190 | 1014 | 1111 | 85.2 |
| $\quad$ Graduate diploma or postgraduate diploma, and Graduate certificate | 1169 | 994 | 1089 | 85.1 |
| Bachelor graduates(b) | 1155 | 920 | 1016 | 79.6 |
| $\quad$ Honours bachelor | 809 | 699 | 741 | 86.4 |
| Pass bachelor | 791 | 696 | 738 | 88.0 |
| Total | 806 | 693 | 736 | 86.0 |

[^0]Earnings of graduates varied by field of study as well as level of qualification. In 2001, individuals who had completed a Doctorate or Masters degree reported relatively high average weekly earnings (\$1,111 and $\$ 1,089$ respectively). Recent graduates who had completed a Bachelor degree reported lower earnings (\$741). In 2001, recent bachelor graduates from the field of Dentistry reported relatively high average weekly earnings (\$998), as did graduates from the field of Medicine (\$898). The lowest reported earnings for bachelor graduates were in the fields of Pharmacy (\$503) and Art and design (\$607).

## AVERAGE WEEKLY EARNINGS COMPARISONS

|  | Bachelor <br> graduate <br> earnings(a) | Postgraduate <br> earnings(a) | Average weekly <br> ordinary time <br> earnings <br> (AWOTE)(b) | Bachelor <br> graduate <br> to AWOTE <br> ratio | Postgraduate <br> to AWOTE |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1998 | $\$$ | $\$$ | $\$$ | $\%$ | ratio |

(a) University graduates employed full-time only, excludes self-employed.
(b) Full-time, average for calendar year.

Source: ABS, Average Weekly Earnings, Australia, 1998-2001 (cat. no. 6302.0); GCCA unpublished data, Graduate Destination Survey 1998-2001.

The ratio of earnings of recent bachelor graduates to the average weekly ordinary time earnings for the full-time adult population remained about the same between 1998 and 2001 (around 86\%). In contrast, the ratio for recent postgraduates was $123 \%$ in 1998 and 128\% in 2001 (see Explanatory Notes).

LABOUR MARKET INDICATORS BY LEVEL OF EDUCATION

People's educational attainment can influence their labour market outcomes, as reflected by key labour market indicators such as the employment to population ratio, the labour force participation rate and the unemployment rate. Time series are presented using a combination of whether a person has a non-school qualification, the level of their highest qualification, and whether they have completed secondary school. More detailed data are presented for 2001. The data are from the ABS's Survey of Education and Work, which is conducted in May each year, and relate to people aged 15-64 years. In 2001, this survey introduced the Australian Standard Classification of Education to classify data on educational attainment (see Explanatory Notes).

In May 2001, the unemployment rate for 15-64 year olds was $2.8 \%$ for those with a Bachelor degree or above, compared with $5.7 \%$ for those whose highest non-school qualification was an Advanced diploma, diploma or certificate. For people without non-school qualifications, the unemployment rate was $7.5 \%$ for those who had completed Year 12 and $10.8 \%$ for those who had not. The unemployment rate has declined for each of these groups since the early 1990s, consistent with the overall trend in the labour market.


Note: Breaks in series: 1993 ABSCQ; 1997 computer assisted coding; 2001 ASCED (see Explanatory Notes).

Source: ABS data available on request, Survey of Education and Work; Transition from Education to Work Survey.

A similar but inverse relationship is evident for the labour force participation rate, where people with non-school qualifications have higher rates than those without. In May 2001, the participation rate was $87.3 \%$ for people with a Bachelor degree or above, and $83.0 \%$ for those whose highest qualification was an Advanced diploma, diploma or certificate. For people without non-school qualifications, the labour force participation rate was $76.8 \%$ for those who had completed Year 12 and $62.2 \%$ for those who had not. Between 1991 and 2001, labour force participation rates have declined slightly for all

ANALYSIS continued
groups, except for those who had completed Year 12 only, where there was an increase from $73.7 \%$ in 1991 to $76.8 \%$ in 2001.

People who had completed Year 12 generally experienced better labour market outcomes (as shown by higher labour force participation rates, higher employment to population ratios and lower unemployment rates) than those who had not completed Year 12. This pattern is evident across all levels of non-school qualification. For example, in May 2001, people with a Certificate I or II and who had completed Year 12 had an unemployment rate of $6.5 \%$ compared to $8.9 \%$ for those who had not completed Year 12, and the employment to population ratio was $74.6 \%$ and $65.3 \%$ respectively. Among people with non-school qualifications, those with a Bachelor degree or higher level qualification had the best labour market outcomes. The majority ( $92 \%$ ) of people with such qualifications had also completed Year 12. Among those whose highest level of school was Year 11 or below, those whose highest qualification was a Certificate III or IV had the highest labour force participation rate (86.2\%) and employment to population ratio (82.3\%).

LABOUR MARKET INDICATORS, By highest level of school completed and highest non-school qualification-2001

|  | YEAR 12 |  |  | YEAR 11 OR BELOW |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Labour force participation rate | Employment to population ratio | Unemployment rate | Labour force participation rate | Employment <br> to <br> population ratio | Unemployment rate |
| Highest level of non-school qualification | \% | \% | \% | \% | \% | \% |
| Graduate diploma, graduate certificate, or above | 89.7 | 87.3 | 2.7 | 81.4 | 79.7 | *2.1 |
| Bachelor degree | 87.3 | 84.9 | 2.8 | 79.0 | 76.2 | *3.5 |
| Advanced diploma or diploma | 84.0 | 80.6 | 4.0 | 79.0 | 74.9 | 5.1 |
| Certificate III or IV | 89.2 | 84.9 | 4.8 | 86.2 | 82.3 | 4.5 |
| Certificate I or II | 79.8 | 74.6 | 6.5 | 71.7 | 65.3 | 8.9 |
| Certificate not further defined | 91.4 | 83.8 | 8.4 | 83.1 | 69.7 | 16.1 |
| Persons without a non-school qualification | 76.8 | 71.0 | 7.5 | 62.2 | 55.5 | 10.8 |
| Total (a) | 83.1 | 78.9 | 5.0 | 68.9 | 62.8 | 8.8 |

[^1](a) Includes level of non-school qualification not determined.

Of those unemployed in May 2001, 65\% did not have a non-school qualification, and most of these $(72 \%)$ also had not completed Year 12. Of those unemployed who did not have a non-school qualification and whose highest level of school was Year 11 or below, $40 \%$ had been unemployed for 26 weeks or more, compared to $19 \%$ of those unemployed and with a Bachelor degree or above.

The proportion of people employed part-time was lowest for people whose highest non-school qualification was a Certificate III or IV (14\%). The proportion of females employed part-time was higher than for males for all combinations of highest level of school and highest non-school qualifications. For example, the proportion of those who had not completed Year 12 and had a Certificate III or IV, who were employed part-time, was $50 \%$ for females compared to $7 \%$ for males.

EARNINGS AND HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT

ABOUT THE DATA

ANALYSIS

A person's earnings are often related to their level of educational attainment. The following analysis relates highest level of educational attainment to average usual weekly earnings of wage and salary earners in their main job. Data are from the ABS's Survey of Education, Training and Information Technology conducted in 2001, and relate to people aged 15-64 years (excluding those aged 15-20 years who were still at school).

The variable 'highest level of educational attainment' provides a single measure of a person's educational attainment encompassing both their school and non-school attainment. For the purpose of obtaining a single highest level, it is usually self-evident which of a person's school and non-school attainment is higher (e.g. a Bachelor degree is higher than Year 12). However, in some cases, Secondary education attainment is regarded as higher than some Certificate level qualifications (e.g. for a person who has completed Year 12 and has a Certificate I or II, their highest level of educational attainment is considered to be Year 12). The Explanatory Notes contain more details about how highest level of educational attainment is derived.

Generally, average usual weekly earnings of wage and salary earners increases as highest level of educational attainment increases. For example, in 2001, the average weekly earnings of full-time wage and salary earners who held a Postgraduate degree, graduate diploma or graduate certificate was $\$ 1,235$, compared with earnings of $\$ 684$ for those with Year 11 or below as their highest level. People whose highest level of educational attainment was a Certificate I or II reported low full-time average weekly earnings (\$599). Earnings for people employed part-time followed a similar pattern to those employed full-time. Because part-time employees can work any number of hours less than 35 per week, their average earnings tend to be more affected by variations in hours worked than full-time employees, most of whom work between 35 and 44 hours per week.

In 2001, males who were employed full-time reported higher average weekly earnings than did females across all levels of highest educational attainment. The percentage difference between male and female earnings varied between different levels of educational attainment. For example, on average, males with Year 11 or below as their highest level of educational attainment earned $18 \%$ more than females, while for those with a Bachelor degree, earnings of males were $41 \%$ higher than those of females. For those with a Postgraduate degree, graduate diploma or graduate certificate, earnings of males were $27 \%$ higher than those of females.

WAGE OR SALARY EARNERS' AVERAGE USUAL WEEKLY EARNINGS (a), By sex—2001

|  | MALES |  | FEMALES |  | PERSONS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fulltime | Part- <br> time | Fulltime | Parttime | Fulltime | Parttime |
| Highest level of educational attainment | \$ | \$ | \$ | \$ | \$ | \$ |
| Postgraduate degree, graduate diploma or graduate certificate | 1358 | 709 | 1066 | 520 | 1235 | 555 |
| Bachelor degree | 1278 | 568 | 906 | 484 | 1108 | 501 |
| Advanced diploma or diploma | 1066 | 490 | 775 | 369 | 943 | 390 |
| Certificate III or IV | 835 | 375 | 607 | 319 | 795 | 336 |
| Certificate I or II | 606 | 435 | 593 | 276 | 599 | 329 |
| Certificate not further defined | 688 | 291 | *617 | *240 | 673 | 259 |
| Year 12 | 797 | 300 | 643 | 265 | 737 | 277 |
| Year 11 or below | 725 | 313 | 613 | 291 | 684 | 296 |
| Total ${ }^{\text {b }}$ ) | 917 | 371 | 741 | 333 | 854 | 342 |

* estimate has a relative standard error of between $25 \%$ and $50 \%$ and should be used with caution

Source: ABS data available on request, Survey of Education, Training and Information Technology 2001.
(a) Excludes persons aged 15-20 years who were still attending school.

Note: Levels of education are not necessarily listed in order from highest to lowest (see Explanatory Notes).
(b) Includes level not determined, and persons who never attended school and have no qualifications.

## ANALYSIS continued

For most levels of educational attainment, average usual weekly earnings of full-time employees increased with age up to 45-54 years, with the exception of those with a Bachelor degree or above or Certificate, where those aged 35-44 years had the highest earnings. Across most age groups, average weekly earnings were highest for those whose highest level of educational attainment was a Bachelor degree or above. In the middle and older age groups ( $35-64$ years), people with a highest attainment of Year 12 had higher earnings than those with a Certificate level qualification as their highest level.

FULL-TIME WAGE OR SALARY EARNERS' AVERAGE USUAL WEEKLY EARNINGS, By age-2001

|  | $15-19(\mathrm{a})$ | $20-24(\mathrm{a})$ | $25-34$ | $35-44$ | $45-54$ | $55-64$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Highest level of |  |  |  |  |  | $\$$ | $\$$ |
| educational attainment | $\$$ | $\$$ | $\$$ | $\$$ | $\$$ | $\$$ |  |
| Bachelor degree or above | np | 717 | 1070 | 1295 | 1275 | 1226 | 1155 |
| Advanced diploma or diploma | 392 | 639 | 835 | 1009 | 1133 | 1055 | 943 |
| Certificate III or IV | 464 | 614 | 768 | 870 | 875 | 807 | 795 |
| Certificate I or II | 379 | 479 | 756 | 608 | 639 | 648 | 599 |
| Year 12 | 396 | 558 | 752 | 913 | 968 | 961 | 737 |
| Year 11 or below | 383 | 553 | 662 | 744 | 751 | 723 | 684 |
| Total(b) | $\mathbf{3 9 4}$ | $\mathbf{6 0 6}$ | $\mathbf{8 3 0}$ | $\mathbf{9 6 2}$ | $\mathbf{9 7 4}$ | $\mathbf{8 9 7}$ | $\mathbf{8 5 4}$ |

$\mathrm{np} \quad$ not available for publication but included in totals where applicable, unless otherwise indicated
(a) Excludes persons aged 15-20 years who were still attending school.
(b) Includes certificate n.f.d., level not determined, and persons who never attended school and have no qualifications.

Source: ABS data available on request, Survey of Education, Training and Information Technology 2001.
Note: Levels of education are not necessarily listed in order from highest to lowest (see Explanatory Notes).

As described earlier, average weekly earnings of male full-time employees were greater than for females across all levels of educational attainment, and the difference was greatest in the 45-54 year age group.

Data presented throughout the 'Related international statistics' section provide some broad international education and training statistics. Data are primarily drawn from the Organisation for Economic Co-operation and Development's (OECD) annual publication Education At A Glance: OECD indicators, but with information about 15 year old student literacy performance sourced from the OECD publication Knowledge and Skills for Life: First results from PISA 2000. Australian data are provided to the OECD by the Department of Education, Science and Training (DEST) in accordance with definitions determined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the OECD and EUROSTAT. Data presented throughout this section are generally different from those published elsewhere in this publication owing to differences between international and Australian definitions, classification systems and compilation methods (see Explanatory Notes).

CONTEXT-1999(a)


[^2](c) GDP calculated for the financial year.

Source: OECD, Education At A Glance: OECD indicators 2002; OECD, Education At A Glance: OECD indicators 2001.

CONTEXT, Education and labour force status of the youth population - 2001


FINANCIAL RESOURCES-1999

|  | Expenditure for educational institutions | EXPENDITURE ON EDUCATIONAL INSTITUTIONS |  | ANNUAL EXPENDITURE PER STUDENT IN EQUIVALENT US DOLLARS(a) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public sources | Private <br> sources(b) | Primary education | Secondary education | $\begin{array}{r} \text { All } \\ \text { tertiary } \\ \text { education } \end{array}$ |
| Selected OECD countries | \% of GDP | \% | \% | \$ | \$ | \$ |
| Australia | 5.8 | 76.5 | 23.5 | 4858 | 6850 | 11725 |
| Canada | 6.6 | 79.8 | 20.2 | (c) na | 5981 | 15211 |
| France | 6.2 | 91.9 | 8.1 | 4139 | 7152 | 7867 |
| Germany | 5.6 | 77.9 | 22.1 | 3818 | 6603 | 10393 |
| Japan | 4.7 | 75.6 | 24.4 | 5240 | 6039 | 10278 |
| Korea | 6.8 | 58.7 | 41.3 | 2838 | 3419 | 5356 |
| New Zealand | 5.9 | na | na | na | na | na |
| United Kingdom | 5.2 | 83.7 | 16.3 | 3627 | 5608 | 9554 |
| United States | 6.5 | 75.0 | 25.0 | 6582 | 8157 | 19220 |
| OECD mean | 5.5 | 88.0 | 12.0 | 4148 | 5465 | 9210 |

na not available
(a) Converted using purchasing power parities (PPPs). Based on full-time equivalents.
(b) Including subsidies attributable to payments to educational institutions from public sources.
(c) Data are included in secondary education column.

Source: OECD, Education At A Glance: OECD indicators 2002.

HUMAN RESOURCES—2000

|  | RATIO OF STUDENTS TO TEACHING STAFF(a) |  |  | ANNUAL STATUTORY TEACHERS' SALARIES IN PUBLIC INSTITUTIONS(b) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary education | Secondary education | University level | Primary education | Lower <br> secondary education | Upper secondary general education |
| Selected OECD countries | ratio | ratio | ratio | \$ | \$ | \$ |
| Australia(c) | 17.3 | 12.6 | 14.8 | 38297 | 38312 | 38312 |
| Canada | 18.1 | 18.8 | (d) na | na | na | na |
| France | 19.8 | 12.5 | 18.6 | 27172 | 29331 | 29331 |
| Germany | 19.8 | 15.2 | 11.7 | 37905 | 40561 | 43881 |
| Japan | 20.9 | 15.2 | 12.9 | 42820 | 42820 | 42845 |
| Korea | 32.1 | 21.2 | na | 43952 | 43800 | 43800 |
| New Zealand | 20.6 | 16.3 | 15.8 | 33653 | 33653 | 33653 |
| United Kingdom(e) | 21.2 | 14.8 | (d) na | na | na | na |
| United States | 15.8 | 15.2 | 14.8 | 40072 | 40072 | 40181 |
| OECD mean | 17.7 | 14.3 | 16.1 | 29407 | 31221 | 33582 |

na not available
(a) Calculations based on full-time equivalents.
(b) After 15 years experience with minimum training. In equivalent US dollars converted using purchasing power parities (PPPs).
(c) Ratio of students to teaching staff includes only general programmes at lower and upper secondary education.
(d) Available for all tertiary only.
(e) Ratio of students to teaching staff includes only general programmes at upper secondary education.
Source: OECD, Education At A Glance: OECD indicators 2002.

PARTICIPATION-2000

ENROLMENT RATES (\% OF AGE GROUP)

|  | $\begin{array}{r} 4 \text { years } \\ \text { and } \end{array}$ under(a) | $\begin{gathered} 5-14 \\ \text { years } \end{gathered}$ | $\begin{array}{r} 15-19 \\ \text { years } \end{array}$ | $\begin{array}{r} 20-29 \\ \text { years } \end{array}$ | $\begin{array}{r} 30-39 \\ \text { years } \end{array}$ | $\begin{array}{r} 40 \\ \text { years } \\ \text { and } \\ \text { over } \end{array}$ | $\begin{array}{r} \text { Participating in } \\ \text { training } \\ \text { outside formal } \\ \text { education } \\ (25-64 \text { years (b) } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selected OECD |  |  |  |  |  |  |  |
| countries | \% | \% | \% | \% | \% | \% | \% |
| Australia | 34.2 | 100.0 | 81.8 | 28.2 | 14.9 | 7.1 | (c) 36 |
| Canada | 20.1 | 97.1 | 74.2 | 21.7 | 4.6 | 1.2 | (d) 29 |
| France | 117.7 | 99.8 | 86.4 | 19.1 | 1.7 | (e) na | na |
| Germany | 67.9 | 99.4 | 88.3 | 23.6 | 2.8 | 0.2 | 42 |
| Japan | 77.4 | 101.2 | na | na | na | na | na |
| Korea | 17.5 | 92.3 | 78.6 | 23.9 | 1.4 | 0.3 | na |
| New Zealand | 86.8 | 99.0 | 72.4 | 21.4 | 9.0 | 3.1 | (c) 46 |
| United Kingdom | 81.1 | 98.9 | 73.3 | 23.8 | 13.2 | 5.4 | (c) 45 |
| United States | 49.9 | 99.3 | 73.9 | 21.2 | 5.4 | 1.5 | (f) 51 |
| OECD mean | 63.8 | 97.9 | 77.3 | 21.4 | 4.9 | 1.3 | na |

na not available
(a) As a proportion of the population 3-4 years.
(b) Participation in continuing education and training activities. Does not include informal learning activities such as informal, on-the-job or other self-organised learning.
(c) Data from 1995/1996 International Adult Literacy Survey.
(d) Data for 1997.
(e) Data are included in 30-39 years column.
(f) Data for 2001.

Source: OECD, Education At A Glance: OECD indicators 2002.

OUTPUTS AND OUTCOMES—2001

|  | 15 YEAR OLD STUDENT LITERACY PERFORMANCE(a) |  |  |  | EDUCATIONAL ATTAINMENT OF POPULATION 25-64 YRS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reading literacy | Mathematical literacy | Scientific literacy | $\begin{array}{r} \text { Prose literacy } \\ \text { skills } \\ (16-65 \text { years)(b) } \end{array}$ | Below upper secondary | Upper secondary or above | $\begin{array}{r} \text { Any } \\ \text { tertiary } \end{array}$ | University level |
| Selected OECD countries | mean | mean | mean | \% scored Level 3 or higher | \% | \% | \% | \% |
| Australia | 528 | 533 | 528 | 56 | 41 | 59 | 29 | 19 |
| Canada | 534 | 533 | 529 | 58 | 18 | 81 | 41 | 20 |
| France | 505 | 517 | 500 | na | 36 | 64 | 23 | 12 |
| Germany | 484 | 490 | 487 | 51 | 18 | 83 | 23 | 13 |
| Japan | 522 | 557 | 550 | na | 17 | 83 | 34 | 19 |
| Korea | 525 | 547 | 552 | na | 32 | 68 | 24 | 17 |
| New Zealand | 529 | 537 | 528 | 54 | 24 | 76 | 29 | 14 |
| United Kingdom | 523 | 529 | 532 | 48 | 17 | 83 | 26 | 18 |
| United States | 504 | 493 | 499 | 54 | 13 | 87 | 37 | 28 |
| OECD mean | 500 | 500 | 500 | na | 34 | 67 | 23 | 15 |

[^3]OUTPUTS AND OUTCOMES, By level of educational attainment-25-64 years-2001

UNEMPLOYMENT RATE

|  | Below upper secondary | Upper secondary and postsecondary nontertiary education | Tertiary nonuniversity | University level | All levels of education | Below upper secondary | Tertiary education |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selected OECD countries | \% | \% | \% | \% | \% | index | index |
|  | -• | . . . . |  | ALES | -•• | . . . . . . . |  |
| Australia | 8.1 | 4.5 | 4.5 | 2.5 | 5.2 | 86 | 139 |
| Canada | 10.2 | 6.2 | 4.8 | 4.4 | 6.2 | 79 | 137 |
| France | 9.7 | 5.1 | 4.3 | 4.1 | 6.2 | 88 | 159 |
| Germany | 15.6 | 8.1 | 4.4 | 3.4 | 7.7 | 80 | 141 |
| Japan | 6.9 | 4.8 | 3.2 | 2.8 | 4.4 | na | na |
| Korea | 4.3 | 3.7 | 5.0 | 3.2 | 3.8 | 88 | 132 |
| New Zealand | 7.4 | 3.0 | 4.4 | 2.8 | 4.0 | 76 | 130 |
| United Kingdom | 9.4 | 4.1 | 2.7 | 2.0 | 4.1 | 72 | 147 |
| United States | 7.5 | 4.2 | 2.5 | 1.9 | 3.7 | 64 | 178 |
| OECD mean | 8.9 | 4.8 | 3.3 | 2.8 | 5.0 | na | na |
| FEMALES |  |  |  |  |  |  |  |
| Australia | 7.0 | 5.2 | 3.9 | 2.6 | 5.1 | 89 | 146 |
| Canada | 10.2 | 6.2 | 4.5 | 4.4 | 5.8 | 70 | 140 |
| France | 14.4 | 9.3 | 5.0 | 5.6 | 9.8 | 79 | 145 |
| Germany | 11.5 | 8.4 | 5.8 | 4.4 | 8.1 | 72 | 137 |
| Japan | 4.3 | 4.7 | 3.8 | 3.1 | 4.2 | na | na |
| Korea | 1.8 | 2.7 | 3.3 | 2.0 | 2.3 | 69 | 141 |
| New Zealand | 5.9 | 3.6 | 2.9 | 3.2 | 3.9 | 72 | 136 |
| United Kingdom | 5.7 | 3.7 | 1.7 | 1.9 | 3.4 | 70 | 183 |
| United States | 8.9 | 3.4 | 2.3 | 2.0 | 3.3 | 62 | 164 |
| OECD mean | 9.4 | 6.4 | 4.0 | 3.5 | 6.1 | na | na |

na not available
(a) Compared to the mean earnings of persons with upper secondary and post-secondary non-tertiary education (index = 100). Data for 1998-2001.
Source: OECD, Education At A Glance: OECD indicators 2002.

## EXPLANATORY NOTES

1 The statistics in this publication are drawn from a wide range of both ABS and non-ABS sources. These Explanatory Notes provide additional information about the statistics in the Topics in this publication. They are divided into 'General notes', which provide information relevant to a number of Topics, and 'Specific notes', which relate largely to a single Topic. Information is presented in the same order as the Topics in this publication.

## INDUSTRY

2 Industry data have been classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993 (cat. no. 1292.0). ANZSIC classifies businesses according to their economic activities, in a structure consisting of four levels (Division, Subdivision, Group and Class).
The 17 Divisions in the classification are:
Agriculture, forestry and fishing
Mining
Manufacturing
Electricity, gas and water supply
Construction
Wholesale trade
Retail trade
Accommodation, cafes and restaurants
Transport and storage
Communication services
Finance and insurance
Property and business services
Government administration and defence
Education
Health and community services
Cultural and recreational services
Personal and other services

```
occupation
```

3 Occupation data have been classified according to the Australian Standard Classification of Occupations (ASCO), Second Edition, 1997 (cat. no. 1220.0), which is a skill-based classification of occupations. However, earlier data in some Topics are classified to the first edition of ASCO. The nine Major occupation groups of ASCO second edition are:

Managers and administrators
Professionals
Associate professionals
Tradespersons and related workers
Advanced clerical and service workers
Intermediate clerical, sales and service workers
Intermediate production and transport workers
Elementary clerical, sales and service workers
Labourers and related workers

EDUCATION
4 In 2001, the Australian Bureau of Statistics Classification of Qualifications (ABSCQ) was replaced by the Australian Standard Classification of Education (ASCED). The ASCED is a national standard classification which can be applied to all sectors of the Australian education system including schools, vocational education and training, and higher education. It replaces a number of classifications previously used in administrative and statistical systems, including the ABSCQ. The ASCED comprises two classifications: Level of Education and Field of Education

5 Level of Education is defined as a function of the quality and quantity of learning involved in an educational activity, and is related to the degree of complexity of the content of the activity. There are nine broad levels, 15 narrow levels and 64 detailed levels. For definitions of these see Australian Standard Classification of Education (ASCED), 2001 (cat. no. 1272.0).
6 The relationship between categories in the Level of Education classification should be essentially ordinal. In other words, educational activities at Broad Level 1 Postgraduate Degree should be at a higher level than those at the Broad Level 2 Graduate Diploma and Graduate Certificate, and so on. However, when this idea is applied to the reality of educational provision in Australia, it is not always possible to assert that an ordinal relationship exists among the various levels of education.

7 This is particularly evident in the case of the relationship between Certificates I-IV in Broad Level 5 Certificate Level, and school education included in Broad Level 6 Secondary Education. The level of education associated with secondary education may range from satisfying the entry requirements for admission to a university degree course, to the completion of units in basic literacy, numeracy and life skills. Educational activity in Secondary Education categories may therefore be of an equal, higher or lower level than Certificates found in Broad Level 5 Certificate Level.

8 Highest Level of Educational Attainment can be derived from information on Highest Year of School Completed and Level of Highest Non-school Qualification. The derivation process determines which of the 'non-school' or 'school' attainments will be regarded as the higher. Usually the higher ranking attainment will be self-evident but in some cases some secondary education is regarded (for the purposes of obtaining a single measure) as higher than some Certificate level attainments.

9 The following decision table is used to determine which of the responses to questions on Highest Year of School Completed (coded to ASCED Broad Level 6) and Level of Highest Non-school Qualification (coded to ASCED Broad Level 5) will be regarded as the highest. It is emphasised that this table was designed for the purpose of obtaining a single value for the output variable Highest Level of Educational Attainment and is not intended to convey any other ordinality.

| DECISION TABLE: ASCED LEVEL OF EDUCATION |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Certificate not further defined (500) | Certificate III or IV not further defined (510) | Certificate IV (511) | Certificate III (514) | Certificate I or II not further defined (520) | Certificate II (521) | Certificate I (524) |
| Secondary Education not further defined (600) | Certificate not further defined | Certificate III or IV not further defined | Certificate IV | Certificate III | Certificate II or I not further defined | Certificate II | Certificate I |
| Senior Secondary Education not further defined (610) | Senior Secondary not further defined | Certificate III or IV not further defined | Certificate IV | Certificate III | Senior Secondary not further defined | Senior Secondary not further defined | Senior Secondary not further defined |
| Year 12 (612) | Year 12 | Certificate III or IV not further defined | Certificate IV | Certificate III | Year 12 | Year 12 | Year 12 |
| Year 11 (613) | Year 11 | Certificate III or IV not further defined | Certificate IV | Certificate III | Year 11 | Year 11 | Year 11 |
| Junior Secondary <br> Education not further defined (620) | Certificate not further defined | Certificate III or IV not further defined | Certificate IV | Certificate III | Certificate I or II not further defined | Certificate II | Certificate I |
| Year 10 (621) | Year 10 | Certificate III or IV not further defined | Certificate IV | Certificate III | Year 10 | Certificate II | Year 10 |
| Year 9 (622) | Certificate not further defined | Certificate III or IV not further defined | Certificate IV | Certificate III | Certificate I or II not further defined | Certificate II | Certificate I |
| Year 8 (623) | Certificate not further defined | Certificate III or IV not further defined | Certificate IV | Certificate III | Certificate I or II not further defined | Certificate II | Certificate I |
| Year 7 (624) | Certificate not further defined | Certificate III or IV not further defined | Certificate IV | Certificate III | Certificate I or II not further defined | Certificate II | Certificate I |

Classifications continued
10 The decision table is used to rank information provided about the qualifications and attainments of a single individual. It does not represent any basis for comparison between differing qualifications. For example, a person whose Highest Year of School Completed was Year 12, and whose Level of Highest Non-school Qualification was a Certificate III, would have those responses crosschecked on the decision table and would as a result have their Highest Level of Educational Attainment output as Certificate III. However, if the same person had answered 'Certificate' to the highest non-school qualification question, without offering any further detail, it would be crosschecked against Year 12 on the decision table as 'Certificate not further defined'. The output would then be 'Year 12'.

11 The decision table was also used to assign a single value for the output variable Level of Education of 2001 Study, for persons who were studying towards a non-school qualification (e.g. Certificate I or II), while undertaking secondary education at school.

12 Field of Education in ASCED is defined as the subject matter of an educational activity. Fields of education are related to each other through the similarity of subject matter, through the broad purpose for which the education is undertaken, and through the theoretical content which underpins the subject matter. There are 12 broad fields, 71 narrow fields and 356 detailed fields. For definitions of these see Australian Standard Classification of Education (ASCED), 2001 (cat. no. 1272.0). Note that Field of study used in the Topics

Changes to the Survey of Education and Work

Accrual accounting

Current prices

SPECIFIC NOTES
Context
'Destinations of recent TAFE graduates' (see paragraph 70) and 'Vocational education and training students' uses a different classification.

13 Data for main field of education from the Survey of Education and Work 2001 are not comparable with previous years due to the move from ABSCQ to ASCED. Field of education data can be concorded between ABSCQ and ASCED at the lowest level of the classification; however, the Survey of Education and Work does not have a sample size large enough to support such a concordance.

14 A number of topics have used data from the 2001 ABS Survey of Education and Work, which is published in Education and Work, Australia (cat. no. 6227.0). The survey was previously known as the Transition from Education to Work Survey. Data are collected in May of each year as a supplement to the ABS's Labour Force Survey (LFS).

15 There are four series breaks in the data collected on highest level of Non-school Qualification. In 1993, the ABSCQ was introduced; qualifications for nurses were treated differently in 1994; computer assisted coding was introduced in 1997; and in 2001, ASCED was implemented.

16 Prior to 1993 some lower level Certificate equivalent courses may have been included in data on educational attainment, although hobby courses were excluded. From 1993 (when the ABSCQ was introduced) to 2000, courses at a level equivalent to Certificate I, and all post-school qualifications with a duration of less than one semester were excluded, as they were not within the scope of the ABSCQ. Personal enrichment and hobby courses were also excluded. In the 2001 Survey of Education and Work, with the introduction of ASCED, data included Certificate I.

17 Accrual accounting is an accounting method which records flows at the time economic value is created, transformed, exchanged, transferred or extinguished. Flows are recorded in the period in which the economic events occur, irrespective of whether there were associated cash flows or not (for example, a sale is entered when it occurs, not when the customer pays the bill). This is now the most widespread method of accounting used. Accrual accounting differs from cash-based accounting which records income, expenditure or other flows at the time cash payment is actually received or paid. Cash accounting is now used only by some public sector operations, and is useful mainly as a measure of how much cash is available at any given time.

18 Current prices are the prices that are actually associated with particular transactions. Current price data are essentially estimates of an aggregated sum of the values of individual transactions. Every transaction has two components: a price and a quantity. From one period to another the quantities and prices comprising the transactions change. This means that when the current price value of an aggregate, such as GDP, in one period is compared with the current price value in another period, the difference between them usually reflects both changes in quantity and changes in price of the constituent transactions.

AUSTRALIA'S POPULATION
19 A combination of assumptions about future levels of births, deaths and migration is used to illustrate the possible size, structure and distribution of Australia's population in the future. The data presented in this publication in the Topic 'Australia's population' assumes a total fertility rate of 1.6 births per woman, and net overseas migration of 90,000 per year. For more details about population projections, please refer to Population Projections, Australia (cat. no. 3222.0).

ECONOMIC CONTEXT
20 There are a number of important differences to note when comparing the financial data on education presented in the 'Economic context' Topic and the 'Total expenditure on education' Topic. Data presented in the 'Economic context' Topic are from the Australian System of National Accounts (cat. no. 5204.0), published by the ABS. Data presented in the 'Total expenditure on education' Topic are from the ABS's Government Finance Statistics (GFS) collection, specifically from Government Finance Statistics, Education, Australia (cat. no. 5518.0.55.001). These two collections differ in scope, and data are not directly comparable.

21 The Australian National Accounts are based on the international standard System of National Accounts 1993 (SNA93). Adjustments are made to ABS Public Finance data to align it with SNA93 requirements and to ensure consistency between all components of GDP. For items classified to government final consumption expenditure in the Australian System of National Accounts, Government Finance Statistics data are altered in the following ways:

- depreciation (calculated using the perpetual inventory method) is added
- financial intermediation services indirectly measured is added
- an adjustment is made to account for expenditure on intangible fixed assets.

LABOUR MARKET
22 Descriptions of the underlying concepts and structure of Australia's labour market statistics, and the sources and methods used in compiling the estimates, are presented in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0).

23 From April 2001, the Labour Force Survey (LFS) has been conducted using a redesigned questionnaire containing additional data items and some minor definition changes. Core labour force series were revised for the period April 1986 to March 2001 to ensure continuity. For further details see Information Paper: Implementing the Redesigned Labour Force Survey Questionnaire (cat. no. 6295.0) and Information Paper: Questionnaires Used in the Labour Force Survey (cat. no. 6232.0).

24 Trend estimation is a process of applying a moving average to a seasonally adjusted time series to reduce the impact of the irregular component of the series. For information about how the trend series is calculated, see the Explanatory Notes of Labour Force, Australia, Preliminary (cat. no. 6202.0). For further information, users may wish to refer to A Guide to Interpreting Time Series-Monitoring Trends, an Overview (cat. no. 1348.0).

TOTAL EXPENDITURE ON EDUCATION
25 See paragraphs 20-21 for details on the differences between data presented in the 'Economic context' Topic and in the 'Total expenditure on education' Topic.

26 See paragraph 18 in General notes for information about current prices.
27 In 1998-99, the ABS moved from cash-based accounting to accrual accounting in the GFS (see paragraph 17 in General notes for details about accrual accounting). This was largely a result of changes to international statistical standards, coupled with a shift by most governments in Australia from cash to accrual reporting in order to determine the real cost of their operations. The former cash-based GFS was compiled on the basis of the System of National Accounts (1968 edition) and the International Monetary Fund's (IMF) Manual on Government Finance Statistics (1986 edition), however the ABS's revised accrual

GFS are based on a new conceptual framework derived from SNA93. The IMF's Manual on Government Finance Statistics is currently being revised to an accrual basis of recording and to harmonise with SNA93 in other respects.

28 Details of the ABS's change from cash-based accounting to accrual accounting are outlined in Information Paper: Accruals-Based Government Finance Statistics (cat. no. 5517.0).

29 Total government expenditure on education is calculated by adding government operating expenses and net acquisition of non-financial assets, then subtracting sales of goods and services. Operating expenses include items such as employee expenses (wages and salaries etc.) and current transfer expenses (living allowances for students etc.). Sales of goods and services includes items such as student fees and charges which are made by governments and educational institutions in exchange for educational services provided.

30 Total government expenditure on education is NOT equal to Commonwealth expenditure on education plus expenditure by state and local governments on education. The reason for this is that Commonwealth grants to state and local governments are classified as a component of Commonwealth expenditure on education but are also included by state and local governments as a component of their expenditure on education. Total government expenditure is calculated in a manner that ensures that Commonwealth grants are not counted as part of total government expenditure twice.

31 Data published in the GFS publications on private expenditure on education are taken from the Australian System of National Accounts (cat. no. 5204.0). Household final consumption expenditure is calculated using data from the Department of Education, Science and Training (as the main data source) and data from a number of other ABS publications. The figure for gross fixed capital formation reported in GFS publications is taken directly from the Australian System of National Accounts (cat. no. 5204.0).

EXPENDITURE PER STUDENT—GOVERNMENT SCHOOLS
32 In 1998-99, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) moved from cash-based accounting to accrual accounting for reporting expenditure on government schools. See Glossary for the definitions of accrual and cash accounting. For information on accrual accounting see paragraph 17 in General notes

33 See paragraph 18 in General notes for information about current prices

INCOME AND EXPENDITURE PER STUDENT-NON-GOVERNMENT SCHOOLS
34 See paragraph 18 in General notes for information about current prices.

```
HOUSEHOLD EXPENDITURE ON EDUCATION FEES
```

35 The average annual expenditure on education fees per household is higher when calculated for only those households with such expenditure, rather than for all households. This is because in 1998-99 only 37\% of households had some expenditure on education fees. The table below outlines the difference between using all households or only households that had expenditure on education fees.

Financial resources continued ALL HOUSEHOLDS AND HOUSEHOLDS WITH EXPENDITURE ON EDUCATION FEES-1998-99
$\left.\begin{array}{rrr} & \begin{array}{r}\text { Households } \\ \text { with } \\ \text { expenditure } \\ \text { on }\end{array} \\ \text { All } \\ \text { education }\end{array}\right\}$

36 Income quintiles are derived for the whole population by ranking all households in the population in ascending order according to each household's income and then dividing them into five groups so that there are an equal number of households in each group. When household income quintiles are derived for only those households that had some expenditure on education fees, the quintile boundaries are higher than those observed for all households. This is because households with expenditure on education fees are not evenly distributed within the population (households with expenditure on education fees are concentrated in the higher income quintiles for all households).
37 The table below outlines the differences in the income quintile boundaries derived for all households in the population, and income quintile boundaries derived for only households that had expenditure on education fees. It shows the distribution of households with expenditure on education fees across both these sets of income quintiles.

|  | Income Quintile 1 | Income Quintile 2 | Income Quintile 3 | Income Quintile 4 | Income Quintile 5 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quintiles based on all households |  |  |  |  |  |  |
| Upper boundary-average annual income (\$) | 15642 | 28677 | 45935 | 71119 | . |  |
| Estimated number of households ('000)(a) | 193.3 | 362.0 | 606.2 | 677.5 | 823.8 | 2662.8 |
| Quintiles based on only those households with expenditure on education fees |  |  |  |  |  |  |
| Upper boundary-average annual income (\$) | 27895 | 42911 | 62255 | 84675 | . |  |
| Estimated number of households ('000)(a) | 532.4 | 532.4 | 531.8 | 531.7 | 534.5 | 2662.8 |

.. not applicable
(a) Households with expenditure on education fees only.

38 Changes in the value of expenditure over time are a function of changes in prices and changes in quantities. For many users it is the change in real expenditure which is of major interest. Therefore, the presentation of time series data which remove the effect of price changes are important. In order to do this, price index series are applied to the data (expressed in nominal or current prices) in order to remove the price impacts.

39 In this Topic, 1993-94 data from the Household Expenditure Survey have been expressed in 1998-99 prices to facilitate comparisons between these two years. The 1993-94 values were multiplied by the increase in the annual average of the All groups Consumer Price Index (CPI) between 1993-94 and 1998-99. Use of the 'All groups CPI' is preferred to the use of a more narrow education price index because the adjustment reflects changes in the general purchasing power of money and better allows comparison of expenditure on

Financial resources continued education with expenditure on other goods and services. More information on the CPI is available in the following publications: Consumer Price Index (cat. no. 6401.0); and A Guide to the Consumer Price Index, 14th Series (cat. no. 6440.0).

40 The table below outlines the differences in the annual average household expenditure on education fees by households with expenditure on education fees between 1993-94 in current prices and 1993-94 in 1998-99 prices. The dollar value of 1993-94 data increased by 10.3\% (the change in the All groups CPI) when the data was calculated in 1998-99 prices.

ANNUAL AVERAGE HOUSEHOLD EXPENDITURE ON EDUCATION FEES BY HOUSEHOLDS WITH EXPENDITURE ON EDUCATION FEES

|  | Income Quintile 1 | Income Quintile 2 | Income Quintile | Income Quintile 4 | Income Quintile 5 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1993-94 (in 1993-94 prices) | 764 | 971 | 1138 | 1112 | 1991 | 1196 |
| 1993-94 (in 1998-99 prices) | 843 | 1072 | 1255 | 1227 | 2196 | 1319 |
| 1998-99 (in 1998-99 prices) | 1077 | 1451 | 1597 | 1838 | 3011 | 1796 |
| Increase between 1993-94 (in 1993-94 prices) and 1998-99 (\%) | 41.0 | 49.3 | 40.4 | 65.3 | 51.3 | 50.2 |
| Increase between 1993-94 (in 1998-99 prices) and 1998-99 (\%) | 27.8 | 35.4 | 27.2 | 49.8 | 37.1 | 36.1 |

SCHOOL TEACHERS
41 The National Schools Statistics Collection (NSSC) defines teachers as those staff who spend the majority of their time in contact with students (i.e. support students either by direct class contact or on an individual basis) and have teaching duties (i.e. are engaged to impart school curriculum). For the purposes of the NSSC this includes principals, deputy principals and senior teachers mainly involved in administration. The NSSC statistics do not include staff engaged in school level education activities conducted by other institutions, in particular Technical and Further Education (TAFE) establishments.

42 Information about the age of school teachers has been drawn from the LFS, based on occupation in main job. See paragraph 3 in General notes for details about the classification of occupation.

43 School principals are not included in data on age of teachers from the LFS, as they cannot be separately identified in this survey. This is because the LFS codes only to the Unit Group level of ASCO, and at this level of the classification school principals are classified to a different occupation Unit Group from other teachers, being included instead with higher education faculty heads.
44 Emergency and casual relief teachers employed on a casual basis are not included in the NSSC, however these persons may identify themselves as a teacher in the LFS. Similarly, preschool teachers are not included in the NSSC but may describe themselves as a teacher in the LFS. For these reasons, the number of teachers identified in the LFS is greater than those identified in the NSSC.

45 Higher education staff are employed on one of three types of work contracts-full-time, fractional full-time, and casual. The first two of these are referred to in this publication as permanent staff (either full-time or part-time), which is different from the terminology used by DEST in their statistical publications. The 'full-time equivalent' (FTE) of staff is used in addition to the number of staff, and is derived from the number of full-time staff and a fraction for part-time staff based on agreed hours worked compared to the hours for similar full-time staff.

46 Higher education staff are classified according to classification type-academic and non-academic—and academic staff are further divided into levels based on their salary classification:

- above senior lecturer (which includes vice-chancellors, deputy vice-chancellors, professors, heads of schools, college fellows, associate professors, and principal lecturers)
- senior lecturer
- lecturer
- below lecturer.

47 Higher education staff are also identified by function, which is the general type of work which a member of staff has formally agreed to undertake in respect of their current duties. A function may be:

- teaching only-the work involves only teaching and associated activities, or the management and leadership of teaching staff and of staff who support teaching staff. There is no formal requirement that research be undertaken.
- research only-the work involves undertaking only research work or providing technical or professional research assistance, or the management and leadership of research staff and of staff who support research staff. There may be limited other work (e.g. participation in the development of postgraduate courses and supervision of postgraduate students).
- teaching and research-a formal requirement is that both a teaching function and a research function will be undertaken, or the work requires the management and leadership of teaching staff and research staff and persons who support such staff.
- other-functions other than a teaching only, research only or teaching and research function (as described above). People with such functions may be located within academic organisational units as well as other types of organisational units.


## EARNINGS OF EDUCATORS

48 Educators have been identified in the Survey of Employee Earnings and Hours as those whose occupation is classified to the sub-major group 'Education professionals' in the second edition of ASCO and the minor groups 'School teachers' and 'Other teachers and instructors' in the first edition of ASCO. 'Education managers' have been excluded. See paragraph 3 in General notes for details about the classification of occupation.
49 The group of employees for which average weekly ordinary time earnings are presented has been restricted to:

- full-time employees-those employees who normally work the agreed or award hours for a full-time employee in their occupation and who received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more per week. Casual employees whose hours vary each week are classified as full-time if the hours worked in the reference week are 35 hours or more.
- adult employees-those employees who are 21 years of age or over and employees under 21 who are paid at the full adult rate for their occupation.
- non-managerial employees-those employees who are not managerial employees. Managerial employees are defined as those employees who are in charge of a significant number of employees or have significant responsibilities in the conduct or operations of the organisation and usually do not receive payment for overtime. Includes professionally qualified staff who primarily perform managerial tasks in conjunction with utilising their professional skills. Working proprietors and working directors of own incorporated businesses have been included as managerial employees.

PRESCHOOL STUDENTS
50 Preschool is usually, but not always one year prior to the first year of primary school, and is generally sessional in nature. The first year of primary school is known as pre-Year 1 and precedes Year 1. Terminology and entry ages for both preschool and pre-Year 1 vary between Australian states and territories. The table below summaries the differences in terminology used across Australia and identifies the entry ages for preschool in each state and territory.

PRESCHOOL TERMINOLOGY, Differences between states and territories

|  | Pre-Year 1 <br> (first year of |  |  |
| :--- | ---: | ---: | ---: |
| State/territory | Preschool | School) | Entry age of preschool (years) |
| New South Wales | Preschool | Kindergarten | 4 by 31 July |
| Victoria | Preschool | Preparatory | 4 by 30 April |
| Queensland | Kindergarten | Preschool | 4 by 31 December |
| South Australia | Kindergarten | Reception | Continuous entry after 4 th birthday |
| Western Australia | Kindergarten | Pre-primary | (a) 4 by 30 June |
| Tasmania | Kindergarten | Preparatory | 4 by 1 January |
| Northern Territory | Preschool | Transition | Continuous entry after 4th birthday |
| Australian Capital Territory | Preschool | Kindergarten | 4 by 30 April |

(a) Prior to 2001 entry age was 4 by 31 December.

Source: Press F. \& Hayes A., OECD Thematic Review of Early Childhood Education and Care Policy: Australian Background Report.

## APPARENT RETENTION RATES

51 To calculate the Year $7 / 8$ to Year 12 apparent retention rate at the Australia level for 2001, the total number of full-time students in Year 12 in 2001 is divided by the number of the full-time students in the base year, which is Year 7 in New South Wales, Victoria, Tasmania and the Australian Capital territory in 1996 and Year 8 in Queensland, South Australia, Western Australia and the Northern Territory in 1997 (since those years represent the commencement of the secondary school system in the respective state or territory). The resultant figure is converted to a percentage. For Year 10 to Year 12 apparent retention rates, the base year becomes Year 10 and the retention year remains at Year 12. For the Indigenous/non-Indigenous table, the base year is Year $7 / 8$ but the retention years are Years 9, 10, 11 and 12.

52 Care should be exercised in the interpretation of apparent retention rates since a range of factors affecting calculation have not been taken into account. At the Australia level these include students repeating a year of education, migration and other net changes to the school population. Also, part-time students are currently excluded from apparent retention rates and the effect of this exclusion varies between states and territories.

53 Overseas student data have been supplied by Australian Education International (AEI) from the Overseas Student Statistics Collection. For Commonwealth higher education institutions, data are collected from the institutions (by DEST through the Higher Education Student Collection). For other providers of higher education and for vocational education, school education and English Language Intensive Courses for Overseas Students (ELICOS), data are derived from the Commonwealth Register of Institutions and Courses for Overseas Students and matched with student visa data supplied by the Department of Immigration, Multicultural and Indigenous Affairs. Students are allocated to educational sectors based on the courses they study.

54 The link between the decline in overseas students participating in ELICOS, vocational education and school education in 1997 and the Asian financial crisis is drawn in the AEI publication, Overseas Student Statistics, 2000 (page 9) and research published in: Dobson, I. R., Hawthorne, L. and Birrell, B. 1998, 'The impact of the 'Hanson' effect and the Asian currency crisis on education exports', People and Place, vol 6, no 1, pp. 44-45. The research states that '... the Asian financial crisis is having a discernible impact on the numbers of visas issued to... students wishing to study in Australia. Visa numbers have declined,... ELICOS visas have dropped more than other categories.'

55 Overseas students participating in school education represent a small proportion of all overseas students in the Overseas Student Statistics Collection. Numbers in this sector may be under represented because only overseas students who hold student visas themselves are counted. Those school students who are in Australia as dependants are not counted in the AEI collection.

PARTICIPATION IN TRAINING
56 In the Survey of Education, Training and Information Technology (SETIT) employed persons were defined as those who reported that they worked in, or were away from, a job, business or farm during the reference week (the full week prior to the date of the interview). This included those who usually worked less than an hour, or no hours, in their job. The definition used in Labour Force, Australia (cat. no. 6203.0) excludes this small group. Also excluded from the LFS definition of 'employed' are contributing family workers who were absent from work in the reference week. This survey classified this small group as employed.

57 In SETIT, unemployed persons were defined as those who were not employed during the reference week, had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week, and were available for work in the reference week. Unlike this survey, the definition used in Labour Force, Australia (cat. no. 6203.0) also includes future starters who had actively looked for work in the four weeks to the end of the reference week but reported that they could not have started work in the reference week (as they were waiting to start a job). Future starters are those persons who were not employed during the reference week who were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

58 Occupation and industry details for participation in training are given for a person's main employer over the 12 months prior to the survey. Percentages have been given for this occupation and industry rather than for the occupation and industry of the respondent at the time of the survey because it is more likely that the respondent would have completed most of their training with the main period employer.

59 In SETIT, respondents were asked how many training courses they had completed in Australia in the 12 months prior to the survey. Detailed questions were then asked about a maximum of four completed courses, starting with the most recent, this means that information related to field of training courses underestimates the number of training courses undertaken by people who attended more than four training courses. The 16 fields of training used in the survey are:

## Management and professional

Technical and para-professional
Trade
Craft
Clerical and office
Sales and personal service
Transport, plant and machinery operation
Labouring and related
Induction
Supervision
Computing skills
Health and safety
English language
Literacy
Numeracy
Music and arts
level of education
60 See paragraphs 4-11 in General notes for details on the introduction of ASCED in 2001.

61 See paragraphs 15-16 in General notes about changes to the Survey of Education and Work resulting in breaks in series.

MAIN FIELD OF NON-SCHOOL QUALIFICATIONS
62 See paragraphs 4 and 12-13 in General notes for details on the introduction of ASCED in 2001 and details about field of education.

READING AND NUMERACY NATIONAL BENCHMARKS—PRIMARY SCHOOL STUDENTS

63 In 1999, data for the reading and numeracy national benchmarks in Australia excluded students in Queensland who were formally exempted from the testing, including: students for whom English was not their first language and who were assessed by their English as a second language teacher and/or classroom teacher; and those with intellectual impairment who have been identified as having specific educational needs. For more information on these exemptions, including other states and territories, see the MCEETYA's National Report on Schooling in Australia, 1999, Preliminary Paper: 1999 Year 3 Reading National Benchmark Results or
[http://www.curriculum.edu.au/mceetya](http://www.curriculum.edu.au/mceetya).
LIteracy of 15 Year olds
64 The Programme for International Student Assessment (PISA) is an initiative of the Organisation for Economic Co-operation and Development which assesses 15 year old school students' achievement in literacy. As well as the literacy assessment, all students who participated in PISA completed a questionnaire which contained a number of questions about their background, including questions about their parents' occupations. This information was coded and

Outputs and Outcomes continued
recorded as a variable and used as an indicator of socioeconomic status (SES). The coding of occupations was done in accordance with the International Standard Classification of Occupations. Socioeconomic status was based on the higher of either the father's or mother's occupations. Values ranged from 0 to 90 where low values indicate low SES and high values indicate high SES.

65 Reading literacy measured three reading processes, they were:

- retrieving information: the ability to locate information in texts
- interpreting texts: the ability to construct meaning and draw inferences from what has been read
- reflecting on and evaluating texts: the ability to relate what has been read to one's own knowledge, ideas and experiences.

66 For the reading literacy domain in PISA 2000, five levels of reading proficiency were defined and described for the combined reading scale as well as the three reading sub-scales. Cut-off scores for the five levels were set internationally, with Level 5 being the highest level. A combination of expert judgement of the skills required to answer each reading task, and statistical analysis of student data were used to determine the cut-off scores. Cut-offs and brief descriptions of abilities at the proficiency levels are as follows:

- Level 5-Score of more than 625: Students were able to deal with difficult texts and complete sophisticated reading tasks. They were able to evaluate texts critically, draw on specialised knowledge to build hypotheses, and cope with concepts that may be contrary to expectations
- Level 4—Score of 553 to 625: Students were able to cope with difficult tasks, such as locating embedded information, construing meaning of part of a text through considering the text as a whole, and dealing with ambiguities and negatively worded ideas
- Level 3-Score of 481 to 552: This level of proficiency includes the international average of 500 . Students could deal with moderately complex reading tasks, such as finding several pieces of relevant information and sorting out detailed competing information. They were able to make links between different parts of a text and understood text in relation to everyday knowledge
- Level 2-Score of 408 to 480: Students could cope with basic reading tasks, such as locating straightforward information, making low-level inferences, using some outside knowledge to help understand a well-defined part of a text, and applying their own experience and attitudes to help explain a feature of a text
- Level 1—Score of 335 to 407: Students were able to deal with only the least complex reading tasks, such as finding explicitly stated pieces of information and recognising the main theme in a text on a familiar topic
- Proficiency not yet at Level 1—Score of less than 335: Students with a score below 335 should not be assumed to have no literacy skills, but scores in this region do point to serious deficiencies in capacity for lifelong learning and functioning in other areas of society in their life beyond school.

ASPECTS OF POPULATION LITERACY
67 The Survey of Aspects of Literacy did not define literacy in terms of a basic threshold, above which someone is 'literate' and below which someone is 'illiterate'. Rather it defined literacy as a continuum for each of the three types of literacy (referred to as prose, document and quantitative) denoting how well people used material printed in English. Progression along this continuum was characterised by increased ability to 'process' information (for example to locate,

Outputs and Outcomes continued
match and generate information) and to draw correct inferences based on the information being used.

68 For analytical purposes, the scores on the literacy continuum for each of the three types of literacy were divided into five levels. However, it should be noted that because the tasks used to derive literacy ability vary in difficulty, there is a range of abilities even among people within each level.

- Level 1—People at this level have very poor skills, and could be expected to experience considerable difficulties in using many of the printed materials that may be encountered in daily life.
- Level 2—People at this level could be expected to experience some difficulties in using many of the printed materials encountered in daily life.
- Level 3-This level represents the ability to cope with a varied range of material found in daily life and at work.
- Level 4—People at this level have good literacy skills, and display the ability to use higher order skills associated with matching and integration of information.
- Level 5-People at this level have very good literacy skills, and can make high-level inferences, use complex displays of information, process conditional information and perform multiple operations sequentially.

DESTINATIONS OF RECENT TAFE GRADUATES
69 There is a break in the National Centre for Vocational Education Research (NCVER) graduate series between 1999 and 2000, as the definition of a TAFE graduate changed slightly for the 2000 survey. Prior to that year, graduates who had completed a qualification from a course of at least 200 hours or one semester in duration were included. The 2000 and 2001 surveys included all graduates who completed a qualification, irrespective of the number of hours of their course.
70 Field of study is a classification used to describe a course based on the intended major vocational outcome and content. Vocational education and training courses are classified according to a hierarchical structure prescribed in the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS), Section 5, release 3.0 September 1998.
AVETMISS offers a nationally consistent standard for the collection and analysis of vocational education and training information in Australia.

EARNINGS OF RECENT TAFE GRADUATES
71 When comparing recent graduate earnings with full-time adult average weekly ordinary time earnings, not only may the demographics of the populations differ, but the composition of the populations may have changed in different ways over time. A degree of caution is therefore appropriate when considering changes in the ratios over time.

EARNINGS OF RECENT UNIVERSITY GRADUATES
72 See paragraph 71 about compositional changes in average weekly earnings.
LABOUR MARKET INDICATORS BY LEVEL OF EDUCATION
73 See paragraphs 4-11 in General notes for details on the introduction of the Australian Standard Classification of Education (ASCED) in 2001.

74 See paragraphs 15-16 in General notes about changes to the Survey of Education and Work resulting in breaks in series.

EARNINGS AND HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT
75 See paragraphs 8-10 in General notes for details on about how highest level of educational attainment is derived.

Related international statistics

76 One of the main differences between Australian and international statistics is that the latter are classified according to the International Standard Classification of Education (ISCED). ISCED does not exactly match the structure of any one country's education system, and the mapping of the Australian system to it is not intuitive in all cases.

77 ISCED is comprised of the following levels: pre-primary (0), primary (1), lower secondary (2), upper secondary (3), post-secondary non-tertiary (4), tertiary (5) and advanced research (6) programmes, and secondary and tertiary levels are sub-classified by orientation (e.g. academic (A), vocational leading to further courses (B), and vocational leading directly to the workforce (C)). Australian school programmes are classified across ISCEDs 1, 2A, and 3A. Australian vocational education and training (VET) courses are classified across ISCEDs 2, 3, 4, and 5 with either B or C orientations, while Australian university courses are generally classified as 5A or 6 .
78 International comparisons should be used bearing in mind that there are a range of factors that can affect comparability across countries. These include complex issues of classification and definition, especially classification of national educational programmes to ISCED, differences in national statistical standards across countries, and differing capacities to exactly adhere to international definitions. Generally it is unwise to place a lot of significance on minor differences between countries.

## APPENDIX

MEASURING LEARNING IN AUSTRALIA: A FRAMEWORK FOR EDUCATION AND TRAINING STATISTICS

## INTRODUCTION

BACKGROUND

WHAT IS THE FRAMEWORK?

WHAT IS LEARNING?

Measuring Learning in Australia: A framework for education and training statistics has been developed by the National Centre for Education and Training Statistics within the Australian Bureau of Statistics (ABS). The framework is a joint initiative of the Department of Education, Science and Training, the Australian National Training Authority, all state and territory education and training departments, and the ABS. The framework is the result of extensive consultation with stakeholders throughout Australia and their assistance is gratefully acknowledged. This appendix outlines the main components of the framework.

The provision of learning has undergone significant change in recent years. From a statistical perspective, the complexity of the area and the pace of change present considerable measurement challenges. Increasingly, those involved in the analysis and development of policy and delivery mechanisms are seeking high quality information which supports cross-sectoral, and cross-jurisdictional, analysis and performance measurement. The public also has a right to information which measures the 'health' of the national education and training system, and offers a window on the work and performance of the various jurisdictions and providers.

The framework is a suggested way of thinking about statistics on learning. It is a broad level conceptual 'map', which defines the boundaries and content of these statistics.

Traditionally, statistics on education and training have been organised largely according to sector. However, there is a growing need to provide different perspectives on learning activities-such as on individual learning pathways, on a geographic basis, or over time. The framework can help us to move towards:

- a more comprehensive and integrated statistical view of learning
- increased comparability and consistency of statistics
- better relationships between learning-related statistics and other social and economic data and their frameworks.

This framework does not itself prescribe priorities for data collection. In fact, the scope of the framework is deliberately broad, allowing data users and policy makers to consider the relative importance of various types of information.

Learning occurs within a wide range of settings, some more formal than others. At one end of the continuum, formal learning is provided in the traditional manner by teaching institutions, or occurs through other courses, seminars or workshops. At the other end of the continuum, non-formal learning includes activities such as managers coaching or mentoring staff, parents instructing children, or members of the community teaching each other living skills

Learning is a lifetime process. Typically, a range of learning activities, which develop particular qualifications, skills or competencies, is available to individuals over the course of their lives. Individuals in each age group may undertake these activities sequentially, or concurrently. These activities can take place in a range of settings, from formal educational institutions to the individual's home.


DEFINING LEARNING IN THE FRAMEWORK

In the framework, 'learning' refers to both formal and non-formal learning. It is intentional and sustained, and mostly involves a transfer of knowledge or skills from one person to another. It can involve a wide variety of channels and media. It may be verbal or written. It may be delivered face-to-face or by other means.
Typically, formal learning is:

- delivered (taught either directly or indirectly-such as on-line)
- structured (it has a designated course content, such as a school curriculum or competency-based training package)
- evaluated (it is assessed, accredited or monitored).

On the other hand, non-formal learning is not evaluated, may be structured or unstructured, and does not necessarily involve a student/teacher relationship.
Incidental learning, which occurs unintentionally or coincidentally during a person's development or daily experience, is outside the scope of the framework, as are activities which are considered to be informative rather than educational in nature.

Non-institution-based Structured workplace training Other instructional courses

higher education

```
Institution-based
Institution-based
    Pre-school
    Pre-school
    School
    School
    Vocational education
    Vocational education
    and training
    and training
    Higher education
    Higher education


```

APPENDIX • MEASURING LEARNING IN AUSTRALIA: A FRAMEWORK FOR EDUCATION AND TRAINING STATISTICS

```

ELEMENTS OF THE

\section*{FRAMEWORK}

The framework is based on a model which describes the seven key elements about which information is required:
- Context: representing the wider environment within which decisions are made about learning activities by individuals or other population entities
- Participants: those who are undertaking learning activities
- Non-participants: those who are not undertaking learning activities
- Providers: organisations, and in some cases individuals, which deliver learning activities
- Resources: the financial, human and physical resources which may be necessary for learning to occur or to produce outputs
- Activities: learning activities, activities of educational institutions, as well as the activities of non-participants
- Outputs and outcomes: the results and/or effects of learning activities.

Each of the elements in the framework is represented within the following model, which can be used to describe the flows and relationships surrounding learning activities.


A MULTI-LEVEL STRUCTURE

COMBINING ELEMENTS AND LEVELS

In order to provide a comprehensive statistical picture, a three level information structure may be overlaid on the framework model:
- Individual: this level is concerned with information about people, because individual learning pathways are a key aspect of the framework
- Organisational: this level is concerned with information about organisations, including educational institutions and employers
- Systemic: this level represents the broadest perspective of the framework, and is concerned with government infrastructure and strategic measures which have national significance.

Much policy-related analysis necessitates the use of information from each or all of the above three levels.

Combining the elements with the levels in the model provides a useful way of thinking about the main types of statistical information which may be required.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline & \multirow{2}{*}{Context} & \multirow{2}{*}{Participants} & \multirow[t]{2}{*}{Nonparticipants} & \multirow{2}{*}{Providers} & \multicolumn{3}{|c|}{Resources} & \multirow{2}{*}{Activities} & \multirow[t]{2}{*}{Outputs \& Outcomes} \\
\hline & & & & & Financial & Human & Physical & & \\
\hline  & Factors which may influence an individual's participation in learning activities & Number and characteristics of students and learners & \begin{tabular}{l}
Number and characteristics of nonparticipants \\
Barriers to participation
\end{tabular} & Number and characteristics of selfemployed teachers and trainers & \begin{tabular}{l}
Expenditure relating to learning activities \\
Income and financial support
\end{tabular} & Number and characteristics of all teachers and trainers & Measures of individuals' use of and access to learning facilities and equipment & \begin{tabular}{l}
Character- \\
istics of \\
learning \\
activities \\
undertaken \\
by individuals
\end{tabular} & Measures of the results and effects of learning activities (or lack of them) related to individuals \\
\hline  & Factors which may influence an organisation's provision of education and training services & Number and characteristics of organisations consuming external education and training services & Number and characteristics of organisations not consuming external education and training services & Number and characteristics of organisations providing or not providing education and training services & Measures of sources and uses of funds & Measures relating to teachers and trainers in organisations & Measures relating to the stock of learning facilities and equipment & Characteristics of learning activities provided and or consumed by organisations & Measures of the results and effects of learning activities (or lack of them) on organisations \\
\hline \[
\begin{aligned}
& \frac{\hookrightarrow}{\varepsilon} \\
& \frac{1}{\infty} \\
& \underset{\sim}{\infty}
\end{aligned}
\] & Strategic measures relating to factors which may influence education and training & Strategic measures relating to participation & Strategic measures relating to nonparticipation & Strategic measures relating to the provision or non-provision of education and training & \begin{tabular}{l}
Strategic \\
measures \\
relating to \\
financial \\
resources \\
in \\
education \\
and \\
training
\end{tabular} & Strategic measures relating to human resources in education and training & \begin{tabular}{l}
Strategic \\
measures relating to physical resources in education and training
\end{tabular} & Strategic measures relating to learning activities & Strategic measures relating to results and effects (or lack of them) of learning activities \\
\hline
\end{tabular}

The framework can be used to shape the way we think about information on learning, and there are a number of ways in which it might be useful to guide agencies in their statistical work. For example, it has application in:
- identification of data gaps or duplications in a jurisdiction's administrative or survey collections
- providing the backdrop for taskforce or committee deliberations when developing key performance measures and equity group disaggregations, or when considering resourcing issues
- organising data relating to agencies' own jurisdictions, such as in their data warehouses, and/or in public reporting.

The more diverse and widespread the application of the framework, the more there will be useful feedback, which in turn will be valuable in refining the framework in the future.

\section*{GLOSSARY}

Academic Organisational Unit

Accrual accounting method

Apparent retention rate

Apprentices and trainees
Australian Standard
Classification of Education

\section*{Australian Standard Classification of Occupations}

AUSTUDY Government income benefit for those who are over 25 years of age and studying an approved full-time course at an approved educational institution. These students must meet residence requirements, and income and assets tests. Prior to July 1998, students aged between 16 years and 24 years were eligible for AUSTUDY. Since this time, these students now must meet the requirements for Youth Allowance.

The value obtained by dividing the estimated weekly expenditure of a group of households by the estimated number of households in the group then multiplying this figure by 52.14 to get an annual value.

Usual weekly earnings as collected in the Survey of Education, Training and Information Technology, is the amount of weekly pay usually earned while working as a wage or salary earner, before taxation or other deductions are made. Annual, monthly or fortnightly amounts were converted to their weekly equivalent. If the person had more than one wage or salary earner job, then the one in which the person usually worked the most hours was used to calculate usual weekly earnings. Average usual weekly earnings was calculated by dividing the total usual weekly earnings for a particular population by the number of people in that population.

\section*{Average weekly ordinary time earnings}

Estimates of average weekly earnings are derived by dividing estimates of weekly earnings by estimates of number of employees. They do not relate to average award rates nor to the earnings of the 'average person'.

Weekly ordinary time earnings as collected in the Survey of Average Weekly Earnings and Survey of Employee Earnings and Hours, refers to one week's earnings of employees for the reference period attributable to award, standard or agreed hours of work. It is calculated before taxation and any other deductions (e.g. superannuation, board and lodging) have been made. Included in ordinary time earnings are award, workplace and enterprise bargaining payments, and other agreed base rates of pay, over award and overagreed payments, penalty payments, shift and other allowances; commissions and retainers; bonuses and similar payments related to the reference period; payments under incentive or piecework; payments under profit sharing schemes normally paid each pay period; payment for leave taken during the reference period; all workers' compensation payments made through the payroll; and salary payments made to directors. Excluded are overtime payments, retrospective pay, pay in advance, leave loadings, severance, termination and redundancy payments, and other payments not related to the reference period.

Award course A program of study formally approved/accredited by an institution or any other relevant accreditation authority and which leads to an academic award granted by the institution or which qualifies a student to enter a course.

Capital expenditure
Cash accounting method

Certificate not further defined

Chain volume measure
For certain types of economic analysis it is useful to examine estimates of the principal flows of goods and services in the economy revalued in such a way as to remove the direct effects of changes in their prices over the period under review. Such estimates are conventionally described as 'real'. This publication shows chain volume measures for GDP. These are obtained by first weighting together elemental volume indexes from the previous financial year to the current financial year, where the weights are calculated using the current price value shares of the previous financial year. Second, the resulting aggregate year-to-year volume indexes are linked (compounded) together to form a time series. Third, the time series is referenced to the current price estimates of the reference year.

Civilian population aged 15 years and over

All usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

Combined schools Schools which deliver, and have enrolments in, both primary and secondary school education. Note that the structure of primary and secondary education varies among the states and territories.

Completion A completing student is one who has completed all academic requirements for the conferring of an award from an institution.


Employed continued

\section*{Employment to population} ratio

English language intensive courses for overseas students

Equivalent full-time student unit (Higher education)

\section*{Estimated resident population}

Field of education

Field of study (VET)
full-time employed

Full-time equivalent (FTE) school student

Full-time equivalent (FTE) school teaching staff

Full-time school student
This is a measure of the total level of teaching resources. The FTE of a full-time teaching staff member (i.e. employed full-time and engaged solely on activities which fall within the scope of the National Schools Statistics Collection (NSSC)) is equal to 1.0 .

The calculation of FTE for part-time teaching staff is as follows:
- the FTE of part-time teaching staff performing some activities which fall outside the scope of the NSSC (e.g. preschool or TAFE) is calculated on the basis of the proportion of time spent on activities in-scope of the NSSC compared with that spent by a full-time teaching staff member solely occupied by in-scope activities and
- the FTE of part-time teaching staff performing activities which fall solely within the scope of the NSSC is calculated on the basis of time worked compared with that worked by full-time teaching staff performing similar duties.

A full-time student is one who undertakes a workload equivalent to, or greater than, that prescribed for a full-time student of that year level. This may vary between states and territories and from year to year.

General government final consumption expenditure

Gross Domestic Product

Gross fixed capital formation
(private)

Higher Education Contribution Scheme

Higher education course Higher education institution

Higher education staff
Higher education students

Higher education student/teaching staff ratios

Highest level of educational attainment

Payments by the government sector for the consumption of goods and services, including education. Includes wages, salaries and supplements, and other purchases of goods and services, paid for by governments.

Total market value of goods and services produced in Australia within a given time period, after deducting the cost of goods used up in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation).

Net expenditure on fixed assets, for example new private school buildings, by the private sector. Private gross fixed capital formation in the field of education is estimated from statistics of the value of work done on new building and major additions to buildings of private educational institutions.

HECS, introduced in 1987, requires students to pay a contribution towards the cost of their Higher education. The payments may be made direct to the institution attended (at a \(25 \%\) discount) at the time the education course is undertaken, or students may enter a loan agreement with the Commonwealth Government to discharge their obligation to pay the contribution, the loan to be repaid at a later date through the taxation system. The proceeds of the loan are not paid to the students, but are paid to the institution on the student's behalf from the Higher Education Trust Fund.

Higher education courses include Bachelor and Associate degrees and above (offered by universities, other higher education providers and other education providers) and any other courses provided by a higher education provider.

All Australian institutions providing higher education courses, e.g. universities, colleges of advanced education, institutes of advanced education, institutes of higher education, institutes of tertiary education, agricultural colleges and some institutes of technology.

See Explanatory Notes, paragraphs 45-47.
Students who met these criteria:
- after 31 March in the year previous to the collection and before 31 March in the year of the collection, the student had been admitted to a higher education institution and was enrolled in a higher education award course, enabling course or non-award course, and
- for such a course enrolled in, the student had student load in at least one unit of study to be undertaken in a semester in which the census date for the year of the collection occurs, and
- at that time, the student was entitled to be enrolled in the course and had not formally indicated that they had withdrawn from, deferred or discontinued the course.

The number of students, measured by the equivalent full-time student unit for all students attending a higher education institution in Australia (excluding the FTE study load of work experience students), divided by the FTE of teaching staff (staff whose function was teaching only or teaching and research) in an Academic Organisational Unit, which includes full-time, fractional full-time, and casual staff.

Highest level of educational attainment identifies the highest achievement a person has attained in any area of study. It is not a measurement of the relative importance of different types of study but a ranking of qualifications and other educational attainments regardless of the particular area of study or the type of institution in which the study was undertaken.

Household A group of related or unrelated people who usually live in the same dwelling and make common provision for food and other essentials for living; or a lone person who makes provision for his or her own food and other essentials of living without combining with any other person.

\section*{Household expenditure}

\section*{Household final consumption expenditure}

Labour force participation rate

Labour force status

Level of education

Level not determined

Income Regular and recurring receipts from all sources, prior to deductions for income tax etc. Excludes lump-sum receipts, windfall gains and withdrawals from savings. Income from Own business and Other regular income can be negative. Most information about income is obtained on a current basis, thought some relates to the previous financial year.
\begin{tabular}{|c|c|}
\hline Income quintiles & Groupings that result from ranking all households in the population in ascending order according to each household's income and then dividing the population into five equal groups. \\
\hline Indigenous & Refers to people who identify as being of Aboriginal and/or Torres Strait Islander origin. \\
\hline Inter-governmental grants & Grants from the Commonwealth to state and territory governments and universities. \\
\hline Investing expenditure & Investing expenditure represent purchases of land and buildings, plant and equipment, infrastructure systems and investments in the financial year. Investing activities means those activities which relate to the acquisition and/or disposal of non-current assets, including property, plant and equipment and other productive assets and investments, such as securities, not falling within the definition of cash. General examples of cash flows arising from investing activities \\
\hline
\end{tabular} are:
- payments to acquire property, plant and equipment and proceeds from the sale of such assets, and
- payments to acquire ownership interests of other entities, and proceeds from the sale of such interests.

Labour force For any group, persons who were employed or unemployed, as defined.
The cost of goods and services acquired during the reference period for private use, whether or not those goods were paid for or consumed. Expenditure is net of refunds. For example, payments for health services are net of any refunds received or expected to be received. Expenditure is classified according to the 609 detailed items of the Household Expenditure Classification (for information on the classification see Household Expenditure Survey: Detailed Expenditure Items, 1998-99 (cat. no. 6535.0)).

Payments by the household sector on the consumption of goods and services, including education. These include expenditure on salaries paid to non-government school teachers. HECS payments (both up front and deferred) by students are also part of household final consumption expenditure. Groupings that result from ranking all households in the population in ascending order according to each household's income and then dividing the population into five equal groups.

Refers to people who identify as being of Aboriginal and/or Torres Strait Islander origin.

Grants from the Commonwealth to state and territory governments and universities.

Investing expenditure represent purchases of land and buildings, plant and equipment, infrastructure systems and investments in the financial year. Investing activities means those activities which relate to the acquisition and/or disposal of non-current assets, including property, plant and equipment and other productive assets and investments, such as securities, not falling within the definition of cash. General examples of cash flows arising from investing activities are:

For any group, the labour force expressed as a percentage of the civilian population in the same group.

A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.

Level of education is a function of the quality and quantity of learning involved in an educational activity. It is categorised according to the Australian Standard Classification of Education (ASCED) (cat. no. 1272.0) Level of Education classification.

Includes inadequately described responses or where no responses were given.

Long day care centre

Marginally attached to the

Mathematical literacy

Median age

Met demand

Multifield education (VET)

Non-award course

Non-school educational institution

\section*{Non-school qualifications}

Not in the labour force
Occupation

\section*{Onshore student}

On-the-job training

Regulated, centre-based care which is available to children between birth and school age for the full day. Centres are usually open for most of the year.

People who were not in the labour force in the reference week, wanted to work and:
- were actively looking for work but did not meet the availability criteria to be classified as unemployed, or
- were not actively looking for work but were available to start work within four weeks or could start work within four weeks if childcare was available.

The capacity to identify, understand and engage in mathematics, and to make well-founded judgements about the role that mathematics plays in an individual's current and future private life, occupational life, social life with peers and relatives, and life as a constructive, concerned and reflective citizen.

The age which divides the population into two groups with equal numbers of persons, one half aged below the median and the other half aged above the median.

Persons who applied to attend a non-school educational institution and were able to gain a place. Met demand includes those who were studying or had deferred their study at the time of interview for the Survey of Education and Work and who, in the previous year, were either not studying or were studying at a different type of institution to their current institution.

Multifield education includes courses for English as a second language, functional literacy and numeracy, pre-vocational/pre-employment courses, and general skills development

A program of study which does not lead to an award and which comprises a unit or units of study which:
- is a unit or units of study from an award course or courses at the institution, and
- is able to be counted as a credit towards some award course at the institution by all students who complete the unit or units of study.

Any institution the primary role of which is education other than schools. Included are higher education establishments, colleges of technical and further education, Excluded are schools and institutions where the primary role is not education, for example, hospitals.

Non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education. They include qualifications at the Postgraduate Degree Level, Master Degree Level, Graduate Diploma and Graduate Certificate Level, Bachelor Degree Level, Advanced Diploma and Diploma Level, and Certificates I, II, III and IV levels. Non-school qualifications may be obtained concurrently with school qualifications.

Persons who were not in the categories employed or unemployed, as defined.
An occupation is a set of jobs with similar sets of tasks. A job is a set of tasks designed to be performed by one individual in return for a wage or salary.

A student undertaking a programme of study conducted in Australia by an Australian university.

Work-related training where at least one of the following activities were undertaken to improve a person's job skills, while working on any job, in the 12 months prior to interview for the Survey of Education, Training and Information Technology: asking questions of co-workers or colleagues; teaching self; being shown how to do the job; or watching others work.

\section*{Operating expenses (public} sector education)

\section*{Other educational institution}

\section*{Overseas students}

Operating expenses (public sector education) include all government expenses on educational services and facilities, but also include some payments which are intended to facilitate education, but which are not spent on educational services and facilities. These types of payments, termed current monetary transfers to households, include living allowances paid to students which are used to finance expenditure on food, clothing, transport, rent, and so on.

Includes institutions or establishments that offer educational courses, such as industry skills centres, professional or industry associations, equipment/product manufacturer or supplier, and instances where insufficient information was available to determine the type of educational institution.

Where higher education is provided by Commonwealth providers, overseas students are defined as participants who were enrolled in a higher education course, who do not have Permanent Resident status and who were neither Australian nor New Zealand citizens. A student is considered to be enrolled in a higher education course if the student is enrolled in a unit of study for a standard semester within the reference year, or enrolled in a unit of study in a non-standard semester which started after 31 August of the year prior to the reference year or before 31 August of the reference year.

For other providers of higher education and providers of vocational education, school education and English Language Intensive Courses for Overseas Students (ELICOS), overseas students are defined as foreign students in Australia with student visas who attend courses on a full fee paying basis (although they may not be paying these fees themselves). They may attend these courses at any time during the reference year. (New Zealand citizens do not require a visa and are therefore not included. Also excluded are students on exchange programs who do not pay fees nor are subsidised.)

Part-time employed Employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

Preschool A type of formal education generally available in school hours during school terms for children from three years of age (younger children are sometimes accepted) up to the school starting age. Children usually have fixed attendance times. Also known as kindergarten in some states and territories.

Primary education Primary education typically commences at around age five and lasts for seven to eight years. It does not include sessional education such as preschool education. In New South Wales, Victoria, Tasmania and the Australian Capital Territory, primary education may extend from Pre-year 1 to Year 6 (or equivalent). In South Australia and the Northern Territory it may extend from Pre-year 1 to Year 7 (or equivalent). In Queensland and Western Australia it may extend from Year 1 to Year 7 (or equivalent).

Prose literacy The knowledge and skills needed to understand and use information from various kinds of textual material including newspapers, brochures and fiction.

Qualification Formal certification, issued by a relevant approved body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional, industry or community needs.

Reading literacy The ability to understand, use and reflect on written texts in order to achieve one's goals, to develop one's knowledge and potential, and to participate effectively in society.

\section*{Recent school leavers}

\section*{Recognised study/qualification}

Recurrent expenditure

School affiliation

School education

School student

\section*{School student/teacher ratio}

School teacher

Scientific literacy

\section*{Secondary education}

Special school

Subject (VET)
Technical and Further Education (TAFE)

Tertiary education
Special school

Persons aged 15-24 years who attended school at some time in the year prior to interview for the Survey of Education and Work and left school before May in the year of the survey.

Study leading to a qualification.
Includes employee related expenses (including salaries, payments in the nature of salary, and redundancy payments), operating expenses, and employee related expenses (including other operating expenses, grants and subsidies and depreciation). Excludes capital/investing expenditure.

Affiliation refers to the link between the individual schools and the systems that administer their operation. In Australia state government education systems are the largest affiliated group followed by the catholic school system. Other schools have loose associations with secular bodies or are entirely independent. The ABS generally reports on only the three major groupings of Government, Catholic and Independent.

School courses include pre-Year 1, primary school, junior secondary school and secondary school studies, and any other courses undertaken with a school education provider.

A person who is formally enrolled in a school and active in a course of study other than preschool or TAFE courses. handicapped students, or those with social problems. Students must exhibit one or more of the following characteristics before enrolment is allowed: mental or physical handicap, slow learning ability, social or emotional problems, or be in custody, on remand or in hospital.

A unit of training which a student may enrol in and be formally assessed for.
A Technical and Further Education institution. In Victoria this may also be interpreted as Training and Further Education.

Formal education beyond secondary education, including higher education, vocational education and training, or other specialist post-secondary education or training. Also called post-secondary education or further education.

Total demand
People who applied to attend a non-school educational institution. Total demand comprises the sum of met demand and unmet demand. See definitions of both met and unmet demand.

Total fertility rate The sum of age-specific fertility rates (live births at each age of mother per female population of that age). It represents the number of children a woman would bear during her lifetime if she experienced current age-specific fertility rates at each age of her reproductive life.

Training courses Activities which were undertaken in Australia to obtain, maintain or improve employment related skills or competencies. Training courses had to: be work-related; have a structured format, with an orderly or methodical means of presenting of providing the training during the period of time; and be completed during the 12 months prior to the interview.

Trend series A smoothed seasonally adjusted time series of estimates (see Explanatory Notes, paragraph 24).

Unemployed Persons aged 15 years and over who were not employed during the reference week, and:
- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week; and
- were available for work in the reference week, or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

In the 'Participating in training' Topic, the definition of 'Unemployed' is slightly different from the above definition (see Explanatory Notes, paragraph 57), and refers to all persons aged 15 to 64 who:
- were not employed during the reference week, and
- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week, and
- were available for work in the reference week.

Unemployment rate For any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

Unmet demand Persons who applied to attend a non-school educational institution but were unable to gain a place. Excludes people who were studying at the time of interview for the Survey of Education and Work.

VET student An individual who was enrolled in a module/unit of competency or completed a qualification during the reporting period.

\section*{Vocational education}
(Overseas students)

Vocational education and training programs delivered by higher education institutions, which provides people with occupational or work-related knowledge and skills. Vocational education and training also includes programs which provide the basis for subsequent vocational programs.

Wage or salary earner An employed person who, during the reference week, worked for an employer for wages or salary in their main job.

\section*{BIBLIOGRAPHY}

SURVEYS AND STATISTICAL COLLECTIONS

Australian Bureau of Statistics, Australian Demographic Statistics
Australian Bureau of Statistics, Australia System of National Accounts
Australian Bureau of Statistics, Census of Population and Housing
Australian Bureau of Statistics, Child Care Survey
Australian Bureau of Statistics, Government Finance Statistics
Australian Bureau of Statistics, Household Expenditure Survey
Australian Bureau of Statistics, Labour Force Survey
Australian Bureau of Statistics, Survey of Aspects of Literacy
Australian Bureau of Statistics, Survey of Average Weekly Earnings
Australian Bureau of Statistics, Survey of Disability, Ageing and Carers
Australian Bureau of Statistics, Survey of Education and Work 2001 (previously known as the Transition from Education to Work Survey)

Australian Bureau of Statistics, Survey of Education, Training and Information Technology 2001 (previously known as the Survey of Education and Training 1997 and Survey of Training and Education 1993)

Australian Bureau of Statistics, Survey of Employee Earnings and Hours
Australian Bureau of Statistics, Vocational Education and Training Graduate Destination Survey 1995

Australian Bureau of Statistics in collaboration with state, territory and Commonwealth education authorities, National Schools Statistics Collection

Australian Education International, Overseas Student Statistics Collection
Australian Council for Educational Research, The PISA 2000 Survey of Students' Reading, Mathematical and Scientific Literacy Skills

Data Analysis Australia, National Indigenous Preschool Census (for DEST)
Department of Education, Science and Training, Higher Education Staff Statistics Collection

Department of Education, Science and Training, Higher Education Student Statistics Collection

Graduate Careers Council of Australia, Graduate Destination Survey
Graduate Careers Council of Australia, Postgraduate Destination Survey
National Centre for Vocational Education Research, Apprentice and Trainee Collection Statistics

National Centre for Vocational Education Research, Australian Vocational Education and Training Collection Statistics

National Centre for Vocational Education Research, Student Outcomes Survey (previously known as the Technical and Further Education Graduate Destination Survey 1997 \& 1998)

Australian Bureau of Statistics 2000, A Guide to the Consumer Price Index, 14th Series, cat. no. 6440.0, ABS, Canberra.

Australian Bureau of Statistics 1993, Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 edition, cat. no. 1292.0, ABS, Canberra.

Australian Bureau of Statistics, Australian Historical Population Statistics, cat. no. 3105.0.65.001—AUSSTATS <http://www.abs.gov.au>. Annual.

Australian Bureau of Statistics 2000, Australian National Accounts: Concepts, Sources and Methods, 2000, cat. no. 5216.0, ABS, Canberra.

Australian Bureau of Statistics, Australian National Accounts: National Income, Expenditure and Product, cat. no. 5206.0, ABS, Canberra. Quarterly.
Australian Bureau of Statistics 2001, Australian Standard Classification of Education (ASCED), 2001, cat. no. 1272.0, ABS, Canberra.

Australian Bureau of Statistics, 1986, Australian Standard Classification of Occupations (ASCO) first edition, cat. no. 1220.0, ABS, Canberra.
Australian Bureau of Statistics, 1997, Australian Standard Classification of Occupations (ASCO) second edition, cat. no. 1220.0, ABS, Canberra.

Australian Bureau of Statistics, Australian System of National Accounts, cat. no. 5204.0, ABS, Canberra. Annual.

Australian Bureau of Statistics, Average Weekly Earnings, Australia, cat. no. 6302.0, ABS, Canberra. Quarterly.

Australian Bureau of Statistics, Child Care, Australia, cat. no. 4402.0, ABS, Canberra. Triennial-latest issue 1999.

Australian Bureau of Statistics, Consumer Price Index, Australia, cat. no. 6401.0, ABS, Canberra. Quarterly.
Australian Bureau of Statistics, Disability, Ageing and Carers, Australia: Summary of Findings, cat. no. 4430.0, ABS, Canberra. Irregular—latest issue 1998.

Australian Bureau of Statistics, Education and Training Experience, Australia, cat. no. 6278.0, ABS, Canberra. Four yearly-latest issue 2001.
Australian Bureau of Statistics, Education and Work, Australia, cat. no. 6227.0, ABS, Canberra. Annual.

Australian Bureau of Statistics, Employee Earnings and Hours, Australia, cat. no. 6306.0, ABS, Canberra. Biennial—latest issue 2000.

Australian Bureau of Statistics, Government Financial Estimates, Australia, cat. no. 5501.0, ABS, Canberra. Annual.

Australian Bureau of Statistics, Government Finance Statistics, Australia, cat. no. 5512.0, ABS, Canberra. Annual.

Australian Bureau of Statistics, Government Finance Statistics, Education, Australia, cat. no. 5518.0.55.001—Electronic delivery <http://www.abs.gov.au>. Annual.
Australian Bureau of Statistics 1995, Government Finance Statistics: Concepts, Sources and Methods, 1994, cat. no. 5514.0, ABS, Canberra.
Australian Bureau of Statistics 1995, Graduate Outcomes-Technical And Further Education, Australia, 1995, cat. no. 4225.0, ABS, Canberra.

Australian Bureau of Statistics, Household Expenditure Survey, Australia: Detailed Expenditure Items, cat. no. 6535.0, ABS, Canberra. Five yearly-latest issue 1998-99.

Australian Bureau of Statistics, Household Expenditure Survey, Australia: Summary of Results, cat. no. 6530.0, ABS, Canberra. Five yearly—latest issue 1998-99.

Australian Bureau of Statistics, Household Expenditure Survey, Australia: User Guide, cat. no. 6527.0, ABS, Canberra. Five yearly—latest issue 1998-99.

Australian Bureau of Statistics 2000, Information Paper: Accruals-based Government Finance Statistics, 2000, cat. no. 5517.0, ABS, Canberra.

Australian Bureau of Statistics 1996, Information Paper: ASCO-Australian Standard Classification of Occupations, second edition, 1996, cat. no. 1221.0, ABS, Canberra.

Australian Bureau of Statistics, Labour Force, Australia, cat. no. 6203.0, ABS, Canberra. Monthly.

Australian Bureau of Statistics, Labour Force, Australia, Preliminary, cat. no. 6202.0, ABS, Canberra. Monthly.

Australian Bureau of Statistics, National Schools Collection: Government Schools, Australia, cat. no. 4215.0, ABS, Canberra. Final issue 1983.

Australian Bureau of Statistics, National Schools Collection: Non-government Schools, Australia, cat. no. 4216.0, ABS, Canberra. Final issue 1983.

Australian Bureau of Statistics, Population by Age and Sex, Australian States and Territories, cat. no. 3201.0, ABS, Canberra. Annual.

Australian Bureau of Statistics, Population Projections, Australia, cat. no. 3222.0, ABS, Canberra. Biennial—latest issue 2000.

Australian Bureau of Statistics, Schools, Australia, cat. no. 4202.0, ABS, Canberra. Final issue 1981.

Australian Bureau of Statistics, Schools, Australia, cat. no. 4221.0, ABS, Canberra. Annual.

Australian Bureau of Statistics, Transition from Education to Work, Australia, cat. no. 6227.0, ABS, Canberra. Annual. Final issue 2000.

Australian Education International, Overseas Student Statistics, DEST, Canberra. Annual.

Data Analysis Australia 1997, 1996 National Indigenous Preschool Census: Final Technical Report (prepared for DEST), DAA, Nedlands.

Data Analysis Australia 2001, 2000 National Indigenous Preschool Census: Technical Report (prepared for DEST), DAA, Nedlands.

Department of Education, Science and Training 2001, Characteristics and Performance Indicators of Australian Higher Education Institutions 2000, DEST, Canberra.

Department of Education, Science and Training 2001, Higher Education Students Time Series Tables 2000: Selected Higher Education Statistics, DEST, Canberra.

Department of Education, Science and Training, Staff, Selected Higher Education Statistics, DEST, Canberra, Annual.

Department of Education, Science and Training, Students, Selected Higher Education Statistics, DEST, Canberra. Annual.

Dobson, I. R., Hawthorne, L. and Birrell, B. 1998, 'The Impact of the 'Hanson' effect and the Asian currency crisis on education exports', People and Place, vol. 6, no.1, pp. 44-45.

Graduate Careers Council of Australia, Graduate Destination Survey, GCCA, Parkville. Annual.

Graduate Careers Council of Australia, Postgraduate Destination Survey, GCCA, Parkville. Annual.

Lokan, J., Greenwood, L. and Creswell, J. 2001, Fifteen-up and counting, reading, writing, reasoning: How literate are Australia's students?: the PISA 2000 survey of students' reading, mathematical and scientific literacy skills, ACER, Melbourne.

Ministerial Council on Education, Employment, Training and Youth Affairs, National Report on Schooling in Australia, Curriculum Corporation, Melbourne. Annual.

Ministerial Council on Education, Employment, Training and Youth Affairs 1999, National Report on Schooling in Australia, 1999, Preliminary Paper: 1999 Year 3 Reading National Benchmark Results, Curriculum Corporation, Melbourne.

National Centre for Vocational Education Research, Apprentices and Trainees, Australia 1985 to 1999: At a Glance, NCVER, Leabrook.
National Centre for Vocational Education Research, Australian Apprentice and Trainee Statistics, NCVER, Leabrook. Annual.

National Centre for Vocational Education Research, Australian Vocational Education and Training Statistics: In Detail, NCVER, Leabrook. Annual.

National Centre for Vocational Education Research, Selected TAFE Statistics, NCVER, Leabrook. Final issue 1992.
National Centre for Vocational Education Research, Selected Vocational Education and Training Statistics, NCVER, Leabrook. Final issue 1995.

National Centre for Vocational Education Research, Student Outcomes Survey: National Report, NCVER, Leabrook. Annual.
National Centre for Vocational Education Research, Technical and Further Education Graduate Destination Survey: National Report, NCVER, Leabrook. Final issue 1998.

National Centre for Vocational Education Research 2002, Vocational Education and Training in Australia 1991 to 2000: At a Glance, NCVER, Leabrook.
National Office of Overseas Skills Recognition 2000, Country Education Profiles: Australia, Third edition, DEST, Canberra.
Organisation for Economic Co-operation and Development, Education At A Glance: OECD indicators, OECD, Paris. Annual.

Organisation for Economic Co-operation and Development 1997, Education Policy Analysis, 1997, OECD, Paris.
Organisation for Economic Co-operation and Development 2001, Knowledge and Skills for Life: First results from PISA 2000, OECD, Paris.

Press, F. and Hayes, A. 2000, OECD Thematic Review of Early Childhood Education and Care Policy: Australian Background Report, Institute of Early Childhood, for the Commonwealth government of Australia, Sydney.

\section*{FOR MORE INFORMATION}
\begin{tabular}{ll} 
INTERNET & \begin{tabular}{l} 
www.abs.gov.au the ABS web site is the best place to \\
start for access to summary data from our latest \\
publications, information about the ABS, advice about \\
upcoming releases, our catalogue, and Australia Now-a a \\
statistical profile.
\end{tabular} \\
LIBRARY & \begin{tabular}{l} 
A range of ABS publications is available from public and \\
tertiary libraries Australia-wide. Contact your nearest library \\
to determine whether it has the ABS statistics you require,
\end{tabular} \\
or visit our web site for a list of libraries.
\end{tabular}

\section*{INFORMATION SERVICE}

Data that is already published and can be provided within five minutes is free of charge. Our information consultants can also help you to access the full range of ABS information-ABS user-pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

PHONE 1300135070

EMAIL client.services@abs.gov.au
\(F A X \quad 1300135211\)

POST Client Services, ABS, GPO Box 796, Sydney NSW 1041

\section*{WHY NOT SUBSCRIBE?}

ABS subscription services provide regular, convenient and prompt deliveries of ABS publications and products as they are released. Email delivery of monthly and quarterly publications is available.

PHONE 1300366323

EMAIL subscriptions@abs.gov.au
\(F A X \quad 0396157848\)

POST Subscription Services, ABS, GPO Box 2796Y, Melbourne Vic 3001```


[^0]:    (a) University graduates employed full-time only.

    Source: GCCA unpublished data, Graduate Destination
    (b) Includes: Graduate bachelors, three year Diplomas.

    Survey 2001.

[^1]:    * estimate has a relative standard error of between $25 \%$ and $50 \%$ and

    Source: ABS data available on request, Survey of Education and Work should be used with caution 2001.

[^2]:    na not available
    (a) Calendar year.
    (b) Current prices 1999.

[^3]:    na not available
    Source: OECD, Knowledge and Skills for Life: First results from PISA 2000;
    (a) Data for 2000. OECD, Education Policy Analysis, 1997; OECD, Education At A
    (b) Data for 1994-1996.

