

HUMAN RESOURCES BY SELECTED QUALIFICATIONS AND OCCUPATIONS

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) FRI 16 MAY 2003

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- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Derek Byars on Canberra 02 6252 5627.

NOTES

ABOUT THIS PUBLICATION

This publication presents data on human resources by selected qualifications and occupations. The data are comparable to that included in the previous (1996) edition of this publication which was titled *Human Resources in Science and Technology (HRST), Australia*. The terminology has been changed to more accurately reflect its coverage.

SELECTED QUALIFICATIONS AND OCCUPATIONS

The selected qualifications are Advanced diplomas, Bachelor degrees, Graduate certificates, Graduate diplomas, Master degrees or Doctoral degrees. The selected occupations are Specialist managers and Professionals; occupations where the above qualifications are normally required.

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ABSCQ	Australian Bureau of Statistics Classification of Qualifications
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCED	Australian Standard Classification of Education
ASCO	Australian Standard Classification of Occupations
LFS	Labour Force Survey
OECD	Organisation for Economic Co-operation and Development
VET	vocational education and training

Dennis Trewin
Australian Statistician

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CHAPTER 1

SUMMARY

NUMBER OF PERSONS

The number of persons with an Advanced diploma, Bachelor degree or higher degree (selected qualifications) and/or employed as Specialist managers or Professionals (selected occupations) was 3,054,000 persons in August 2001. This represented 21% of the population aged 15 years and over, up from 15% and 18% in 1991 and 1996 respectively.

The percentage with selected qualifications increased from 11% in 1991 and 14% in 1996 to 16% in 2001, while the percentage in selected occupations increased from 10% in 1991 and 12% in 1996 to 13% in 2001. The percentage who were both in a selected occupation and had selected qualifications increased from 6% in 1991 and 7% in 1996 to 8% in 2001.

Of the persons with selected qualifications and/or employed in selected occupations in August 2001, 321,000 (11%) were persons born overseas who had not taken out Australian citizenship, with the main countries of origin being England (64,000), New Zealand (42,000) and India (19,000).

By state and territory, persons with selected qualifications and/or in selected occupations ranged from 16% to 22% of the population in 2001, with the exception of the Australian Capital Territory where the percentage was 36%. The percentage was much higher in Major Urban centres (24%) than in Other Urban (14%) and Other areas (15%).

AGE AND SEX

Of the persons with selected qualifications and/or in selected occupations in 2001, 34% were aged 15–34 years, 49% were aged 35–54 years and 17% were aged 55 years and over.

Females accounted for 51% of the persons with selected qualifications and/or in selected occupations in 2001, up from 50% in 1996, while their share of the population aged 15 years and over was 51% in both 2001 and 1996. The percentage of persons in selected occupations that were female increased from 47% in 1996 to 49% in 2001, while the percentage of persons with selected qualifications that were female remained stable at 54%.

QUALIFICATIONS

Of persons with selected qualifications in 2001, 3% had Doctoral degrees, 8% Master degrees, 8% Graduate diplomas, 1% Graduate certificates, 60% Bachelor degrees and 21% Advanced diplomas. The most popular fields of study were Management and commerce, Education and Health, accounting for 18%, 18% and 17% respectively.

OCCUPATIONS

Persons in selected occupations in 2001 were most commonly employed in the Education, Property and business services and Health and community services industry groups, accounting for 22%, 20% and 19% of these persons respectively. Similarly, the industries with the highest percentage of their employment in selected occupations were Education (70%), Health and community services (44%) and Property and business services (40%). Of the persons in selected occupations in 2001, 67% had selected qualifications; 62% of the males and 72% of the females.

INCOME

Persons with selected qualifications and employed in selected occupations had an annual income of \$51,000 on average in 2001, compared with \$39,000 for persons with selected qualifications employed in other occupations and \$43,000 for persons in selected occupations without selected qualifications.

Of the persons in selected occupations, Specialist managers and Computing professionals had the highest average annual incomes in 2001 (\$57,000 and \$56,000 respectively).

LABOUR FORCE STATUS

The unemployment rate for persons with selected qualifications was 3% at August 2001, compared with 8% for persons without selected qualifications. The participation rate (persons in the labour force as a proportion of the population aged 15 years and over) for persons with selected qualifications was 81% at August 2001, compared with 56% for persons without such qualifications.

JOB MOBILITY

Approximately 290,000 persons in selected occupations in February 2002 had changed their jobs in the preceding 12 months. Of these, 55,000 (19%) were inflows from other occupations while the remainder were internal flows (i.e. were already employed in selected occupations). On average, persons in selected occupations had been in their current job for longer than persons in other occupations.

INTERNATIONAL
MIGRATION

In 2001–02, 79,179 persons with stated selected occupations arrived in Australia permanently or long-term, while 60,392 persons with stated selected occupations departed permanently or long-term, resulting in a net gain of 18,787 persons.

INDIGENOUS POPULATION

The number of Indigenous persons with selected qualifications and/or in selected occupations in 2001 was 17,874 representing 7% of Indigenous Australians aged 15 years and over.

INTERNATIONAL
COMPARISON

Persons with selected qualifications and/or in selected occupations as a percentage of Australia's population ranked fifth in comparison with ten European countries for which similar data are available. Australia was ranked below Finland, Belgium, Denmark and the Netherlands but above Ireland, Germany, France, Spain, Italy and Portugal.

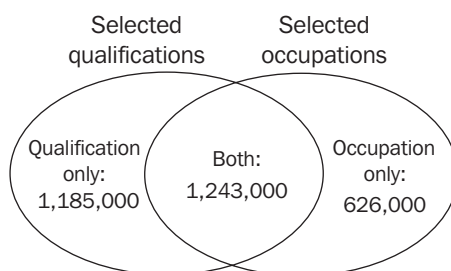
CHAPTER 2

PERSONS WITH SELECTED QUALIFICATIONS AND OR IN SELECTED OCCUPATIONS

NUMBER OF PERSONS

The number of persons with an Advanced diploma, Bachelor degree or higher degree (selected qualifications) and/or employed as Specialist managers or Professionals (selected occupations) was 3,054,000 persons in August 2001. The number of persons with selected qualifications was 2,428,000 persons while the number of persons in selected occupations was 1,869,000 persons.

The following diagram illustrates the relationship between the components, with values shown as at August 2001.



The number of persons with selected qualifications and/or in selected occupations as a percentage of the population aged 15 and over in Australia in 2001 was 21%, up from 15% and 18% in 1991 and 1996 respectively. The number of persons with selected qualifications represented 16% of the population in 2001, an increase over 1991 (11%) and 1996 (14%). The number of persons in selected occupations accounted for 13% of the population in 2001, compared with 10% in 1991 and 12% in 1996.

Since 1991, the number of persons both with selected qualifications and in selected occupations has increased by 53%, while persons without selected qualifications but in selected occupations has only increased by 28%.

PERSONS WITH SELECTED QUALIFICATIONS AND/OR IN SELECTED OCCUPATIONS

	1991	1996	2001
With selected qualifications and in selected occupations ('000)	811	1 033	1 243
With selected qualifications only ('000)	685	905	1 185
In selected occupations only ('000)	490	575	626
Total ('000)	1 987	2 512	3 054
Population(a) ('000)	13 018	13 915	14 857
As a percentage of the population (%)	15	18	21

(a) Includes persons aged 15 years and over resident in Australia in August 2001. Persons visiting Australia for less than one year are not included.

Source: ABS data available on request, Census of Population and Housing.

COUNTRY OF ORIGIN

Of the persons with selected qualifications and/or in selected occupations (3,054,000 persons) in August 2001, 2,733,000 (89%) were Australian citizens. The remaining 321,000 (11%) were persons born overseas who had not taken out Australian citizenship, with the main countries of origin being England (64,000), New Zealand (42,000) and India (19,000).

PERSONS WITH SELECTED QUALIFICATIONS AND/OR IN SELECTED OCCUPATIONS, By country of origin(a)—August 2001

	<i>Persons</i>
<i>Country</i>	'000
Australia	2 733
England	64
New Zealand	42
India	19
Malaysia	16
China (excl. SARs and Taiwan Province)	16
United States of America	13
Scotland	10
South Africa	10
Indonesia	9
Japan	8
Germany	8
Korea, Republic of (South)	7
Philippines	6
Ireland	6
Singapore	5
Netherlands	5
Canada	5
Other	71
Total	3 054

(a) The figure for Australia includes Australian citizens born overseas.

Source: ABS data available on request, 2001 Census of Population and Housing.

AGE

Of the persons with selected qualifications and/or in selected occupations in 2001, 34% were aged 15–34 (down from 36% in 1996), 49% were aged 35–54 (50% in 1996), while 17% were aged 55 and over (14% in 1996).

SEX

Females accounted for 51% of the persons with selected qualifications and/or in selected occupations in 2001, up from 50% in 1996, while their share of the population aged 15 years and over was 51% in both 2001 and 1996.

LABOUR FORCE STATUS

There were 661,000 persons unemployed at August 2001, which accounted for 7% of the labour force. The unemployment rate for persons with selected qualifications was 3% compared to 8% for persons without those qualifications. For males it was 4% compared to 9% and for females 3% compared to 8%.

Approximately 9.0 million people out of a population of 14.9 million persons aged 15 or over were either employed at August 2001 or looking for work, representing a participation rate of 60%. The participation rate for persons with selected qualifications (81%) was far higher than that for persons without such qualifications (56%). For males this rate was 86% compared to 65%. For females it was 78% compared to 48%.

LOCATION

In 2001, 36% of the population of the Australian Capital Territory were persons with selected qualifications and/or in selected occupations. Other state and territory percentages varied from 16% (Tasmania) to 22% (New South Wales and Victoria).

The percentage was much higher in Major Urban centres (24%) than in Other Urban (14%) and Other areas (15%).

INTERNATIONAL
COMPARISON

Persons with selected qualifications and/or in selected occupations as a percentage of Australia's population aged 15 years and over ranked fifth in comparison with ten European countries for which similar data are available.

To be consistent with the international figures, Specialist managers have been excluded from the selected occupations and persons with Associate degrees and Diplomas included in the selected qualifications.

PERSONS WITH SELECTED QUALIFICATIONS AND/OR IN SELECTED
OCCUPATIONS, As a proportion of population aged 15 years and over
—2001

Country	%	Country	%	Country	%
Finland	26.5	Australia	20.7	Spain	16.8
Belgium	22.0	Ireland	19.3	Italy	8.6
Denmark	21.8	Germany	18.8	Portugal	7.2
Netherlands	21.2	France	18.2		

Source: ABS data available on request, 2001 Census of Population and Housing; Eurostat, Community Labour Force Surveys; U.S. Census Bureau, International Database.

INTERNATIONAL
MIGRATION

In 2001–02, there were 79,179 persons with stated selected occupations who arrived in Australia permanently or long-term. During this period, there were 60,392 persons with these stated occupations who departed permanently or long-term, resulting in a net gain of 18,787 persons.

As shown in the table below, during the period 1991–92 to 2001–02 there has consistently been a net gain ranging from 12,461 to 21,211 persons.

PERMANENT AND LONG-TERM ARRIVALS AND DEPARTURES, Of persons with stated selected occupations

Year	PERMANENT AND LONG-TERM ARRIVALS			PERMANENT AND LONG-TERM DEPARTURES			
	Specialist managers	Professionals	Total selected occupations	Specialist managers	Professionals	Total selected occupations	Net gain
	no.	no.	no.	no.	no.	no.	no.
1991–92	5 286	41 616	46 902	2 385	27 727	30 112	16 790
1992–93	5 505	39 218	44 723	2 807	29 046	31 853	12 870
1993–94	5 591	39 973	45 564	3 019	29 437	32 456	13 108
1994–95	6 540	45 207	51 747	3 062	30 892	33 954	17 793
1995–96	7 859	47 706	55 565	3 933	33 597	37 530	18 035
1996–97	7 686	48 673	56 359	4 251	37 592	41 843	14 516
1997–98	6 401	50 889	57 290	3 125	41 480	44 605	12 685
1998–99	6 392	52 288	58 680	3 004	43 215	46 219	12 461
1999–2000	7 864	59 990	67 854	3 994	45 798	49 792	18 062
2000–01	9 072	70 255	79 327	5 515	52 601	58 116	21 211
2001–02	6 762	72 417	79 179	3 840	56 552	60 392	18 787

Source: ABS data available on request, Overseas arrivals and departures.

INDIGENOUS POPULATION

There were 249,075 Indigenous persons aged 15 years and over in Australia in August 2001. The number of Indigenous persons with selected qualifications and/or in selected occupations was 17,874 representing 7% of this population (compared to 21% for all persons). There were 9,901 Indigenous persons with selected qualifications while 12,667 Indigenous persons were employed in selected occupations.

INDIGENOUS PERSONS, By occupation and qualification—Aged 15 years and over

	With selected qualifications	Other(a)	Total
	no.	no.	no.
Selected occupations			
Specialist managers	529	1 034	1 563
Professionals			
Natural and physical science	86	252	338
Building and engineering	92	124	216
Computing	86	172	258
Health	703	477	1 180
Education	1 741	1 164	2 905
Other	1 457	4 750	6 207
Total selected occupations	4 694	7 973	12 667
Other(b)	5 207	231 201	236 408
Total	9 901	239 174	249 075

(a) Includes other qualifications, not applicable, not stated and inadequately described.

(b) Includes other occupations, unemployed, not in the labour force, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

2.1**PERSONS AGED 15 YEARS AND OVER(a), By occupation by age by qualification ..****SELECTED QUALIFICATIONS (b)**

	<i>Doctoral degree</i>	<i>Master's degree</i>	<i>Graduate diploma</i>	<i>Graduate certificate</i>	<i>Bachelor degree</i>	<i>Advanced diploma</i>	<i>Total</i>	<i>Other(c)</i>	<i>Total</i>
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Selected occupations									
Specialist managers									
15-24	—	—	—	—	3	—	4	9	13
25-34	—	4	3	—	31	4	43	43	87
35-44	1	10	5	1	31	7	55	60	115
45-54	2	9	6	1	24	8	49	53	102
55 and over	1	2	1	—	7	3	14	23	38
<i>Total</i>	4	26	15	2	96	22	166	189	355
Professionals									
Natural & physical science									
15-24	—	—	—	—	3	—	3	1	5
25-34	2	1	1	—	10	—	14	2	17
35-44	3	2	1	—	6	—	12	3	15
45-54	2	1	—	—	4	1	8	2	11
55 and over	1	1	—	—	1	—	3	1	5
<i>Total</i>	9	5	2	—	25	2	42	10	51
Building & engineering									
15-24	—	—	—	—	4	—	4	3	7
25-34	—	1	—	—	17	1	20	6	26
35-44	—	2	1	—	12	1	17	7	23
45-54	—	2	1	—	9	2	14	7	22
55 and over	—	1	—	—	4	2	7	5	12
<i>Total</i>	1	7	2	—	46	6	63	27	90
Computing									
15-24	—	—	—	—	7	—	7	9	16
25-34	—	3	1	—	24	2	31	18	48
35-44	1	3	2	—	15	2	23	15	38
45-54	—	2	1	—	6	1	11	9	19
55 and over	—	—	—	—	1	—	2	2	4
<i>Total</i>	2	8	5	—	53	6	74	53	126
Health									
15-24	—	—	—	—	12	—	13	3	16
25-34	1	2	4	1	48	7	63	7	70
35-44	4	3	5	1	46	13	73	17	90
45-54	3	3	3	1	37	13	60	18	78
55 and over	3	1	2	—	18	5	29	8	38
<i>Total</i>	12	10	15	3	162	38	238	53	292

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Highest educational attainment.

(c) Includes other qualifications, not applicable, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

2.1 PERSONS AGED 15 YEARS AND OVER(a), By occupation by age by qualification

continued

SELECTED QUALIFICATIONS(b)

	Doctoral degree	Master's degree	Graduate diploma	Graduate certificate	Bachelor degree	Advanced diploma	Total	Other(c)	Total
	'000	'000	'000	'000	'000	'000	'000	'000	'000

Selected occupations cont.

Professionals cont.

Education

15-24	—	—	1	—	14	—	16	8	24
25-34	1	4	10	—	48	4	67	8	75
35-44	4	8	16	—	46	15	90	11	101
45-54	6	11	19	—	48	20	105	14	119
55 and over	4	5	5	—	14	7	34	9	43
Total	15	29	51	1	170	46	311	51	362

Other

15-24	—	—	1	—	26	2	29	31	60
25-34	2	10	8	1	88	9	118	63	181
35-44	2	13	9	1	57	11	93	62	155
45-54	2	11	8	1	41	12	75	56	131
55 and over	2	5	3	—	18	7	34	32	66
Total	8	40	28	2	230	40	349	244	593

Total selected occupations

15-24	—	1	2	—	70	3	77	64	140
25-34	7	27	28	3	266	27	357	147	504
35-44	16	42	38	4	214	49	363	175	538
45-54	16	40	38	3	169	56	322	160	482
55 and over	11	15	11	1	63	25	125	80	205
Total	50	125	117	10	781	160	1 243	626	1 869

Other(d)

15-24	—	2	2	—	73	20	97	2 329	2 426
25-34	2	17	14	2	190	66	290	1 929	2 219
35-44	3	21	18	2	147	76	268	2 063	2 331
45-54	3	17	16	2	108	73	220	1 867	2 087
55 and over	11	19	20	1	146	114	310	3 615	3 925
Total	19	76	70	7	665	349	1 185	11 802	12 988

Total

15-24	—	3	4	—	142	24	173	2 393	2 566
25-34	9	44	42	4	456	92	647	2 076	2 723
35-44	19	63	56	6	361	125	631	2 237	2 868
45-54	19	57	54	4	277	130	542	2 027	2 568
55 and over	22	34	31	1	209	139	435	3 695	4 131
Total	68	201	188	16	1 446	509	2 428	12 429	14 857

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Highest educational attainment.

(c) Includes other qualifications, not applicable, not stated and inadequately described.

(d) Includes other occupations, unemployed, not in the labour force, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

2.2**PERSONS AGED 15 YEARS AND OVER(a), By occupation by qualification by sex . .**

SELECTED QUALIFICATIONS(b)

	<i>Doctoral degree</i>	<i>Master's degree</i>	<i>Graduate diploma</i>	<i>Graduate certificate</i>	<i>Bachelor degree</i>	<i>Advanced diploma</i>	<i>Total</i>	<i>Other(c)</i>	<i>Total</i>
	'000	'000	'000	'000	'000	'000	'000	'000	'000
MALES									
Selected occupations									
Specialist managers	3	18	8	1	62	14	107	137	243
Professionals									
Natural and physical science	6	3	1	—	13	1	25	7	32
Building and engineering	1	6	2	—	41	5	56	26	82
Computing	1	7	3	—	41	5	58	41	99
Health	9	4	3	—	46	5	66	9	75
Education	10	12	14	—	52	10	99	17	115
Other	5	21	12	1	119	23	181	134	315
<i>Total selected occupations</i>	36	71	43	4	374	64	592	370	962
Other(d)	13	45	26	3	295	139	522	5 775	6 297
<i>Total</i>	49	116	70	7	669	203	1 114	6 145	7 259
FEMALES									
Selected occupations									
Specialist managers	1	9	7	1	34	8	59	52	111
Professionals									
Natural and physical science	2	2	1	—	11	—	17	3	19
Building and engineering	—	1	—	—	5	—	7	2	8
Computing	—	2	1	—	12	1	16	11	28
Health	3	6	12	3	116	33	172	44	217
Education	5	17	37	1	118	36	213	34	246
Other	3	18	16	1	112	17	167	110	277
<i>Total selected occupations</i>	14	53	74	6	407	96	651	256	907
Other(d)	5	31	44	3	370	210	664	6 027	6 691
<i>Total</i>	19	85	118	9	777	306	1 315	6 283	7 598

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Highest educational attainment.

(c) Includes other qualifications, not applicable, not stated and inadequately described.

(d) Includes other occupations, unemployed, not in the labour force, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

2.3 PERSONS AGED 15 YEARS AND OVER(a), By labour force status by age by qualification by sex

	SELECTED QUALIFICATIONS			OTHER(b)			TOTAL		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Employed									
Selected occupations									
15-34 ('000)	185	248	433	117	94	211	302	343	644
35-54 ('000)	333	352	685	200	134	335	533	486	1 019
55 and over ('000)	74	51	125	53	27	80	127	78	205
Total ('000)	592	651	1 243	370	256	626	962	907	1 869
Other occupations(c)									
15-34 ('000)	112	146	258	1 367	1 076	2 443	1 480	1 222	2 702
35-54 ('000)	170	162	332	1 457	1 172	2 629	1 627	1 334	2 961
55 and over ('000)	43	30	74	435	258	693	478	289	767
Total ('000)	325	338	664	3 260	2 506	5 766	3 585	2 845	6 430
Total employed									
15-34 ('000)	297	394	692	1 484	1 171	2 654	1 781	1 565	3 346
35-54 ('000)	502	514	1 016	1 658	1 306	2 964	2 160	1 820	3 980
55 and over ('000)	117	82	199	488	285	774	605	367	972
Total ('000)	917	989	1 907	3 630	2 762	6 392	4 547	3 752	8 299
Unemployed									
15-34 ('000)	15	15	30	206	143	349	220	158	378
35-54 ('000)	17	15	31	117	80	197	133	95	228
55 and over ('000)	5	2	7	35	12	47	40	14	54
Total ('000)	36	32	68	358	235	593	394	267	661
Not in the labour force									
15-34 ('000)	26	72	98	524	762	1 286	549	834	1 384
35-54 ('000)	27	96	124	275	658	933	303	754	1 057
55 and over ('000)	106	122	228	1 065	1 532	2 597	1 171	1 654	2 825
Total ('000)	159	291	450	1 864	2 952	4 816	2 023	3 243	5 265
Not stated									
15-34 ('000)	—	1	1	95	85	180	96	86	181
35-54 ('000)	1	1	1	88	82	170	88	83	171
55 and over ('000)	1	1	2	110	167	277	111	168	279
Total ('000)	2	3	4	294	334	628	295	337	632
Total									
15-34 ('000)	338	482	820	2 309	2 160	4 469	2 647	2 643	5 290
35-54 ('000)	547	625	1 172	2 137	2 127	4 264	2 684	2 752	5 437
55 and over ('000)	228	207	435	1 699	1 996	3 695	1 927	2 203	4 131
Total ('000)	1 114	1 315	2 428	6 145	6 283	12 429	7 259	7 598	14 857
Unemployment rate									
15-34 (%)	4.7	3.7	4.1	12.2	10.9	11.6	11.0	9.2	10.2
35-54 (%)	3.2	2.8	3.0	6.6	5.8	6.2	5.8	5.0	5.4
55 and over (%)	4.0	2.4	3.4	6.7	4.0	5.7	6.2	3.6	5.3
All labour force (%)	3.8	3.1	3.4	9.0	7.8	8.5	8.0	6.6	7.4
Participation rate									
15-34 (%)	92.3	84.9	88.0	73.2	60.8	67.2	75.6	65.2	70.4
35-54 (%)	94.9	84.5	89.3	83.0	65.2	74.1	85.4	69.6	77.4
55 and over (%)	53.5	40.4	47.2	30.8	14.9	22.2	33.5	17.3	24.8
Total (%)	85.6	77.7	81.3	64.9	47.7	56.2	68.1	52.9	60.3

— nil or rounded to zero (including null cells)

(c) Includes not stated and inadequately described.

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

(b) Includes other qualifications, not applicable, not stated and inadequately described.

2.4 PERSONS AGED 15 YEARS AND OVER(a), By location by selected qualifications and/or occupations

WITH SELECTED QUALIFICATIONS AND/OR IN SELECTED OCCUPATIONS

	<i>With selected qualifications and in selected occupations</i>	<i>With selected qualifications only</i>	<i>In selected occupations only</i>	<i>Total</i>	<i>Population</i>	<i>As a proportion of the population</i>
	'000	'000	'000	'000	'000	%
New South Wales	433	425	222	1 079	4 998	22
Victoria	333	315	160	808	3 668	22
Queensland	199	190	107	497	2 823	18
South Australia	85	76	45	206	1 172	18
Western Australia	116	115	56	288	1 439	20
Tasmania	24	21	13	58	357	16
Northern Territory	12	9	7	29	154	19
Australian Capital Territory	40	33	17	89	244	36
Other Territories(b)	—	—	—	—	2	22
Australia	1 243	1 185	626	3 054	14 857	21
Major Urban(c)	948	908	459	2 315	9 780	24
Other Urban(d)	187	163	107	457	3 213	14
Other(e)	108	115	60	283	1 864	15

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Includes Christmas, Cocos (Keeling) Islands and Jervis Bay Territory.

(c) All Urban centres with a population of 100,000 and over.

(d) All Urban centres with a population of 1,000 to 99,999.

(e) Includes bounded localities, rural balance and migratory — all population clusters less than 1,000.

Source: ABS data available on request, 2001 Census of Population and Housing.

CHAPTER 3

PERSONS WITH SELECTED QUALIFICATIONS

HIGHEST EDUCATIONAL ATTAINMENT

Of persons with selected qualifications in August 2001, 3% had Doctoral degrees, 8% Master degrees, 8% Graduate diplomas, 1% Graduate certificates, 60% Bachelor degrees and 21% Advanced diplomas.

AGE AND SEX

Persons aged 25–34 accounted for 27% of persons with selected qualifications, while those aged 35–44 made up 26%, those aged 45–54 made up 22%, those aged 55 and over made up 18% and those aged 15–24 the remaining 7%.

Females accounted for 54% of persons with selected qualifications. While 37% of females with selected qualifications were aged under 35, only 30% of males with such qualifications were in that age group. Conversely, 21% of the males were aged 55 and over, compared with only 16% of the females.

FIELD OF EDUCATION

Management and commerce, Education and Health were the most common fields of education for persons with selected qualifications, accounting for 18%, 18% and 17% respectively. For males, Management and commerce (22%) and Engineering and related technologies (17%) were the most popular fields, while for females they were Education (25%) and Health (24%).

The fields of education which had the highest percentages of their persons aged 55 and over were Health (24%) and Engineering and related technologies (23%). Persons with qualifications in the field of Information technology tended to be younger than those with qualifications in other fields. Information technology had the highest percentage of persons in the age groups 15–24, 25–34 and 35–44 (13%, 40% and 30% respectively) and the lowest percentage in the age groups 45–54, 55–64 and 65 and over (14%, 2% and 0% respectively).

LABOUR FORCE STATUS

Of the 2,428,000 persons with selected qualifications, 1,243,000 (51%) were employed in selected occupations, 664,000 (27%) were employed in other occupations, 68,000 (3%) were unemployed and 450,000 (19%) were not in the labour force.

Persons with qualifications in the fields of Health and Education had the lowest unemployment rates (both 2%). The highest unemployment rate, with the exception of the Other category, was for persons with qualifications in the field of Information technology (6%).

Persons with qualifications in the field of Information technology had the highest participation rate (91%), while persons with qualifications in the field of Health had the lowest participation rate (78%).

OTHER OCCUPATIONS

Of the 664,000 persons with selected qualifications who were employed in other occupations, 226,000 (34%) were working as Intermediate and elementary clerical, sales and service workers and 207,000 (31%) as Associate professionals. Their qualifications were mainly in the fields of Management and commerce (27%) and Society and culture (18%).

YEAR COMPLETED
QUALIFICATION

Of persons who have completed a selected qualification, 45% completed their highest educational qualification between 1991 and 2001, 23% between 1981 and 1990, 16% between 1971 and 1980 and 13% before 1971.

A higher percentage of females than males with selected qualifications have completed those qualifications recently; 48% of females in the period 1991 to 2001, compared to 42% for males.

For those persons who completed their selected qualifications in the periods 1971 to 1980, 1981 to 1990, and 1991 to 2001, the percentages who were employed in August 2001 were 81%, 82% and 86% respectively. A lower percentage (45%) of persons who completed their selected qualifications before 1971 were employed in August 2001, with most persons in this category (53%) not being in the labour force.

INDUSTRY

The industries with the largest number of employed persons with selected qualifications were Education (390,000), Health and community services (343,000) and Property and business services (340,000). These industries also had the highest percentages of persons with selected qualifications (65%, 43% and 37% respectively).

The industries with the lowest percentages of persons with selected qualifications were Construction (6%), Retail trade (8%) and Agriculture, forestry and fishing (9%).

Of all industries, the Education industry had the highest number of Doctoral degrees (21,000, accounting for 38% of the total), Masters degrees (41,000, or 25% of the total) and Graduate diplomas (60,000, or 39% of the total).

AVERAGE ANNUAL
INCOME

Persons with selected qualifications had an average annual income of \$51,000 if employed in selected occupations compared with \$39,000 if employed in other occupations.

Persons who held Doctoral degrees and were employed in selected occupations had the highest average annual income (\$63,000), while those with Master degrees and employed in selected occupations earned \$58,000.

Employed males with selected qualifications had an average annual income of \$54,000, whereas employed females with selected qualifications had an average annual income of \$40,000. Regardless of selected qualification or occupation, males had a higher average annual income than females.

**HIGHER EDUCATION
STATISTICS**

The number of selected award course completions in higher education institutions increased every year during the period 1991 (97,849 completions) to 1998 (133,872) before levelling off in 1999 (133,866) and 2000 (133,781). In 2000, completions at the Bachelor degree level comprised 81,057 Pass degrees (61% of total completions) and 7,760 Honours degrees (6% of the total). Completions at the Postgraduate degree level included 3,237 Doctoral degrees (2% of total completions) and 15,795 Master's degrees (12%).

The number of selected award course completions in vocational education institutions increased every year during the period 1995 to 2000. In 2000, there were 5,701 selected award course completions, of which 5,356 (94%) were Advanced diplomas.

The number of students commencing in selected courses in higher education institutions increased steadily over the period 1992 to 1997, levelled off for the next three years and then increased again in 2001.

Of the 222,912 students commencing selected courses at higher education institutions in 2001, 128,831 (58%) were female. Male commencements greatly outnumbered female commencements in courses in Information technology and in Engineering and related technologies, whereas the reverse was true in courses in Health and Education.

3.1**PERSONS WITH SELECTED QUALIFICATIONS(a), By age by qualification by sex ...**

HIGHEST EDUCATIONAL ATTAINMENT							
	<i>Doctoral degree</i>	<i>Master's degree</i>	<i>Graduate diploma</i>	<i>Graduate certificate</i>	<i>Bachelor degree</i>	<i>Advanced diploma</i>	<i>Total</i>
<i>Age group (years)</i>	'000	'000	'000	'000	'000	'000	'000
MALES							
15-24	—	1	1	—	55	10	68
25-34	5	22	14	1	197	32	271
35-44	12	37	20	3	168	44	283
45-54	14	34	21	2	139	54	264
55-64	11	15	9	1	64	34	134
65 and over	7	7	4	—	46	30	95
<i>Total</i>	49	116	70	7	669	203	1 114
FEMALES							
15-24	—	2	3	—	87	14	106
25-34	4	22	29	3	259	60	376
35-44	6	27	36	3	194	82	347
45-54	5	23	33	2	138	76	278
55-64	3	8	12	1	59	41	124
65 and over	1	3	6	—	40	33	84
<i>Total</i>	19	85	118	9	777	306	1 315
PERSONS							
15-24	—	3	4	—	142	24	173
25-34	9	44	42	4	456	92	647
35-44	19	63	56	6	361	125	631
45-54	19	57	54	4	277	130	542
55-64	13	24	21	1	123	75	257
65 and over	9	10	10	—	86	63	178
<i>Total</i>	68	201	188	16	1 446	509	2 428

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.2**PERSONS WITH SELECTED QUALIFICATIONS(a), By field of education by age by****sex**

	AGE GROUP (YEARS)						
	15-24	25-34	35-44	45-54	55-64	65 and over	Total
Field of education	'000	'000	'000	'000	'000	'000	'000
MALES							
Natural and physical sciences	6	23	24	22	12	8	96
Information technology	9	25	19	9	2	—	63
Engineering and related technologies	9	42	47	43	24	21	186
Architecture and building	2	8	8	8	4	3	33
Agriculture, environmental and related studies	2	8	8	7	5	4	34
Health	4	21	25	22	13	13	99
Education	3	18	28	39	19	10	117
Management and commerce	18	66	67	57	26	16	250
Society and culture	8	38	40	43	23	16	168
Other(b)	7	21	17	13	6	4	68
Total	68	271	283	264	134	95	1 114
FEMALES							
Natural and physical sciences	9	24	19	11	4	3	70
Information technology	3	9	8	3	1	—	23
Engineering and related technologies	2	8	6	3	1	1	21
Architecture and building	1	5	3	2	1	—	12
Agriculture, environmental and related studies	2	6	4	2	1	—	14
Health	15	71	86	70	39	33	314
Education	13	67	88	94	40	21	323
Management and commerce	26	77	50	28	9	5	195
Society and culture	20	68	56	48	22	12	226
Other(b)	15	41	28	18	8	7	116
Total	106	376	347	278	124	84	1 315
PERSONS							
Natural and physical sciences	15	48	43	34	16	10	166
Information technology	11	34	26	12	2	—	86
Engineering and related technologies	11	50	53	46	26	22	207
Architecture and building	3	13	12	10	5	3	45
Agriculture, environmental and related studies	4	14	12	9	5	4	48
Health	19	92	112	92	52	46	413
Education	16	85	116	132	59	32	440
Management and commerce	45	143	116	86	35	21	445
Society and culture	28	106	96	91	44	28	394
Other(b)	22	63	45	31	13	10	185
Total	173	647	631	542	257	178	2 428

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Includes other fields, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.3 PERSONS WITH SELECTED QUALIFICATIONS(a), By field of education by labour force status

Field of education	EMPLOYED			Unemployed	Not in the labour force		Total	Unemployment Rate	Participation Rate
	Selected occupations	Other occupations(b)	Total		Not stated	Not stated			
	'000	'000	'000	'000	'000	'000	'000	%	%
Natural and physical sciences	83	46	129	6	31	—	166	4	81
Information technology	54	19	74	4	8	—	86	6	91
Engineering and related technologies	99	62	161	8	38	—	207	4	81
Architecture and building	21	16	37	1	7	—	45	4	85
Agriculture, environmental and related studies	17	22	38	2	8	—	48	4	83
Health	253	64	317	5	90	1	413	2	78
Education	275	69	343	6	90	1	440	2	79
Management and commerce	193	176	369	14	62	1	445	4	86
Society and culture	181	122	303	12	77	1	394	4	80
Other(c)	67	68	135	9	39	1	185	7	78
Total	1 243	664	1 907	68	450	4	2 428	3	81

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Includes not stated and inadequately described.

(c) Includes other fields, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.4 PERSONS, OTHER THAN SPECIALIST MANAGERS AND PROFESSIONALS, WITH SELECTED QUALIFICATIONS(a), By field of education by occupation

<i>Field of education</i>	<i>Managers and administrators(b)</i>	<i>Associate professionals</i>	<i>Advanced clerical and service workers</i>	<i>Intermediate and elementary clerical, sales and service workers</i>	<i>Other(c)</i>	<i>Total</i>
	'000	'000	'000	'000	'000	'000
Natural and physical sciences	5	16	2	15	8	46
Information technology	1	8	1	6	4	19
Engineering and related technologies	10	20	1	10	21	62
Architecture and building	3	7	—	2	2	16
Agriculture, environmental and related studies	6	5	—	4	6	22
Health	7	22	5	23	7	64
Education	8	17	6	27	11	69
Management and commerce	23	60	15	60	18	176
Society and culture	13	38	9	48	14	122
Other(d)	4	15	4	30	14	68
Total	82	207	44	226	105	664

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Excludes specialist managers.

(c) Includes other occupations, not stated and inadequately described.

(d) Includes other fields, not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.5**PERSONS WITH SELECTED QUALIFICATIONS(a), By sex by year completed**

qualification by labour force status

	EMPLOYED				Not in the labour force		
Sex/year completed	Selected occupations	Other occupations(b)	Total	Unemployed		Not stated	Total
NUMBER ('000)							
Males							
Pre 1971	46	31	77	3	77	—	158
1971–1980	111	58	168	5	24	—	198
1981–1990	154	78	231	7	18	—	257
1991–2001	268	148	415	19	34	—	469
Not stated	14	11	25	1	6	—	32
Total	592	325	917	36	159	2	1 114
Females							
Pre 1971	34	28	62	1	89	1	154
1971–1980	97	52	149	4	39	—	192
1981–1990	150	76	226	7	65	—	299
1991–2001	353	170	523	19	86	1	629
Not stated	16	12	28	1	12	1	41
Total	651	338	989	32	291	3	1 315
Persons							
Pre 1971	81	59	139	4	166	1	311
1971–1980	208	109	318	9	63	—	390
1981–1990	304	154	458	14	83	1	556
1991–2001	621	318	939	38	120	1	1 098
Not stated	29	24	53	2	17	1	73
Total	1 243	664	1 907	68	450	4	2 428
PROPORTION (%)							
Males							
Pre 1971	29	20	49	2	49	—	100
1971–1980	56	29	85	3	12	—	100
1981–1990	60	30	90	3	7	—	100
1991–2001	57	31	89	4	7	—	100
Not stated	42	35	78	4	17	1	100
Total	53	29	82	3	14	—	100
Females							
Pre 1971	22	18	41	1	58	1	100
1971–1980	51	27	78	2	20	—	100
1981–1990	50	26	76	2	22	—	100
1991–2001	56	27	83	3	14	—	100
Not stated	38	30	68	3	28	1	100
Total	50	26	75	2	22	—	100
Persons							
Pre 1971	26	19	45	1	53	—	100
1971–1980	53	28	81	2	16	—	100
1981–1990	55	28	82	3	15	—	100
1991–2001	57	29	86	3	11	—	100
Not stated	40	32	72	3	23	1	100
Total	51	27	79	3	19	—	100

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Includes not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.6 PERSONS WITH SELECTED QUALIFICATIONS(a), By age by year completed qualification by labour force status

Age group/year completed	EMPLOYED			Unemployed	Not in the labour force	Not stated	Total
	Selected occupations	Other occupations(b)	Total				
	'000	'000	'000				
.....							
15-34							
Pre 1971	—	—	—	—	—	—	—
1971-1980	—	—	—	—	—	—	—
1981-1990	42	27	69	2	14	—	85
1991-2001	383	222	605	27	80	1	712
Not stated	9	9	18	1	4	—	24
Total	433	258	692	30	98	1	820
35-54							
Pre 1971	23	18	41	1	8	—	50
1971-1980	182	96	279	7	33	—	320
1981-1990	242	118	360	11	49	—	420
1991-2001	220	87	307	11	29	—	347
Not stated	18	12	30	1	5	—	36
Total	685	332	1 016	31	124	1	1 172
55 and over							
Pre 1971	58	41	99	3	158	1	261
1971-1980	26	13	39	1	30	—	70
1981-1990	20	9	29	1	21	—	51
1991-2001	18	8	26	1	11	—	39
Not stated	3	2	6	—	8	—	14
Total	125	74	199	7	228	2	435
Total							
Pre 1971	81	59	139	4	166	1	311
1971-1980	208	109	318	9	63	—	390
1981-1990	304	154	458	14	83	1	556
1991-2001	621	318	939	38	120	1	1 098
Not stated	29	24	53	2	17	1	73
Total	1 243	664	1 907	68	450	4	2 428

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

(b) Includes not stated and inadequately described.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.7 EMPLOYED PERSONS WITH SELECTED QUALIFICATIONS(a), By industry by qualification

Industry	HIGHEST EDUCATIONAL ATTAINMENT						Total	Percentage of industry employment
	Doctoral degree	Master's degree	Graduate diploma	Graduate certificate	Bachelor degree	Advanced diploma		
	'000	'000	'000	'000	'000	'000	'000	%
Agriculture, forestry and fishing	1	1	2	—	17	11	31	9
Mining	—	2	1	—	10	2	15	20
Manufacturing	2	10	6	1	80	28	128	13
Electricity, gas and water supply	—	2	1	—	9	2	14	23
Construction	—	2	1	—	21	11	36	6
Wholesale trade	1	5	3	—	37	14	59	13
Retail trade	1	4	5	—	62	26	97	8
Accommodation, cafes and restaurants	—	2	2	—	25	13	41	10
Transport and storage	—	3	2	—	24	15	45	13
Communication services	—	3	1	—	18	5	28	19
Finance and insurance	1	10	6	1	62	14	93	30
Property and business services	10	35	19	2	227	46	340	37
Government administration and defence	3	15	13	2	74	15	124	33
Education	21	41	60	2	208	58	390	65
Health and community services	14	21	23	4	215	66	343	43
Cultural and recreational services	1	4	5	—	31	9	50	25
Personal and other services	1	4	4	1	28	13	52	17
Not stated/non-classifiable	1	2	1	—	12	5	20	11
Total	56	166	155	15	1 161	354	1 907	23

— nil or rounded to zero (including null cells)

Source: ABS data available on request, 2001 Census of Population and Housing.

(a) Excludes overseas visitors.

3.8 AVERAGE ANNUAL INCOME OF EMPLOYED PERSONS WITH SELECTED QUALIFICATIONS(a), By occupation by sex by qualification

	HIGHEST EDUCATIONAL ATTAINMENT						Total
	Doctoral degree	Master's degree	Graduate diploma	Graduate certificate	Bachelor degree	Advanced diploma	
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	
.....							
Selected occupations							
Males	65	62	58	60	58	54	58
Females	57	52	45	48	44	39	44
Persons	63	58	50	52	51	45	51
Other occupations							
Males	54	56	50	56	45	42	46
Females	44	43	36	44	32	28	32
Persons	51	51	42	51	39	34	39
All occupations							
Males	64	60	56	59	54	47	54
Females	55	50	43	47	40	33	40
Persons	61	56	48	52	47	39	47

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

3.9 SELECTED HIGHER EDUCATION COURSE COMPLETIONS(a), By level of course by year

Level of course	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Higher Doctorate	57	50	53	49	55	57	62	65	19	16
Doctorate by Research	1 238	1 224	1 356	1 663	1 908	2 326	2 707	2 853	3 018	3 176
Doctorate by Coursework	—	—	—	—	3	3	9	14	13	45
Master's by Research	805	908	1 081	1 352	1 476	1 494	1 485	1 354	1 389	1 372
Master's by Coursework	4 678	6 104	7 552	8 979	10 008	11 160	12 499	13 863	14 185	14 423
Postgraduate Qual/Prelim.	921	949	887	311	311	303	279	201	242	101
Grad.(Post) Dip. — new area	9 993	10 097	10 421	11 633	11 513	11 970	12 114	11 629	10 665	10 817
Grad.(Post) Dip. — extended area	5 382	6 010	6 019	6 061	5 103	4 945	5 720	4 668	3 999	3 553
Graduate Certificate	612	1 319	2 164	2 890	3 688	4 829	4 858	5 259	6 064	7 056
Bachelor's Postgraduate	1 462	1 372	1 604	—	—	—	—	—	—	—
Bachelor's Graduate Entry	—	—	—	1 927	2 227	2 249	2 490	2 936	3 101	3 585
Bachelor's Honours	5 449	5 641	6 527	6 776	6 775	7 197	7 334	7 781	8 727	7 760
Bachelor's Pass	57 709	68 806	77 359	80 395	79 941	77 822	81 262	82 444	81 524	81 057
Advanced Diploma	9 543	6 567	4 068	1 606	1 181	1 071	961	805	920	820
Total	97 849	109 047	119 091	123 642	124 189	125 426	131 780	133 872	133 866	133 781

— nil or rounded to zero (including null cells)

(a) Excludes students from overseas.

Source: Department of Education, Science and Training, Students 2001, Selected Higher Education Statistics.

3.10**SELECTED VOCATIONAL COURSE COMPLETIONS, By level of course by year**

Level of course	1995	1996	1997	1998	1999	2000
Graduate Diploma	—	—	—	—	—	43
Graduate Certificate	—	—	—	—	286	255
Bachelor Degree	—	6	8	17	21	47
Advanced Diploma	114	1 629	2 846	3 489	4 961	5 356
Total	114	1 635	2 854	3 506	5 268	5 701

— nil or rounded to zero (including null cells)

Source: National Centre for Vocational Education Research.

3.11**SELECTED HIGHER EDUCATION COURSE COMMENCEMENTS(a), By level of course by year**

Level of course	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Higher Doctorate	131	97	89	76	46	50	59	8	2	—
Doctorate by Research	3 686	4 277	4 715	4 908	4 996	5 391	5 462	6 003	5 912	5 553
Doctorate by Coursework	—	—	5	55	67	181	112	153	157	189
Master's by Research	4 039	4 379	4 150	3 656	3 524	3 680	3 414	3 155	3 082	2 881
Master's by Coursework	12 744	14 214	15 080	16 782	17 763	18 596	18 399	18 438	18 828	20 052
Postgraduate Qual/Prelim.	2 106	2 007	912	1 027	774	585	432	453	277	303
Grad.(Post) Dip. — new area	14 928	15 786	16 371	16 521	18 190	17 227	15 104	13 594	12 668	12 369
Grad.(Post) Dip. — extended area	8 094	7 871	7 743	8 139	7 683	7 403	5 954	5 724	5 449	5 867
Graduate Certificate	1 906	2 817	3 928	5 173	6 104	6 194	7 105	8 171	8 513	9 102
Bachelor's Postgraduate	1 746	2 240	—	—	—	—	—	—	—	—
Bachelor's Graduate Entry	—	—	2 454	2 927	2 822	3 274	4 339	4 890	4 860	5 154
Bachelor's Honours	1 239	1 404	1 621	2 021	2 194	2 108	2 404	2 453	2 955	2 792
Bachelor's Pass	128 471	131 969	136 107	146 064	153 564	154 191	152 614	154 013	153 436	157 291
Advanced Diploma	2 459	1 301	1 572	1 344	1 807	1 426	1 439	1 549	1 445	1 359
Total	181 549	188 362	194 747	208 693	219 534	220 306	216 837	218 604	217 584	222 912

— nil or rounded to zero (including null cells)

(a) Excludes students from overseas.

Source: Department of Education, Science and Training, Students
2001, Selected Higher Education Statistics.

3.12 SELECTED HIGHER EDUCATION COURSE COMMENCEMENTS(a), By level of course by field of education by sex—2001

Level of course	Natural and physical sciences	Information technology	Engineering and related technologies	Architecture and building	Agriculture, environmental and related studies	Health	Education
MALES							
Doctorate by Research	563	122	379	47	133	330	191
Doctorate by Coursework	1	4	—	—	—	9	16
Master's by Research	178	52	254	37	55	109	148
Master's by Coursework	151	1 179	571	119	169	669	788
Postgraduate Qual/Prelim.	8	17	12	14	2	15	12
Grad.(Post) Dip. — new area	105	637	193	110	93	283	1 547
Grad.(Post) Dip. — extended area	78	780	116	59	22	280	188
Graduate Certificate	119	415	314	118	83	292	359
Bachelor's Graduate Entry	30	19	2	192	6	287	615
Bachelor's Honours	335	89	42	8	58	72	10
Bachelor's Pass	7 511	9 100	9 113	1 950	1 867	4 576	3 674
Advanced Diploma	25	15	35	15	198	116	26
Total	9 104	12 429	11 031	2 669	2 686	7 038	7 574
FEMALES							
Doctorate by Research	526	40	121	35	104	551	298
Doctorate by Coursework	1	—	—	—	—	5	12
Master's by Research	135	27	53	28	42	200	291
Master's by Coursework	114	504	140	125	161	1 808	2 013
Postgraduate Qual/Prelim.	7	5	3	10	2	56	27
Grad.(Post) Dip. — new area	99	322	47	40	91	1 029	3 122
Grad.(Post) Dip. — extended area	108	365	34	43	21	1 233	365
Graduate Certificate	103	188	62	34	54	1 123	1 021
Bachelor's Graduate Entry	13	8	1	101	2	441	2 160
Bachelor's Honours	450	20	6	12	69	188	41
Bachelor's Pass	9 065	3 052	1 653	1 358	1 813	14 258	12 419
Advanced Diploma	2	11	1	2	65	104	75
Total	10 623	4 542	2 121	1 788	2 424	20 996	21 844
PERSONS							
Doctorate by Research	1 089	162	500	82	237	881	489
Doctorate by Coursework	2	4	—	—	—	14	28
Master's by Research	313	79	307	65	97	309	439
Master's by Coursework	265	1 683	711	244	330	2 477	2 801
Postgraduate Qual/Prelim.	15	22	15	24	4	71	39
Grad.(Post) Dip. — new area	204	959	240	150	184	1 312	4 669
Grad.(Post) Dip. — extended area	186	1 145	150	102	43	1 513	553
Graduate Certificate	222	603	376	152	137	1 415	1 380
Bachelor's Graduate Entry	43	27	3	293	8	728	2 775
Bachelor's Honours	785	109	48	20	127	260	51
Bachelor's Pass	16 576	12 152	10 766	3 308	3 680	18 834	16 093
Advanced Diploma	27	26	36	17	263	220	101
Total	19 727	16 971	13 152	4 457	5 110	28 034	29 418

— nil or rounded to zero (including null cells)

Source: Department of Education, Science and Training, Students 2001, Selected Higher Education Statistics.

(a) Excludes students from overseas.

3.12**SELECTED HIGHER EDUCATION COURSE COMMENCEMENTS(a), By level of course by field of education by sex—2001** *continued*

<i>Level of course</i>	<i>Management and commerce</i>	<i>Other</i>	<i>Total(b)</i>
MALES			
Doctorate by Research	252	680	2 697
Doctorate by Coursework	21	25	76
Master's by Research	102	426	1 361
Master's by Coursework	4 609	1 481	9 734
Postgraduate Qual/Prelim.	1	45	126
Grad.(Post) Dip. — new area	1 062	844	4 874
Grad.(Post) Dip. — extended area	402	430	2 347
Graduate Certificate	2 139	460	4 299
Bachelor's Graduate Entry	50	454	1 654
Bachelor's Honours	102	408	1 071
Bachelor's Pass	15 656	18 176	65 131
Advanced Diploma	131	150	711
Total	24 527	23 579	94 081
FEMALES			
Doctorate by Research	177	1 008	2 856
Doctorate by Coursework	15	80	113
Master's by Research	87	657	1 520
Master's by Coursework	2 926	2 532	10 318
Postgraduate Qual/Prelim.	3	64	177
Grad.(Post) Dip. — new area	964	1 781	7 495
Grad.(Post) Dip. — extended area	377	1 001	3 520
Graduate Certificate	1 379	839	4 803
Bachelor's Graduate Entry	26	748	3 500
Bachelor's Honours	87	910	1 721
Bachelor's Pass	18 140	38 562	92 160
Advanced Diploma	88	300	648
Total	24 269	48 482	128 831
PERSONS			
Doctorate by Research	429	1 688	5 553
Doctorate by Coursework	36	105	189
Master's by Research	189	1 083	2 881
Master's by Coursework	7 535	4 013	20 052
Postgraduate Qual/Prelim.	4	109	303
Grad.(Post) Dip. — new area	2 026	2 625	12 369
Grad.(Post) Dip. — extended area	779	1 431	5 867
Graduate Certificate	3 518	1 299	9 102
Bachelor's Graduate Entry	76	1 202	5 154
Bachelor's Honours	189	1 318	2 792
Bachelor's Pass	33 796	56 738	157 291
Advanced Diploma	219	450	1 359
Total	48 796	72 061	222 912

(a) Excludes students from overseas.

(b) The data takes into account the coding of Combined Courses to two fields of education. As a consequence, counting both fields of education for Combined Courses means that the totals may be less than the sum of all broad fields of education.

Source: Department of Education, Science and Training, Students 2001, Selected Higher Education Statistics.

CHAPTER 4

PERSONS IN SELECTED OCCUPATIONS

SELECTED OCCUPATIONS

Of the 1,869,000 persons working in selected occupations in August 2001, 362,000 (19%) were employed as Education professionals, 355,000 (19%) as Specialist managers and 292,000 (16%) as Health professionals. The number of persons working in selected occupations increased by 16% between 1996 and 2001, with the largest increase (56%) being recorded by Computing professionals.

AGE AND SEX

There were 140,000 persons aged 15–24 years employed in selected occupations (accounting for 7% of the total), 504,000 persons aged 25–34 (27%), 538,000 persons aged 35–44 (29%), 482,000 persons aged 45–54 (26%), 175,000 persons aged 55–64 (9%) and 30,000 persons aged 65 and over (2%). In general, the females tended to be younger than the males, with 38% of the females being aged 15–34 years compared with 31% of the males and only 9% of the females being aged 55 and over compared with 13% of the males.

In total, males accounted for 51% of persons employed in selected occupations (down from 53% in 1996). Males dominated in the occupations of Building and engineering professionals (91% male), Computing professionals (79% male), Specialist managers (68% male) and Natural and physical science professionals (63% male), while females dominated in the occupations of Health professionals (74% female) and Education professionals (68% female).

INDUSTRY

The industries with the largest numbers of persons in selected occupations were Education (418,000), Property and business services (366,000) and Health and community services (352,000). These industries also had the highest percentages of persons in selected occupations (70%, 40% and 44% respectively).

The industries with the lowest percentages of persons in selected occupations were Agriculture, forestry and fishing (3%), Accommodation, cafes and restaurants (3%), Construction (4%) and Retail trade (5%).

SELECTED QUALIFICATIONS

In total, 67% of persons in selected occupations had selected qualifications; 62% of the males and 72% of the females. A higher percentage of males in selected occupations had Postgraduate degrees than females (11% compared with 7%).

INCOME

The average annual income of persons in selected occupations in August 2001 was \$48,000. Persons with selected qualifications had a higher average annual income (\$51,000) than those without such qualifications (\$43,000). In fact, regardless of occupation, persons with selected qualifications consistently had a higher average annual income than those without such qualifications.

Similarly, regardless of occupation or qualification, males consistently had a higher average annual income than females.

INCOME *continued*

Male Specialist managers with selected qualifications had the highest average annual income (\$67,000), while female Education professionals without such qualifications had the lowest (\$28,000).

DURATION OF CURRENT JOB

Generally, persons in selected occupations stay in the same job for longer than persons in other occupations. Only 19% of persons in selected occupations had been in their current job for under a year, while 28% had been in their current job for 10 years or more. For persons in other occupations, 24% had been in their current job for under a year and 23% had been in their current job for 10 years or more.

Of the persons in selected occupations, Computing professionals had the shortest time in their current job with 55% having been in their job for less than 3 years.

JOB MOBILITY

Approximately 290,000 persons in selected occupations in February 2002 had changed their jobs in the preceding 12 months. Of these, 55,000 (19%) were inflows from other occupations while the remainder were internal flows (i.e. were already employed in selected occupations). In the same period, 36,000 persons who were employed in selected occupations moved to other occupations.

The percentage of persons in selected occupations in February 2002 who had changed their job (14%) was similar to that for those in other occupations (15%). Within selected occupations the percentage ranged from 10% for Education professionals to 17% for Specialist managers, Building and engineering professionals and Computing professionals.

INTERNATIONAL MIGRATION

In 2001–02, there were 307,713 persons aged 15 years and over who arrived in Australia permanently or long-term (of which 79,179 or 26% had stated selected occupations) and 193,273 persons who departed permanently or long-term (of which 60,392 or 31% had stated selected occupations), resulting in a net gain of 114,440 persons (18,787 of which had stated selected occupations).

Of those with stated selected occupations, males accounted for 56% of the persons who arrived permanently or long-term, 54% of the persons who departed permanently or long-term and 63% of the net gain.

4.1**PERSONS IN SELECTED OCCUPATIONS(a), By age by occupation by sex****PROFESSIONALS**

<i>Age group (years)</i>	<i>Specialist managers</i>	<i>Natural and physical science</i>	<i>Building and engineering</i>	<i>Computing</i>	<i>Health</i>	<i>Education</i>	<i>Other</i>	<i>Total</i>
	'000	'000	'000	'000	'000	'000	'000	'000
15-24	7	2	6	13	3	6	25	62
25-34	51	9	22	37	17	21	83	240
35-44	82	10	22	30	21	30	84	278
45-54	74	8	21	16	19	41	78	255
55-64	26	3	10	3	10	16	37	106
65 and over	3	1	2	—	4	2	9	21
<i>Total</i>	<i>243</i>	<i>32</i>	<i>82</i>	<i>99</i>	<i>75</i>	<i>115</i>	<i>315</i>	<i>962</i>

MALES

15-24	7	2	6	13	3	6	25	62
25-34	51	9	22	37	17	21	83	240
35-44	82	10	22	30	21	30	84	278
45-54	74	8	21	16	19	41	78	255
55-64	26	3	10	3	10	16	37	106
65 and over	3	1	2	—	4	2	9	21
<i>Total</i>	<i>243</i>	<i>32</i>	<i>82</i>	<i>99</i>	<i>75</i>	<i>115</i>	<i>315</i>	<i>962</i>

FEMALES

15-24	6	3	1	3	13	18	34	78
25-34	35	8	4	11	53	55	98	264
35-44	33	5	2	9	68	71	71	260
45-54	28	3	1	4	59	78	53	226
55-64	8	1	—	1	20	22	17	70
65 and over	1	—	—	—	2	2	3	9
<i>Total</i>	<i>111</i>	<i>19</i>	<i>8</i>	<i>28</i>	<i>217</i>	<i>246</i>	<i>277</i>	<i>907</i>

PERSONS

15-24	13	5	7	16	16	24	60	140
25-34	87	17	26	48	70	75	181	504
35-44	115	15	23	38	90	101	155	538
45-54	102	11	22	19	78	119	131	482
55-64	34	4	10	4	31	38	54	175
65 and over	4	1	2	—	7	5	12	30
<i>Total</i>	<i>355</i>	<i>51</i>	<i>90</i>	<i>126</i>	<i>292</i>	<i>362</i>	<i>593</i>	<i>1 869</i>

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

4.2

PERSONS IN SELECTED OCCUPATIONS(a), By industry by occupation

PROFESSIONALS									
	<i>Specialist managers</i>	<i>Natural and physical science</i>	<i>Building and engineering</i>	<i>Computing</i>	<i>Health</i>	<i>Education</i>	<i>Other</i>	<i>Total</i>	<i>Proportion of industry employment</i>
<i>Industry</i>	'000	'000	'000	'000	'000	'000	'000	'000	%
Agriculture, forestry and fishing	2	4	—	—	—	—	4	11	3
Mining	5	3	4	1	—	—	4	17	22
Manufacturing	68	5	18	9	1	1	59	160	16
Electricity, gas and water supply	4	1	4	2	—	—	4	15	25
Construction	8	—	7	1	—	—	7	23	4
Wholesale trade	35	1	3	6	1	—	25	70	16
Retail trade	28	1	1	4	12	1	19	65	5
Accommodation, cafes and restaurants	5	—	—	—	—	—	6	12	3
Transport and storage	16	—	2	3	—	—	20	40	11
Communication services	9	—	3	7	—	—	9	29	19
Finance and insurance	22	—	—	12	—	—	27	62	20
Property and business services	51	15	39	65	4	3	190	366	40
Government administration and defence	28	5	7	8	4	5	54	110	30
Education	33	5	1	5	3	340	32	418	70
Health and community services	19	9	1	2	263	4	54	352	44
Cultural and recreational services	12	2	—	2	—	3	42	61	30
Personal and other services	8	1	—	1	1	2	30	43	14
Not stated/ non-classifiable	2	—	1	1	2	2	6	15	8
Total	355	51	90	126	292	362	593	1 869	23

— nil or rounded to zero (including null cells)

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

4.3**PERSONS IN SELECTED OCCUPATIONS(a), By occupation by year by sex**

<i>Occupation</i>	<u>1996</u>			<u>2001</u>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
	'000	'000	'000	'000	'000	'000
<hr/>						
<i>Specialist managers</i>	210	88	298	243	111	355
<i>Professionals</i>						
Natural and physical science						
Chemists	4	2	6	3	2	5
Environmental and agricultural science	10	2	12	12	5	17
Medical scientists	4	6	10	4	7	11
Other natural and physical science	10	3	13	13	5	18
<i>Total</i>	27	13	40	32	19	51
Building and engineering						
Architects and landscape architects	9	2	11	10	3	13
Civil engineers	12	1	13	14	1	15
Electrical and electronics engineers	14	1	15	14	1	15
Other building and engineering	48	3	51	44	3	48
<i>Total</i>	82	6	88	82	8	90
<i>Computing</i>	63	18	81	99	28	126
<i>Health</i>						
Medical practitioners	31	13	44	32	16	48
Nursing	13	148	161	15	157	172
Other health	25	35	60	28	43	72
<i>Total</i>	69	197	266	75	217	292
<i>Education</i>						
School teachers	68	167	235	69	187	256
University and vocational education teachers	34	27	61	31	26	58
Other education	10	26	36	15	33	48
<i>Total</i>	113	221	334	115	246	362
<i>Other</i>	285	214	499	315	277	593
Total	851	756	1 607	962	907	1 869

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

4.4**PERCENTAGE OF PERSONS IN SELECTED OCCUPATIONS WITH QUALIFICATIONS(a),
By occupation by level of qualification by sex**

Occupation	PERCENTAGE WITH SELECTED QUALIFICATIONS(b)			PERCENTAGE WITH POSTGRADUATE DEGREES (b)(c)		
	Males	Females	Persons	Males	Females	Persons
	%	%	%	%	%	%
.....						
<i>Specialist managers</i>	44	53	47	9	9	9
Professionals						
Natural and physical science						
Chemists	80	76	78	19	12	16
Environmental and agricultural science	64	80	68	17	15	16
Medical scientists	92	89	90	39	19	26
Other natural and physical science	90	89	89	43	31	39
<i>Total</i>	79	85	81	30	21	27
Building and engineering						
Architects and landscape architects	86	87	86	7	8	7
Civil engineers	80	86	81	12	12	12
Electrical and electronics engineers	62	77	63	9	12	9
Other building and engineering	63	75	63	9	11	10
<i>Total</i>	68	81	70	9	10	10
<i>Computing</i>	58	59	58	8	7	8
Health						
Medical practitioners	92	91	92	28	20	25
Nursing	78	77	77	3	2	2
Other health	90	85	87	11	7	8
<i>Total</i>	88	79	82	17	4	7
Education						
School teachers	92	91	91	9	5	6
University and vocational education teachers	81	82	82	45	33	40
Other education	63	64	64	14	10	11
<i>Total</i>	85	86	86	19	9	12
<i>Other</i>	58	60	59	8	8	8
Total	62	72	67	11	7	9
.....						

(a) Excludes overseas visitors.

(b) Percentages may be understated due to qualifications being inadequately described or not stated in some instances.

(c) Includes Doctoral and Masters degrees.

Source: ABS data available on request, 2001 Census of Population and Housing.

4.5 AVERAGE ANNUAL INCOME OF PERSONS IN SELECTED OCCUPATIONS (a), By qualification by sex by occupation

PROFESSIONALS								
	<i>Specialist managers</i>	<i>Natural and physical science</i>	<i>Building and engineering</i>	<i>Computing</i>	<i>Health</i>	<i>Education</i>	<i>Other</i>	<i>Total</i>
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
.....								
Selected qualifications								
Males	67	56	58	61	62	52	55	58
Females	58	44	46	55	41	42	45	44
Persons	64	51	57	60	46	45	50	51
Other qualifications								
Males	54	43	49	53	48	35	44	49
Females	44	32	33	46	30	28	34	35
Persons	52	40	48	52	33	30	39	43
All qualifications								
Males	60	53	55	58	60	50	50	55
Females	52	42	44	52	39	40	41	42
Persons	57	49	54	56	44	43	46	48

(a) Excludes overseas visitors.

Source: ABS data available on request, 2001 Census of Population and Housing.

4.6**PERSONS WHO WERE EMPLOYED AT FEBRUARY 2002(a), By duration of current job by occupation**

PROFESSIONALS										
<i>Duration</i>	<i>Specialist Managers</i>	<i>Natural and physical science</i>	<i>Building and engineering</i>	<i>Computing</i>	<i>Health</i>	<i>Education</i>	<i>Other</i>	<i>Total selected occupations</i>	<i>Other occupations</i>	<i>Total</i>
NUMBER ('000)										
Under 1 year	61	14	27	44	59	52	132	389	1 682	2 071
1 and under 3 years	67	11	24	52	63	58	155	429	1 612	2 041
3 years and under 5 years	41	12	17	29	38	37	92	265	973	1 238
5 years and under 10 years	60	14	21	29	67	67	112	369	1 169	1 538
10 years and under 20 years	66	9	20	17	57	82	94	344	1 044	1 389
20 years and over	39	8	15	6	24	67	48	207	577	784
<i>Total</i>	<i>334</i>	<i>67</i>	<i>123</i>	<i>176</i>	<i>309</i>	<i>363</i>	<i>632</i>	<i>2 003</i>	<i>7 058</i>	<i>9 061</i>
PROPORTION (%)										
Under 1 year	18	20	22	25	19	14	21	19	24	23
1 and under 3 years	20	16	19	29	21	16	24	21	23	23
3 years and under 5 years	12	17	14	16	12	10	14	13	14	14
5 years and under 10 years	18	21	17	16	22	18	18	18	17	17
10 years and under 20 years	20	13	16	9	18	23	15	17	15	15
20 years and over	12	12	12	4	8	18	8	10	8	9
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

(a) Overseas residents in Australia are not included.

Source: ABS data available on request, Labour Mobility, Australia, February 2002.

4.7 PERSONS WHO WERE EMPLOYED AT FEBRUARY 2002(a), By job mobility by occupation

PROFESSIONALS										
Job mobility	Specialist Managers	Natural and physical science	Building and engineering	Computing	Health	Education	Other	Total selected occupations	Other occupations	Total
NUMBER ('000)										
Did not change job	277	57	102	146	270	326	535	1 713	6 031	7 744
Changed job(b)										
Last job										
Selected										
occupation	48	8	18	28	30	29	74	235	36	271
Other	9	*1	*3	*3	9	8	23	55	991	1 046
Total	56	9	21	30	39	37	97	290	1 027	1 317
Total	334	67	123	176	309	363	632	2 003	7 058	9 061
PROPORTION (%)										
Did not change job	83	86	83	83	87	90	85	86	85	85
Changed job(b)										
Last job										
Selected										
occupation	14	12	15	16	10	8	12	12	1	3
Other	3	2	2	2	3	2	4	3	14	12
Total	17	14	17	17	13	10	15	14	15	15
Total	100	100	100	100	100	100	100	100	100	100

* estimate is subject to sampling variability too high for most practical purposes

(a) Overseas residents in Australia are not included.

(b) Persons who ceased a job during the year ended February 2002 and were working at February 2002.

Source: ABS data available on request, Labour Mobility, Australia, February 2002.

4.8**PERSONS AGED 15 YEARS AND OVER, ARRIVING AND DEPARTING PERMANENTLY OR LONG TERM, By occupation by sex—2001–02**

<i>Occupation</i>	<i>Arrivals</i> no.	<i>Departures</i> no.	<i>Net gain</i> no.
.....			
MALES			
Persons in selected occupations			
Specialist managers	4 855	2 585	2 270
Professionals			
Natural and physical science	1 415	1 247	168
Building and engineering	8 521	6 326	2 195
Computing	7 210	3 430	3 780
Health	3 384	2 460	924
Education	4 170	3 955	215
Other	15 116	12 857	2 259
<i>Total</i>	44 671	32 860	11 811
Other occupations	46 900	37 925	8 975
Not stated/inadequately described	10 111	6 053	4 058
Not applicable(a)	53 573	23 185	30 388
<i>Total</i>	155 255	100 023	55 232
.....			
FEMALES			
Persons in selected occupations			
Specialist managers	1 907	1 255	652
Professionals			
Natural and physical science	909	783	126
Building and engineering	1 423	805	618
Computing	2 268	985	1 283
Health	7 272	5 956	1 316
Education	6 831	6 136	695
Other	13 898	11 612	2 286
<i>Total</i>	34 508	27 532	6 976
Other occupations	34 210	28 960	5 250
Not stated/inadequately described	12 038	5 567	6 471
Not applicable(a)	71 702	31 191	40 511
<i>Total</i>	152 458	93 250	59 208
.....			
PERSONS			
Persons in selected occupations			
Specialist managers	6 762	3 840	2 922
Professionals			
Natural and physical science	2 324	2 030	294
Building and engineering	9 944	7 131	2 813
Computing	9 478	4 415	5 063
Health	10 656	8 416	2 240
Education	11 001	10 091	910
Other	29 014	24 469	4 545
<i>Total</i>	79 179	60 392	18 787
Other occupations	81 110	66 885	14 225
Not stated/inadequately described	22 149	11 620	10 529
Not applicable(a)	125 275	54 376	70 899
<i>Total</i>	307 713	193 273	114 440

(a) Includes retired, pensioners, disabled, housekeepers, students and unemployed.

Source: ABS data available on request, Overseas arrivals and departures.

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents data on human resources by selected qualifications and occupations. It follows definitions and guidelines in the OECD's manual, *The Measurement of Scientific and Technological Activities, Manual on the Measurement of Human Resources Devoted to S&T* ('Canberra Manual').

DEFINITIONS

2 The selected qualifications are post-secondary school qualifications at ASCED levels:

- broad level 1, Postgraduate degree (including Doctoral and Master degree levels)
- broad level 2, Graduate diploma and graduate certificate
- broad level 3, Bachelor degree
- detailed level 411, Advanced diploma.

3 The minimum entry requirement for these courses is usually the completion of Year 12. Typically the courses have a minimum duration of three years full-time study.

4 The selected occupations are those classified as ASCO occupations:

- sub-major group 12, Specialist managers
- major group 2, Professionals.

5 These occupations are defined in ASCO as the most highly skilled in the workforce and come under skill level 1.

DATA SOURCES

6 Data presented in this publication were obtained from:

- the ABS 1991, 1996 and 2001 Censuses of Population and Housing
- the ABS Labour Mobility Survey, February 2002
- the ABS publication *Migration, Australia, 1999–2000*
- the Department of Education, Science and Training publication *Students 2001, Selected Higher Education Statistics*
- the National Centre for Vocational Education Research national vocational education and training (VET) data collection.

7 For tables sourced from the Census of Population and Housing, the population was all persons aged 15 years and over in place of usual residence. Persons classified as overseas visitors were excluded. Australians overseas were out of scope and there was no adjustment for under enumeration.

8 The Census aims to count every person who spent Census Night in Australia. This includes Australian residents in Antarctica and people in the territories of Jervis Bay, Cocos (Keeling) Islands and Christmas Island. The other Australian External Territories, Norfolk Island and minor islands such as Heard and McDonald Islands, are outside the scope of the Australian Census. The only people in Australia on Census Night who are excluded from the Census are foreign diplomats and their families.

9 Overseas visitors were defined differently for the 2001 Census. For the 1996 Census, overseas visitors were defined as any person who stated they would be in Australia for less than 6 months. For the 2001 Census, they were defined as any person who stated they would be in Australia for less than 12 months.

10 Income data in the 2001 Population Census were collected in ranges, not actual dollars, as this has proven to be the most reliable way to collect income data. Average annual incomes were calculated using the range data and mean values from the Survey of Income and Housing Costs.

DATA SOURCES *continued*

11 The February 2002 Labour Mobility Survey was conducted as a supplement to the Labour Force Survey (LFS). Respondents to the LFS who fell within the scope of the supplementary survey were asked further questions.

12 The Labour Force Survey includes all persons aged 15 years and over except:

- members of the permanent defence forces
- certain diplomatic personnel of overseas governments customarily excluded from census and estimated populations
- overseas residents in Australia
- members of non-Australian defence forces (and their dependants).

13 The Labour Mobility Survey was restricted to persons aged less than 70 years who had worked at some time during the year ending February 2002.

14 Persons arriving in, or departing from, Australia provide information in the form of incoming and outgoing passenger cards. Incoming persons also provide information in visa applications, apart from people travelling as Australian and New Zealand citizens. These and other information available to the Department of Immigration and Multicultural Affairs serve as the source for statistics of overseas arrivals and departures published by the Australian Bureau of Statistics (ABS).

CLASSIFICATION OF
EDUCATION

15 In 2001, the *ABS Classification of Qualifications (ABSCQ)* (cat. no. 1262.0) was replaced by the *Australian Standard Classification of Education (ASCED)* (cat. no. 1272.0). 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.

CLASSIFICATION OF
OCCUPATION

16 Occupation data have been classified according to the *ASCO—Australian Standard Classification of Occupations, Second Edition* (cat. no. 1220.0). ASCO is a skill-based classification of occupations.

CLASSIFICATION OF
INDUSTRY

17 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).

DATA QUALITY

18 The errors that can occur in data from Population Censuses are termed non-sampling errors. In an estimate based on a sample survey, such as the Labour Mobility Survey, two types of error are possible: sampling error and non-sampling error.

19 Non-sampling error arises from inaccuracies in collecting, recording and processing the data. The most significant of these errors are: misreporting of data items; deficiencies in coverage; non-response; and processing errors. Every effort is made to minimise non-sampling error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures.

20 Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors. Details of sampling error in the Labour Mobility Survey can be found in *Labour Mobility, Australia, February 2002* (cat. no. 6209.0).

RELATED PUBLICATIONS

21 Users may also wish to refer to the following publications:

RELATED PUBLICATIONS

*continued**Australian Standard Classification of Education (ASCED)* cat. no. 1272.0*ASCO—Australian Standard Classification of Occupations, Second Edition*
cat. no. 1220.0*Human Resources in Science and Technology (HRST), Australia, 1996*
cat. no. 8149.0*Labour Mobility, Australia, February 2002* cat. no. 6209.0Eurostat, *Community Labour Force Surveys*OECD, *Main Science and Technology Indicators, 2002–1*OECD, *The Measurement of Scientific and Technological Activities, Manual on the Measurement of Human Resources Devoted to S&T ('Canberra Manual')*, OECD Paris, 1995

ROUNDING

22 Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

GLOSSARY

Advanced diploma	A qualification awarded for the successful completion of a course providing a specialised knowledge base with depth in some areas and wide-ranging, highly specialised technical, creative or conceptual skills.
Bachelor degree	A qualification awarded for the successful completion of a course which provides a systematic and coherent broad body of knowledge, the underlying principles and concepts and the associated communication and problem-solving skills. This degree level develops the academic skills necessary to comprehend and evaluate new information, concepts and evidence from a range of sources.
Current job	The job in which the person worked for an employer/business in the week before the survey. Where the person worked in more than one job during this period, the main job, i.e. the job in which most hours were usually worked, was regarded as the current job.
Doctoral degree	A qualification awarded for the successful completion of a course involving a significant contribution to the knowledge and understanding within a particular field, and to the application of knowledge within that field.
Employed	For census purposes, persons aged 15 years and over who during the reference week: worked for payment or profit, or as an unpaid helper in a family business; or had a job from which they were on leave or otherwise temporarily absent; or were on strike or stood down temporarily.
Field of education	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.
Graduate certificate	A qualification awarded for the successful completion of a course which provides graduate specialisation within a systematic and coherent body of knowledge, and develops or broadens vocational knowledge and skills or recognises some practical experience in a new or existing field of professional study.
Graduate diploma	A qualification awarded for the successful completion of a course which provides extended graduate specialisation within a systematic and coherent body of knowledge, develops or broadens vocational knowledge and skills in a new or existing field of professional study, and develops practical experience in a chosen professional activity.
Highest educational attainment	Level of highest 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 fields 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.
Labour force	Comprises persons employed and persons unemployed as defined in this glossary.
Last job	The last job in which employment ceased during the reference period.
Long-term arrivals	Comprise overseas visitors who intend to stay in Australia for 12 months or more (but not permanently) and Australian residents returning after an absence of 12 months or more overseas.
Long-term departures	Comprise Australian residents who intend to stay abroad for 12 months or more (but not permanently) and overseas visitors departing who stayed 12 months or more in Australia.

Master's degree	A qualification awarded for the successful completion of a course providing in-depth study leading to greater understanding in a particular field, or to professional and vocational development in that field.
Not in the labour force	Persons aged 15 years and over not in the categories employed or unemployed as defined in this glossary.
Participation rate	For any group, the labour force expressed as a percentage of the civilian population aged 15 years and over in the same group.
Professionals	Persons who perform analytical, conceptual and creative tasks through the application of theoretical knowledge and experience in the fields of science, engineering, business and information, health, education, social welfare and the arts.
Selected occupations	Includes Specialist managers and Professionals.
Selected qualifications	Includes Advanced diploma, Bachelor degree, Graduate certificate, Graduate diploma, Master degree and Doctoral degree levels.
Specialist managers	Persons who coordinate the administration and operation of specialised functions or fields of activity within an organisation. Under broad direction from the General manager, they plan, administer and review the financial, corporate, personnel, supply and distribution, information technology, sales and marketing, and other specialised activities of an organisation.
Unemployed	For census purposes, persons aged 15 years and over who do not have a job but are actively looking for employment and available to start work.
Unemployment rate	For any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

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<i>CPI INFOLINE</i>	For current and historical Consumer Price Index data, call 1902 981 074 (call cost 77c per minute).
<i>DIAL-A-STATISTIC</i>	For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

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2814900001016
ISBN 0 642 47877 5

RRP \$23.00