

5 Education

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 together with statistics relating to educational attainment and employment.

In economic terms, the Education industry sector contributed 5.3% of the total Victorian Gross State Product (GSP) at factor cost in 1994–95. Victoria's percentage share of the national Gross Domestic Product (GDP) at factor cost for the Education sector was 27.7%.

Schools and teachers

There were 2,386 schools in Victoria in 1995. This was 24 schools fewer than in 1994, with government schools showing the sharpest decline (20 schools) and non-government schools showing only a slight decrease. The total enrolment of students in all Victorian schools in 1995 was 770,277, a marginal decrease of 0.4% over the previous year. Of the total students enrolled, 56% were in primary schools and 44% were in secondary schools.

Government schools, which constituted 72% of total schools, had a student enrolment of 514,805, which represented a decrease of 1% over 1994.

Enrolments in non-government schools showed a small increase of 1% in 1995. Seventy-three per cent of non-government schools were Catholic schools. Of students attending non-government schools, there were 174,532 (68%) enrolled in Catholic schools, 24,636 (10%) in Anglican schools and 56,304 (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.

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 1995 (government schools 70%; non-government schools 84%).

The number of teaching staff (expressed in full-time equivalent units) decreased by 0.4%, from 51,295 in 1994 to 51,065 in 1995. The average number of students per full-time teaching staff was 15.1 for both non-government and government schools. The average ratios for all schools were 18.5 for primary and 12.2 for secondary schools.

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

	Governmer			Non-gover			Total		
Year	Schools	Students	Teaching staff	Schools	Students	Teaching staff	Schools	Students	Teaching staff
1990	2 038	526 576	39 950	715	257 786	16 508	2 753	784 362	56 459
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 63 5	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

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

Source: Schools, Australia (4221.0)

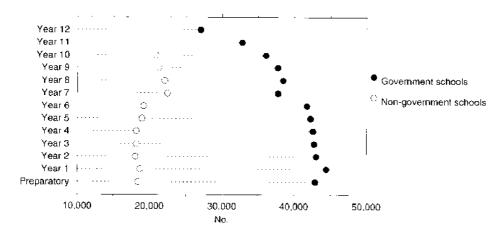
5.2 NUMBER OF FULL-TIME STUDENTS: CATEGORY OF SCHOOL AND YEAR OF EDUCATION, VICTORIA, 1995

	Government	Non-government (a)			All schools				
Year of education	schools	Anglican	Catholic	Other	Total	Males	Females	Persons	
Primary -									
Preparatory	42 936	863	14570	2 972	18 405	31 754	29 587	61 341	
Year 1	44 450	833	14 836	3 011	18 680	32 347	30 783	63 130	
Year 2	43 024	807	14 257	2 946	18 010	31 186	29 848	61 034	
Year 3	42 775	864	14 180	3 086	18 130	31 270	29 635	60 905	
Year 4	42 624	1 012	14 030	3 116	18 158	31 102	29 680	60 782	
Year 5	42 260	1 194	14 331	3 412	18 937	31 182	30 015	61 197	
Year 6	41 776	1 380	14 159	3 628	1.9 167	31 222	29 721	60 943	
Ungraded	1 670	_	68	541	609	1 494	785	2 2 79	
Total primary	301 515	6 653	100 431	22 712	130 096	221 557	210 054	431 611	
Secondary									
Year 7	37 762	2 761	13 891	5 786	22 438	31 070	29 130	60 200	
Year 8	38 461	2 851	13 549	5 664	22 064	30 758	29 767	60 525	
Year 9	37 710	2 936	12 754	5 5 7 6	21 266	30 007	28 969	58 976	
Year 10	36 049	3 1 1 9	12 310	5 441	20 870	28 753	28 166	56 9 19	
Year 11	32 810	3 070	11 20 1	5 489	19 /60	25 789	26 /81	52 570	
Year 12	27 032	2 946	10 317	5 193	18 456	21 130	24 358	45 488	
Ungraded	3 466	_	79	443	- 522	2 364	1 627	3 988	
Total secondary	213 290	17 68 3	74 101	33 592	125 376	169 868	168 798	338 666	
Total	514 805	24 636	174 532	56 304	255 472	391 425	378 852	770 277	

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

Source: Schools, Australia (4221.0)

ALL SCHOOLS: NUMBER OF FULL-TIME STUDENTS BY CATEGORY OF SCHOOL AND YEAR OF EDUCATION, VICTORIA 1995



Source: Schools, Australia (4221.0)

Technology in education

Developments in computing and communications technologies are changing the ways we store, access, analyse and transfer information. The impact of these developments is being felt in our schools, universities and professional development programs, by both students and teachers; affecting the way material is stored and presented, enabling greater participation and increasing access to a wider range of information than was previously available.

In 1995 the Victorian Department of Education (DOE) established an Internet site – Schools of the Future Web (SOFWeb) – to provide students and teachers with easier on-line access to current research material, to establish discussion groups for collaborative material and to publish student work for national and international readership. To facilitate access to local information and data, some prototype modules of statistical material for use in teaching and learning were included on SOFWeb during 1996 in a joint project being undertaken by ABS and DOE.

Special funds and support have been provided by DOE to all Victorian government schools to connect to the Internet, develop home pages and provide professional development for teachers. Many non-government schools are also making increasing use of Internet-based materials, with some playing a prominent role in the field.

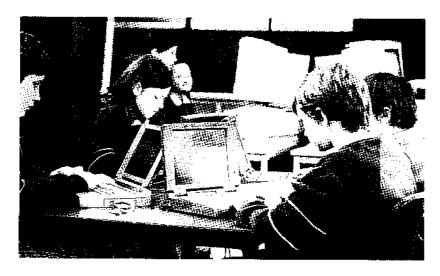
The Internet enables students to communicate with each other, locally and internationally, and to participate in inferactive projects such as the Global Classroom Project. The information resources available to students from libraries, galleries and museums worldwide are also expanded. Through the Internet, teachers gain access to course materials, conferences and new developments in teaching methods.

The Global Classroom Project, launched in 1995, is helping schools take advantage of new learning opportunities. Students from approximately 100 schools in Victoria are involved in learning activities with colleagues and mentors from around the world, using electronic mail, online conferences and Internet information to study issues of global significance. Activity in the Global Classroom Project has developed around four themes: Air and Atmosphere; Water; Young Authors; and the Holocaust Genocide Project. Outcomes from the project have included publications for distribution around the world, fundraising for international relief and development projects, reports on the status of local water catchments, and online presentations at international forums hosted by the United Nations in New York. Involvement in such activities enables students to develop and apply research, communication and analytical skills relevant to workplace and community.

Schools of the Future Net (SOFNet) also transmits programs live to all government schools via satellite. Phone and fax links are also used to obtain student input during broadcasts. SOFNet is playing an important role in language and science teaching, as well as in presentation of professional development material for teachers.

Teaching methods are changing in response to the capabilities of electronic technology. The development of interactive learning modules incorporating text, graphics, animation, audio and video media are examples of such changes. The teaching of skills to enable students to effectively manage and evaluate the accuracy, relevance and usefulness of information from many diverse sources is also an increasingly important focus.

Seven schools have been designated as 'navigator schools' to develop new teaching methodologies and administrative practices. Six science and technology centres have also been created in Victoria. These technologically advanced centres are becoming focal points for science and technology education in the community; developing, evaluating, promoting and using advanced teaching methods and materials.



Higher education

The number of students attending a higher education institution (excluding TAFE) was 167,528 in 1995, an increase of 2% over the previous year. There were 2,093 additional students enrolled in Bachelor degree courses, a 2% increase. The number studying for Higher degree and Post-graduate courses increased by 1,355 students (8%) and 883 students (5%) respectively.

5.3 HIGHER EDUCATION: NUMBER OF STUDENTS BY LEVEL OF COURSE AND TYPE OF ENROLMENT, VICTORIA, 1995

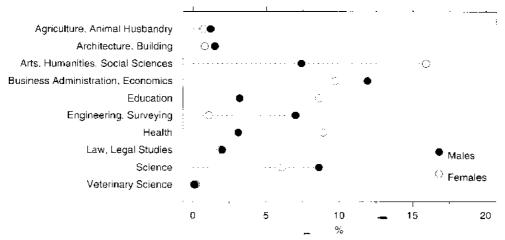
	Level of course					
Institute of Higher Education	Higher degree	Post- graduate	Bachelor	Other	Enabling (a)	Total
University of Ballarat	161	420	3 486	93	_	4 160
Deakin University	1 960	3 5 4 1	18 451	814	_	24 856
La Trobe University	1 930	2 028	16 220	237	14	20 429
Marcus Oldham Farm						
Management College	_		_	98	_	98
Monash University	5 06 0	3 354	29 412	1 147	25	38 998
Royal Melbourne Institute						
of Technology	3 511	2 036	20 082	40		25 669
Swinburne University						-
of Technology	675	1 158	7 067	_	19	8 919
University of Melbourne	4 4 7 0	3 641	20 497	1 297	_	29 905
Victoria University of Technology	1 107	1 577	11 161	649		14 994
Total higher education	18 874	17 755	126 466	4 375	58	167 528

⁽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 1995, the highest proportion of students were enrolled in Business, Administration or Economics (23%) and Arts, Humanities and the Social Sciences (22%). A further 16% of students were studying Science.

PERCENTAGE OF ALL STUDENTS BY FIELD OF STUDY AND SEX, VICTORIA, 1995



Source: Department of Employment, Education and Training

TAFE

The number of students enrolled in TAFE (Technical and Further Education) courses in 1995 increased to 638,581, representing a 6% rise over the previous year. TAFE enrolments in 1995 had increased by 58% when compared with 1990 enrolments of 404,072 students.

Enrolments in vocational courses continued to increase, with a rise of 13% from 1994 to 1995. Since 1990, enrolments in vocational courses have increased by 80% from 249,458 to 449,469. In comparison, recreational course enrolments have fluctuated widely over the period 1990–1995, reaching a peak of 221,994 in 1992 before decreasing to 189,112 in 1995.

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

	Males			Females			Persons (a)		
Year	Voca- tional (b)	Recre- ational (c)	Total	Voca- tional (b)	Recre- ational (c)	Total	Voca- tional (b)	Recre- ational (c)	Total
1990	143 844	36 392	180 236	105 614	118 222	223 836	249 458	154 614	404 072
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 45 1	297 190	221 994	5 1 9 184
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

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

Source: Department of Employment, Education and Training

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 18% were enrolled in TAFE multi-field education courses.

5.5 HIGHER EDUCATION: NUMBER OF STUDENTS BY INSTITUTION AND FIELD OF STUDY, VICTORIA, 1995

Total	4 160	24.856	20.429	<u>}</u>	ă	800 88	200	27, 689		919	29 905) } } !	14 194		167 528	
Non- award courses	34	446	120	ì		629	3			l	I		123		1352	
Veterinary Science			I		I	I				I	275	i			275	
Science	838	3.486	2 799			6.825	<u>.</u>	3 219		1 /50	3.413		3 724		26 054	
Law, Legal Studies	I	971	382			2 309		249		1	089		I		4 591	
Health	599	2.973	4 856		:	3 932		2 636		1	2 811		1843		19 650	
Engineering. Surveying	. 437	453	743			4 037		4 391		2 188	2 705		1 541		16 495	
Education	713	4 655	1 809			2 531		1 494		1	53/19		447		16 998	
Business Admin Economics	772	5 775	2 686			10 681		8078		3 006	3 332		4 403		38 734	
Arts. Humanities, Social Sciences	767	5 329	6836			8 054		3814		1874	8 434		2 351		37 459	·n.c
Archi- tecture, Building,	I	768				1		1 787		101	881		62		3 599	n and Training
Agriculture, Animal Husbandry			198		86						2 025		i	:	2 321	ment. Educatio
Institute of Higher Education:	University of Ballarat	Deakin University	La Trobe University	Marcus Oldham Farm	Management College	Monash University	Royal Melboume Institute	of Technology	Swinburne University of	Technology	University of Melbourne	Victoria University of	Jechnology		lotal higher education	Source: Department of Employment. Education and Training

5.6 TAFE: NUMBER OF ENROLMENTS IN VOCATIONAL COURSES BY FIELD OF STUDY, VICTORIA, 1995

Field of study	No	%
Land & Marine Resources, Animal Husbandry	23 581	5.2
Architecture, Building	30 519	6.8
Arts, Humanities & Social Sciences	35 550	7.9
Business Administration, Economics	100 861	22.4
Education	5 858	1.3
Engineering , Surveying	63 489	14.1
Health, Community Services	29 033	6.5
Law, Legal Studies	1 344	0.3
Science	35 7 37	8.0
Veterinary Science, Animal Care	394	0.1
Services, Hospitality, Transportation	43 056	9.6
TAFE Multi-field Education	80 04 /	17.8
Total (a)	449 469	100.0

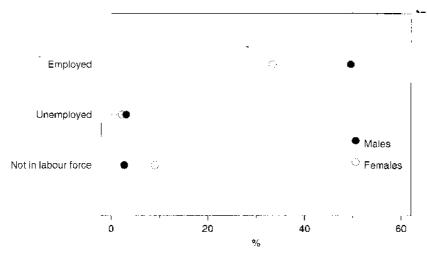
⁽a) Students may enrol in more than one field of study thus causing the number of students enrolled by field of study to exceed the actual total number of students enrolled.

Source: Department of Employment, Education and Training

Educational attainment and employment

Information about educational attainment and employment in Victoria was collected from a household survey conducted in October 1995. The survey obtained information on the links between education and training and employment outcomes for persons aged from 15 to 54 years.

PERSONS AGED 15 TO 54 YEARS WITH POST-SCHOOL QUALIFICATIONS: SEX AND EMPLOYMENT STATUS, VICTORIA, 1995



Source: Educational Attainment and Employment, Victoria (4227.2)

Of the 2,578,000 Victorians aged 15–54 years, 41% (1,059,400) had at least one post-school qualification. A higher proportion of men (45%) had at least one post-school qualification than did women (37%).

Of persons aged 20–24 years, 37% had at least one post-school qualification, with the proportion rising to 48% for people aged 25–34 years and 49% for people aged 35–44 years.

A slight decrease was recorded for people aged 45–54 years, of whom 46% had at least one post-school qualification. Four per cent of people in the age group 15–19 years had gained at least one post-school qualification.

Of people born overseas, 51% of those born in English speaking countries had at least one post-school qualification, a significantly higher proportion than the 41% recorded for all Victorians. In contrast, 37% of people from other countries had at least one post-school qualification, slightly lower than the proportion for all Victorians.

5.7 PERSONS AGED **1**5 TO 54 YEARS: SELECTED CHARACTERISTICS BY NUMBER OF POST-SCHOOL QUALIFICATIONS, VICTORIA, 1995

	No qual-	1 qual-	2 or more qual-		
Selected characteristics	ifications %	ification %	ifications %	lotal %	10tal 1000
Sex -					
Male	54.6	32.1	13.3	100.0	1 289.4
Female	63.2	27.2	9.6	100.0	1 288.6
Age group (years) –					
15-19	95.5	4.3		100.0	304.6
20–24	62.7	33.4	4.0	100.0	349.9
25–34	52.3	36.1	11 .6	100.0	700.9
35-44	51.4	31.9	- 1 6.7	100.0	673.4
45–54	53.9	30.2	15.8	100.0	549.2
Country of birth –					
Australia	58.8	29.9	11.3	100.0	1 915.1
Other main English-speaking countries (a)	49.3	33.2	17.5	100.0	181.8
Other	63.1	27.2	9.7	100.0	481 .1
Employment status					
Employed	52.2	33.7	. 14.1	100.0	1 831.9
Unemployed	71.0	21.7	7.3	100.0	193.7
Not in labour force	77.0	19.0	4.1	100.0	552.4
Area of usual residence -					
Melbourne Statistical Division	58.0	30.5	11.5	100.0	1 899.5
Rest of Victoria	61 .4	27.1	11.4	100.0	678.5
Total	58.9	29.6	11.5	100.0	2 578.0

(a) Includes: United Kingdom, Ireland, Canada, South Africa, USA and New Zealand.

Source: Educational Attainment and Employment, Victoria (4227.2)

Employed persons

A total of 875,900 (48%) of employed persons had at least one post-school qualification compared with 563,300 (29%) of unemployed persons and 127,300 (23%) of persons not in the labour force.

Of employed persons with post-school qualifications, 201,900 (89%) professionals and 141,000 (84%) tradespeople stated that their qualifications were required for their current occupation. This compares with 15,600 (31%) labourers and related workers and 15,700 (39%) plant and machine operators and drivers.

Of people with post-school qualifications, a high porportion of those working as Managers and administrators (86%), Professionals (89%), Para-professionals (88%) and Tradespersons (85%) reported they were working in their preferred occupation. In comparison, 56% of Plant and machine operators and drivers and 45% of Labourers and related workers were working in their preferred occupation.

Of employed people, 107,700 (6%) did not know their preferred occupation, compared to 47,100 (24%) unemployed people and 31,300 (6%) persons not in the labour force who did not know their preferred occupation.

5.8 EMPLOYED PERSONS AGED 15 TO 54 YEARS WITH COMPLETED POST-SCHOOL QUALIFICATION: MAIN OCCUPATION BY WHETHER WORKING IN PREFERRED OCCUPATION, VICTORIA, 1995

Main occupation	Working in preferred occupation %	Not working in preferred occupation %	Don't know %	Total %	Total 1000
Managers and administrators	86.2	*10.1	*3.7	100.0	96.3
Professionals	89.4	8.9	*1.8	100.0	227.6
Para-professionals	88.4	*9.5	a.p.	100.0	92.2
Tradespersons	84.6	14.2	n.p.	100.0	167.7
Clerks	67.5	26.6	*6.0	100.0	95.2
Salespersons and personal					
service workers	64.2	32.7	*3.2	100.0	1 04.6
Plant and machine operators and drivers	56.1	43.1	n.ρ.	100.0	40.8
Labourers and related workers	45.4	51.3	n.ρ.	100.0	51.0
Total (a)	78.5	18.9	2.6	100.0	875.9

(a) Includes persons who cid not state their occupation.

Source: Educational Attainment and Employment, Victoria (4227.2)

Reason for study

The most frequently stated reason for people obtaining their most recent qualification was career purposes. Specific reasons included, the need to obtain a qualification to get a specific position (64% or 677,000 persons) and the need to be competitive in the job market (26% or 279,500 persons). A further 22% (231,800) of people cited hobby or self-interest as the reason for obtaining their most recent qualification.

5.9 PERSONS AGED 15 TO 54 YEARS WITH POST-SCHOOL QUALIFICATIONS: REASONS FOR STUDYING BY NUMBER OF POST-SCHOOL QUALIFICATIONS, VICTORIA, 1995

Reasons for studying (a)	1 qual- ification '000	2 qual- ifications '000	Total '000	1 qual- ification %	2 qual- ifications %	Total %
Career/to get specific job	527.2	149.8	677.0	69.0	50.7	63.9
To get any job	86.4	*9.6	96.0	11.3	*3.3	9.1
The need for a qualification to be competitive in the				,		*
job market	181.4	98.1	279.5	23.7	33.2	26.4
Money/to get more pay	115,7	50.7	166.4	15.1	17.2	15.7
To try for a different career	35.0	38.7	73.7	4.6	13.1	7.0
Was a requirement of the job	131.5	42.3	173.8	17.2	14.3	16.4
Was a requirement of the						
employer	64.7	27.6	92.2	8.5	9.3	8.7
To get a better job or						
promotion	88.7	79. 1	167.8	11.6	26.8	15.8
To get extra skills for						
present job	76.0	104.3	180.3	9.9	35.3	17.0
Required to study by CES	n.p.	ባ.p.	*0.3	n.p.	n.p.	*0.3
To get into another course						
of study	15.8	14.3	30.2	2.1	4.9	2.8
Self-interest/hobby	160.7	7 1 .1	231.8	21.0	24.1	21.9
Other	12.6	*8. 9	21.5	1.6	*3.0	2.0
Total	764.2	295.3	1 059.5	100.0	100.0	100.0

(a) Multiple reasons could be stated.

Source: Educational Attainment and Employment, Victoria (4227.2)



REFERENCES

ABS sources

Schools, Australia (4221.0)

Educational Attainment and Employment, Victoria (4227.2)

Non-ABS sources

Department of Employment, Education and Training

Photographs

Ballarat University: Photographer Andrew Stiller, Public Affairs Branch, Dep't of Infrastructure

 $Computing \ class: \ Courtesy \ of \ the \ Dep't \ of \ Education$

VCE discussion group: Courtesy of the Dep't of Education

