

Chapter 5

Education

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Jell's Park - children grouped around fire

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OVERVIEW

This chapter provides an overview of Education in Victoria, including details of the numbers of schools, teachers and students. Information relating to higher education and TAFE is also included.

In economic terms, the Education industry sector contributed 5.1% of the total Victorian Gross State Product (GSP) at factor cost in 1995–96. Victoria's percentage share of the national Gross Domestic Product (GDP) at factor cost for the Education sector was 27.5%.

Schools and teachers

There were 2,379 schools in Victoria in 1996, 7 schools fewer than in 1995. Government schools decreased by 11 while non-government schools increased by 4. The total enrolment of students in all Victorian schools in 1996 was 776,455, a marginal increase of 0.8% over the previous year. Of the total students enrolled, 56% were in primary schools and 44% were in secondary schools.

Government schools, which constituted 71% of total schools, had a student enrolment of 517,062, which represented an increase of 0.4% over 1995, while non-government school enrolments increased 1.5% over the same period to 259,393 students in 1996. Catholic schools comprised 73% of the 679 non-government schools in Victoria. Of students attending non-government schools, there were 176,080 (68%) enrolled in Catholic schools, 25,290 (10%) in Anglican schools and 58,023 (22%) in other non-government schools. The proportion of students enrolled in non-government schools was higher at secondary level, with the highest proportion (41%) being recorded in Year 12. Overall, 33% of students were enrolled in non-Government schools.

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Jell's Park - children planting trees
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Apparent retention rates are measures of the tendencies of students to remain in secondary education from Year 7 to the senior years of secondary schooling. The apparent retention rate to Year 12 increased from 47% in 1986 to 81% in 1992 and declined to 75% in 1996 (government schools 69%; non-government schools 86%).

The number of teaching staff (expressed in full-time equivalent units) increased by 0.5%, from 51,065 in 1995 to 51,340 in 1996. The average number of students per full-time teaching staff was 15.0 for non-government and 15.2 for government schools. The average ratios for all schools were 18.3 for primary and 12.4 for secondary schools.

5.1 SCHOOLS, STUDENTS, AND TEACHING STAFF(a), VICTORIA

Year	Government			Non-government			Total		
	Schools	Students	Teaching staff	Schools	Students	Teaching staff	Schools	Students	Teaching staff
1991	2 029	533 386	39 447	696	256 127	16 421	2 725	789 513	55 868
1992	2 013	533 909	40 550	687	253 713	16 192	2 700	787 622	56 741
1993	1 934	526 636	37 551	683	250 961	16 227	2 617	777 597	53 778
1994	1 731	520 328	34 635	679	252 866	16 661	2 410	773 194	51 295
1995	1 711	514 805	34 106	675	255 472	16 959	2 386	770 277	51 065
1996	1 700	517 062	34 045	679	259 393	17 295	2 379	776 455	51 340

(a) Number of full-time teaching staff plus full-time equivalents of part-time teaching staff.

Source: *Schools, Australia* (Cat. no. 4221.0).

5.2 NUMBER OF FULL-TIME STUDENTS: CATEGORY OF SCHOOL AND YEAR OF EDUCATION, VICTORIA, 1996

		Non-government(a)				All schools		
Year of education	Government schools	Anglican	Catholic	Other	Total	Males	Females	Persons
Primary								
Preparatory	45 634	889	15 435	3 194	19 518	33 604	31 548	65 152
Year 1	42 579	867	14 552	3 054	18 473	31 581	29 471	61 052
Year 2	44 213	878	14 678	3 148	18 704	32 121	30 796	62 917
Year 3	42 642	942	14 199	3 150	18 291	31 101	29 832	60 933
Year 4	42 485	1 026	14 065	3 315	18 406	31 236	29 655	60 891
Year 5	42 300	1 274	13 933	3 507	18 714	31 229	29 785	61 014
Year 6	41 983	1 351	14 254	3 738	19 343	31 263	30 063	61 326
Ungraded	1 933	—	74	530	604	1 692	845	2 537
Total primary	303 769	7 227	101 190	23 636	132 053	223 827	211 995	435 822
Secondary								
Year 7	38 220	2 800	14 012	5 912	22 724	31 236	29 708	60 944
Year 8	37 738	2 892	13 812	5 810	22 514	31 051	29 201	60 252
Year 9	38 238	3 025	13 207	5 706	21 938	30 474	29 702	60 176
Year 10	36 126	3 153	12 344	5 736	21 233	28 888	28 471	57 359
Year 11	32 338	3 242	11 275	5 612	20 129	25 662	26 805	52 467
Year 12	26 823	2 951	10 158	5 255	18 364	21 031	24 156	45 187
Ungraded	3 810	—	82	356	438	2 590	1 658	4 248
Total secondary	213 293	18 063	74 890	34 387	127 340	170 932	169 701	340 633
Total	517 062	25 290	176 080	58 023	259 393	394 759	381 696	776 455

(a) Includes full-time students attending one special school administered by government authorities other than the Ministry of Education.

Source: *Schools, Australia* (Cat. no. 4221.0).

Higher education

The number of students attending a higher education institution (excluding TAFE) was 175,038 in 1996, an increase of 4% over the previous year. There were 4,552 additional students enrolled in Bachelor degree courses, a 4% increase. The number studying for Higher degree and Post-graduate courses increased by 1,008 (5%) and 1,158 students (7%) respectively.

5.3 HIGHER EDUCATION: NUMBER OF STUDENTS BY LEVEL OF COURSE AND TYPE OF ENROLMENT, VICTORIA, 1996

	Level of course					Total
	Higher degree	Post-graduate	Bachelor	Other	Enabling(a)	
Institute of Higher Education						
University of Ballarat	197	369	3 557	43	—	4 166
Deakin University	2 079	3 968	20 163	2 022	—	28 232
La Trobe University	1 948	2 258	16 506	245	18	20 975
Marcus Oldham Farm Management College	—	—	—	86	—	86
Monash University	4 872	3 306	30 384	941	13	39 516
Royal Melbourne Institute of Technology	4 004	2 114	20 377	4	—	26 499
Swinburne University of Technology	852	1 236	7 685	—	2	9 775
University of Melbourne	4 772	3 889	21 614	1 212	12	31 499
Victoria University of Technology	1 158	1 773	10 732	627	—	14 290
Total higher education	19 882	18 913	131 018	5 180	45	175 038

(a) An enabling course is a program of study which provides bridging or supplementary education for the purpose of enabling a person to undertake an award course at that institution or at another institution.
Source: Department of Employment, Education and Training.

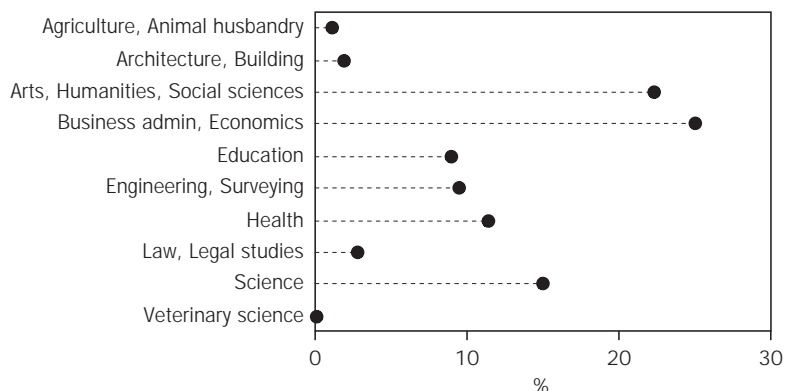
In 1996, the highest proportion of students were enrolled in Business, Administration or Economics (25%) and Arts, Humanities and the Social Sciences (22%). A further 15% of students were studying Science.

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PERCENTAGE OF STUDENTS(a) BY FIELD OF STUDY, VICTORIA, 1996



(a) Excludes TAFE students.

Source: Dept of Education, Employment and Training

5.4 HIGHER EDUCATION: NUMBER OF STUDENTS BY INSTITUTION AND FIELD OF STUDY, VICTORIA, 1996

Institute of Higher Education	Agriculture, Animal Husbandry	Architecture, Building	Arts, Humanities, Social Sciences	Business, Admin., Economics	Education	Engineering, Surveying
University of Ballarat	—	—	793	786	726	351
Deakin University	—	721	7 378	7 388	4 200	723
La Trobe University	168	—	7 059	3 128	1 925	732
Marcus Oldham Farm Management College	86	—	—	—	—	—
Monash University	—	—	8 283	11 368	2 422	3 904
Royal Melbourne Institute of Technology	—	1 820	3 961	8 422	1 451	4 490
Swinburne University of Technology	—	219	1 963	3 464	—	2 201
University of Melbourne	1 976	941	7 324	4 380	4 773	3 041
Victoria University of Technology	—	60	2 367	4 986	492	1 400
Total higher education	2 230	3 761	39 128	43 922	15 989	16 842

Institute of Higher Education	Health	Law, Legal Studies	Science	Veterinary Science	Non-award courses	Total
University of Ballarat	600	—	870	—	40	4 166
Deakin University	3 000	756	3 752	—	314	28 232
La Trobe University	4 664	434	2 676	—	189	20 975
Marcus Oldham Farm Management College	—	—	—	—	—	86
Monash University	4 098	2 215	6 625	—	601	39 516
Royal Melbourne Institute of Technology	2 729	233	3 393	—	—	26 499
Swinburne University of Technology	—	—	1 928	—	—	9 775
University of Melbourne	2 940	1 410	4 435	279	—	31 499
Victoria University of Technology	2 034	—	2 818	—	133	14 290
Total higher education	20 065	5 048	26 497	279	1 277	175 038

Source: Department of Employment, Education and Training.

TAFE

The number of students enrolled in TAFE (Technical and Further Education) courses in 1996 increased to 677,912, representing a 6% rise over the previous year. TAFE enrolments since 1991 (436,040 students) had increased by 55%.

Enrolments in vocational courses continued to increase, with a rise of 10% from 1995 to 1996. Since 1991, enrolments in vocational courses have increased by almost 90% from 263,796 to 496,324. In comparison, recreational course enrolments have fluctuated widely over the period 1991–1996, reaching a peak of 221,994 in 1992 before decreasing to 181,588 in 1996.

5.5 TAFE: NUMBER OF ENROLMENTS BY MAJOR STREAM GROUP AND SEX, VICTORIA

Year	Males			Females			Persons(a)		
	Voca- tional(b)	Recrea- tional(c)	Total	Voca- tional(b)	Recrea- tional(c)	Total	Voca- tional(b)	Recrea- tional(c)	Total
1991	148 090	35 880	183 970	115 706	136 364	252 070	263 796	172 244	436 040
1992	160 531	41 202	201 733	136 659	180 792	317 451	297 190	221 994	519 184
1993	181 495	35 536	217 031	167 061	166 888	333 949	348 556	202 424	550 980
1994	214 452	37 028	251 480	184 130	164 799	348 929	398 588	201 828	600 416
1995	242 066	34 621	276 687	207 294	154 464	361 758	449 469	189 112	638 581
1996	267 601	35 816	303 417	228 285	145 772	374 057	496 324	181 588	677 912

(a) Includes enrolments for students of unstated sex. (b) TAFE streams 2100 to 4500. (c) Stream 1000, Recreation, leisure and personal enrichment.

Source: Australian National Training Authority.

Almost a quarter of students (22%) in the TAFE vocational stream were studying Business administration and Economics. A further 14% were studying Engineering, Surveying and 21% were enrolled in TAFE multi-field education courses.

5.6 TAFE: NUMBER OF ENROLMENTS IN VOCATIONAL COURSES BY FIELD OF STUDY, VICTORIA, 1996

Field of study	no.	%
Land & Marine Resources, Animal Husbandry	26 862	5.4
Architecture, Building	33 018	6.7
Arts, Humanities & Social Sciences	33 766	6.8
Business Administration, Economics	110 989	22.4
Education	4 846	1.0
Engineering, Surveying	70 219	14.1
Health, Community Services	33 193	6.7
Law, Legal Studies	1 105	0.2
Science	28 082	5.7
Veterinary Science, Animal Care	332	0.1
Services, Hospitality, Transportation	49 191	9.9
TAFE Multi-field Education	104 721	21.1
Total(a)	496 324	100.0

(a) Students may enrol in more than one field of study thus causing the number of students enrolled by field of study to exceed the actual number of students enrolled.

Source: Australian National Training Authority.

Literacy

The Survey of Aspects of Literacy was conducted nationally between May and July 1996. The survey was designed to measure elements of literacy and numeracy skills necessary to use printed material found at work, home, and in the community.

The survey objectively assessed three types of literacy.

Prose:

- Ability to understand and use information from various kinds of prose texts, including texts from newspapers, magazines and brochures.

Document:

- Ability to locate and use information contained in materials such as tables, schedules, charts, graphs and maps.

Quantitative:

- Ability to perform arithmetic operations using numbers contained in printed texts or documents.

The survey defined literacy as a continuum for each of the three types of literacy. Progression along this continuum was characterised by increased ability to 'process' information and to draw correct inferences based on the information being used. To enable analysis, the three types of literacy were divided into five levels, with Level 1 referring to the lowest levels of literacy and Level 5 to the highest.

5.7 PERCENTAGE OF THE POPULATION AT EACH SKILL LEVEL, 1996

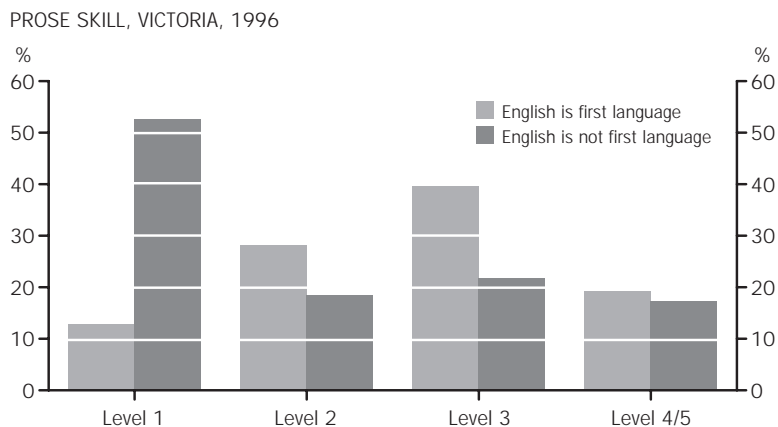
Level	Victoria			Australia		
	Prose	Document	Quantitative	Prose	Document	Quantitative
1	21.7	22.0	21.2	19.7	19.5	19.2
2	26.1	26.3	26.7	27.5	28.3	27.2
3	35.6	35.7	35.2	35.3	36.1	36.0
4/5	16.6	16.0	16.9	17.5	16.1	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Aspects of Literacy: Assessed Skill Levels, Australia (Cat. no. 4228.0)*.

Literacy Skills in Victoria

An estimated 3.3 million Victorians are represented in the results of the survey. The skill level distribution of Victorians was similar on each of the prose, document and quantitative literacy scales. Around 22% of Victorians had very poor skills (Level 1), and could be expected to experience considerable difficulties in using many of the printed materials that may be encountered in daily life. A further 26% were at Level 2, and could be expected to experience some difficulties in using many of the printed materials encountered in daily life. Level 3 was the largest category comprising one-third of Victorians whose skills would enable them to cope with many printed materials found in daily life and at work, though not always with a high level of proficiency. Almost 17% of Victorians were at Levels 4 and 5, representing good to very good skills; people at these levels are considered capable of managing the literacy demands of everyday life.

One characteristic strongly related to English literacy skill level was whether English was the first language spoken. Of the 735,100 people whose first language was not English, around 53% (386,500 people) were at Level 1 for prose literacy skills. In comparison, 13% of people whose first language was English were at Level 1 (prose), representing 335,000 people. Across the literacy categories (prose, document, quantitative), some 19–20% of those whose first language was English were at Level 4/5, compared with 6–7% for those whose first language was not English.



Source: *Aspects of Literacy* - unpublished data.

Educational Attainment

Educational attainment is one of the strongest predictors of literacy, and is sometimes used as a surrogate indicator when objective literacy assessments are not available. In general, greater proportions of people with high literacy skill levels had high levels of educational attainment compared with those at lower skill levels. For example, 61% of Victorians at Level 4/5 on the prose scale had a post-school qualification, compared with 24% of people at Level 1.

There is also a relationship between certain reasons for leaving school early and poor literacy skills. Nationally, similar proportions of people who left school early, for financial or family reasons, were at Level 1 on the prose scale (48% and 49% respectively). In comparison, 35% of those who left school because they were bored with school, did not like school, or did not do well at school, had Level 1 prose skills while 22% of those who left because they wanted to work or learn a trade had prose skills at the same level.

A relationship also exists between people's literacy skills and their parents' education levels. Nationally, greater proportions of people whose mothers had no post-school qualifications had Level 1 and 2 document skills compared with people whose mothers held a qualification (including vocational qualifications), irrespective of their own educational attainment categories.

Work and Literacy

There was a clear relationship between literacy skill level and labour force status. Across the Victorian workforce almost 40% of workers recorded prose skills at Levels 1 and 2, 40% at Level 3 and the remaining 21% at Levels 4/5. A marked contrast was evident in the skill level across different occupation groupings. Almost 51% of Professionals recorded prose skills at Levels 4/5, compared to the average of 21% across all occupation groups. In contrast, Level 1 prose skills were recorded for almost 48% of Plant and machine operators and drivers compared to the average of 14% across all occupations.

5.8 PROSE SKILL LEVEL BY OCCUPATION, VICTORIA, 1996

Occupation	Level				Total	Total '000
	1 %	2 %	3 %	4/5 %		
Managers & administrators	11.0	27.2	45.0	16.8	100.0	310.2
Professionals	*2.0	11.7	35.9	50.5	100.0	294.9
Para-professionals	*2.3	*18.5	44.5	34.7	100.0	130.8
Tradespersons	18.0	36.7	36.1	*9.3	100.0	304.7
Clerks	*6.2	24.3	43.8	25.7	100.0	315.9
Salespersons & personal service workers	9.4	29.0	43.9	17.7	100.0	379.9
Plant & machine operators, & drivers	47.5	22.5	24.3	*5.7	100.0	143.8
Labourers & related workers	32.2	25.6	35.5	*6.7	100.0	272.1
Total	14.3	25.3	39.5	20.9	100.0	2 152.3

Source: *Aspects of Literacy*—unpublished data.

ASSISTING TEACHERS AND STUDENTS USE ABS DATA

Almost every student will have the experience of using statistics as part of their course work. They may be required to analyse data provided by their teachers or to seek out statistical material from libraries or the Internet when undertaking projects. In the past decade, the emphasis on sourcing and critically using numbers has steadily grown in most levels and fields of education.

To help meet these expanding statistical needs the ABS has developed a programme to assist teachers, students and other educators. This work is based on the National Education Services unit, located in the ABS Victorian Office. The unit grew out of initiatives commenced in the late 1980s in several ABS State Offices to better promote and distribute ABS products to the school education sector. The unit now offers a range of products and services to all levels of education. These include a yearly catalogue called Statpak, a variety of specialised products designed for aspects of the curriculum, a range of curriculum advice and assistance in accessing data for academic research purposes.

At the beginning of each school year the unit sends the ABS Statpak catalogue to every secondary school throughout Australia. The Statpak refers teachers to ABS resource material relevant to key learning areas — Maths and Information Technology, English and Languages Other Than English (LOTE), Economics and Business Studies, Health and Physical Education, the Arts, Studies of Society and the Environment, and Agriculture and Horticultural Studies. A core of general reference publications is offered, along with a selection of the latest releases most relevant to the curriculum areas. Some State specific publications are also included. The most popular ABS publications purchased through the Statpak in 1997 were those dealing with economic indicators, social trends, environment and sports participation.

As well as assisting teachers and librarians select from the general range of ABS products the National Education Services unit is also involved in producing specialised publications and products designed to support curriculum topics. These include:

- *Australia Working It Out* for Australian Studies
- *Women and Work* for Economics
- *Striking a Balance* for Geography and Environmental Studies

- *Statistics a Powerful Edge* (book and floppy disks) for Mathematics and Information Technology
- *Measuring Australia's Economy* for Economics
- 1996 Census School Resource Kit sent free to all Australian primary schools
- *1996 Year Book Australia* (Developmental multi-media version)
- Australia a Changing Society, a website project undertaken with the Victorian Education Department

Suggestions for such products often arise from consultation and research within the education sector. In its publishing programme the unit aims to meet unmet teaching needs for lively, accurate and relevant statistical materials and to help promote a long-term understanding of how ABS data is used in government and community decision-making.

The unit also assists teachers, university academics, curriculum writers and others identify and access ABS data for curriculum product development, course planning and university research. The unit attends key educational conferences each year to provide advice on new ABS product releases and to gain feedback from the education sector.

An important contribution has been made each year to the unit's work by the Teacher Release to Industry Programme (TRIP) organised by the Victorian Employers' Chamber of Commerce and Industry (VECCI). Each year since 1991 a Victorian school teacher has been placed full-time for 40 weeks at the unit. With their current knowledge and expertise the placements have assisted greatly in ensuring that the unit's work meets current educational needs.

In 1998 and years beyond the ABS will be utilising the Internet more widely in providing information about its products and in actual data dissemination. The National Education Services unit has already established a section on the ABS web site which includes the Statpak catalogue, a "What's New" feature which is updated monthly, a curriculum resources guide by key learning area and other classroom support material. Some 1996 Census data, suitable for teaching purposes, is also now available on the ABS web site. The unit is working to develop the range of education services on the web, including a widening of coverage to TAFE, tertiary and vocational education.

Initiatives are also being taken to meet demands from the education sector for other electronic and multimedia material. In 1998 the ABS will release a Census Keydata Education Toolkit; this is a CD-ROM that will make a wide range of Census data available to education at special prices. Curriculum support materials for the CD-ROM will be maintained on the ABS web site. Preliminary work has also commenced on a multimedia education resource, Australia: Towards the 21st Century. This will be for use by educators in conjunction with the Australian Federation centenary in 2001.

The Statsite address is <http://www.abs.gov.au> and education services pages can be accessed by clicking on the products button on the ABS homepage.

The internet joint project Australia A Changing Society can be accessed from the Victorian Education Department SOFweb site at <http://www.dse.vic.gov.au>.

REFERENCES

ABS sources

Schools, Australia (Cat. no. 4221.0)

Aspects of Literacy: Assessed Skill Levels, Australia, 1996 (Cat. no. 4228.0)

Non-ABS sources

Department of Employment, Education and Training

Australian National Training Authority
