CHAPTER 15

EDUCATION, CULTURAL ACTIVITIES, AND RESEARCH

For the most recent statistics available on subjects dealt with in this chapter reference should be made to the series of mimeographed bulletins Social Statistics issued by this Bureau. The Quarterly Summary of Australian Statistics contains summarised information on these subjects, and financial aspects are dealt with in the annual bulletins Commonwealth Finance and State, Territory and Local Government Authorities' Finance and Government Securities. The Annual Reports of the respective State education departments provide detailed statistical and other information concerning particular States.

EDUCATION

An account of the development of the Australian school system up to 1929 may be found in Year Books Nos 1, 2, 17 and 22. In Year Book No. 40 a review of changes which occurred up to 1951 and of the practices then current was presented from material furnished by the then Commonwealth Office of Education (now part of the Commonwealth Department of Education and Science). The Department has contributed much of the textual matter in the early part of this chapter.

Education in Australian schools

Administration and organisation

In Australia the provision of schools is mainly the responsibility of State governments. During the nineteenth century all six Australian colonies had established systems of compulsory education, beginning with the *Education Act* 1872 in Victoria, and followed by similar Acts in Queensland (1875), South Australia (1875), New South Wales (1880), Tasmania (1893), and Western Australia (1893). These Acts, with subsequent amendments, constitute the legal basis of compulsory education in the Australian States to-day.

School attendance is compulsory throughout Australia between the ages of six and fifteen at least. The minimum leaving age is fifteen years in New South Wales, Victoria, Queensland, and South Australia, and sixteen years in Tasmania, while in Western Australia attendance is compulsory until the end of the year in which the child turns fifteen years. The Education Acts require that all children between the prescribed ages must attend either a government school or some other recognised educational institution. Children may be exempted from the requirement of compulsory attendance if they live too far from a school or suffer a physical disability. These children usually receive correspondence tuition.

The school year in Australia begins at the end of January or early in February; it ends in mid-December. The long vacation is taken over the summer months (December to February) and two short vacations divide the school year into three terms.

At government primary schools it is usual for both boys and girls to attend the same school; at the secondary level practices vary, but the trend is towards co-educational schools. Non-government secondary schools cater mainly for boys and girls separately.

Government school systems

Government schools, except in the Commonwealth Territories, are a responsibility of the six State governments. Although the educational systems are not identical, they have many similar features. Responsibility for framing educational policy and having it put into effect rests with a Minister for Education, who is a member of the State Cabinet. The administrative authority in each State is an education department headed by a Director-General of Education. Separate divisions of the education department in each State administer primary, secondary and technical education (in New South Wales there is a separate Department of Technical Education). Other divisions look after such matters as the recruitment and training of teachers, pupil guidance, research, and the education of atypical children. In New South Wales and Queensland, administration has been decentralised to a degree by the appointment of directors who are responsible for policy in the area which they control.

Tuition at government primary and secondary schools is free in all States. Parents are usually expected to bear the cost of text-books, uniforms and charges for such things as the use of sports materials. However, income tax concessions exist in respect of these expenditures for both government and non-government systems, and certain text-book costs are subsidised in the case of pupils attending government and non-government schools in some States.

Non-government schools systems

Approximately one quarter of Australian school children are enrolled at non-government primary and secondary schools and about 80 per cent of these attend Roman Catholic schools. At the primary level these children normally attend co-educational parish schools, but at the secondary level there are separate boys and girls schools. Some of the small convent schools in country districts are co-educational up to the junior secondary level.

The majority of other non-government schools, sometimes known as 'private' or 'independent' schools, are conducted by, or are under the auspices of, various other religious denominations, particularly the Church of England, Presbyterian and Methodist Churches. A few non-government schools are undenominational and are conducted under the auspices of corporate bodies.

The methods adopted by the educational authorities to ensure an acceptable standard of education at non-government schools vary from State to State. In New South Wales, Victoria, South Australia and Tasmania, these schools are regularly inspected. In Victoria and Tasmania, schools and teachers must be registered. Non-government schools in Queensland and also those in Western Australia are inspected on request.

Principally because of the public examination system, courses and curricula in non-government schools are very similar to those in the government schools. The principals of a number of the larger non-government schools have formed organisations with both State and Australia-wide coverage, namely the Headmasters Conference of the Independent Schools of Australia and the Association of Headmistresses of the Independent Schools of Australia.

Schools and courses

Primary education in government schools. Though school attendance is not compulsory until the age of six, most Australian children begin school when they are five, attending infants schools or infants classes attached to a primary school. In some States the first year in the infants department is known as 'kindergarten'. The emphasis in infants classes is on the development of skills in language and numbers. Creative expression through drawing, dancing, handiwork, dramatisation, and painting and similar activities is encouraged.

Primary schools are normally provided when and where there is sufficient population to justify them. Irrespective of the size or the location of the school, standards of tuition are similar because teachers within a State follow similar courses of training and transfer freely between metropolitan and country areas. The education departments prescribe syllabuses of instruction, which are drawn up with the assistance of expert committees. The primary syllabuses have an emphasis on basic subjects like reading, writing, arithmetic and social studies, but the teacher has some freedom to modify courses to suit local circumstances and the varying abilities of his students.

Children attend primary schools in their own districts, usually within walking distance of their homes, on five days each week. The school day is broken up into three or four sessions by a lunch break and by a morning and sometimes an afternoon recess. The total period of instruction is four and a half to five hours daily with individual subject lessons lasting twenty to thirty minutes. Periods are set aside for physical education and sport. One teacher generally has charge of a class and teaches it all the subjects set out in the curriculum for the particular grade.

Progression from primary to secondary school is usually automatic. Allocation to particular schools or particular courses is based on the district in which the child lives, the recommendations of the headmaster, general ability tests, tests of achievement in the basic subjects, and parents' wishes.

Secondary education in government schools. The age of transfer from a government primary to secondary school is usually between twelve and thirteen. Most secondary schools are co-educational, although separate schools for boys and girls are not uncommon in capital cities. In the cities and larger country centres secondary and primary courses are provided in separate schools, but in less populous areas secondary classes sometimes share buildings with primary classes.

The secondary student takes up new studies, such as foreign languages, technical or commercial subjects, and moves on to more specialised studies in natural and social sciences and mathematics. The study of basic subjects begun in primary school is continued. The actual subjects studied depend

on the ability of the pupil and, in some States, the type of school. A school day is divided into 'periods' and the children are taught by a number of teachers, each specialising in a particular subject or group of subjects.

In the past, various kinds of secondary schools were established in which different types of education were provided to meet the varying abilities and needs of students, although in country areas secondary schools tended of necessity to be comprehensive and offered a full range of secondary courses. But following the re-examination by expert committees of the problems associated with the provision of appropriate secondary education for all, significant changes in the structure and curricula of secondary schools are taking place. In New South Wales, for example, following a committee's recommendation that the secondary curriculum should offer a core of common basic education to all students, secondary schools have become 'comprehensive'. Pupils of different typical secondary school, undertake this core of common basic studies, and in addition specialise according to their proven abilities and interests.

The most common type of secondary school is the comprehensive or multi-purpose high school, which offers a wide range of subjects. To cater for this diversity of subjects, most high schools now have modern facilities for the teaching of domestic science, commercial subjects, woodwork, and other technical subjects. In some States there are still, however, separate high schools specialising in technical, agricultural, commercial, or home science subjects. Some of the agricultural high schools are residential. The curriculum consists of general educational subjects and practical farm training. There are also 'area' and 'rural' schools offering up to three years of secondary study, and in some States courses in agriculture are also given at high schools.

Primary and secondary education in non-government schools. Non-government schools follow curricula similar to those laid down by education departments and prepare their students for examinations conducted by public examining authorities. Most non-government schools are comprehensive type schools, providing a range of subjects and courses at various levels. Although there are similarities between non-government and government schools in the courses they provide, more emphasis may be given to the religious training of pupils in denominational schools. Non-government schools sometimes offer facilities additional to those normally found in government schools, such as personal tuition in music. A few are organised on 'experimental' lines.

Examinations

During the course of secondary education State-wide examinations are taken at two levels. The earlier examination qualifies pupils for entry to trade courses at technical colleges and agricultural colleges, to junior commercial positions in, for instance, insurance and banking, to nursing and secretarial courses, to lower grades of the public service, and to industry. The examination at the end of the secondary school course qualifies students for entry to teachers colleges, colleges of advanced education, and is also the qualification for entry to the university, certain subjects and combinations of subjects being set down as the matriculation requirements by the respective universities.

In most States the higher examination is controlled by a board consisting of representatives of the department of education, the universities, non-government schools, and sometimes of other bodies such as teachers organisations. A brief description of the examinations in each State follows.

New South Wales. The full secondary course is of six years' duration, with a School Certificate Examination at the end of the fourth year, age about sixteen, and a Higher School Certificate Examination (Matriculation) after a further two years. Pupils who leave school before gaining their School Certificate receive a signed statement of attainment from their school principal.

Victoria. The Leaving Examination is taken at the end of fifth year, and the Matriculation Examination at the end of sixth year. Pupils at approved non-government schools and certain government schools may be accredited for the Leaving by passing examinations set by their own schools.

Queensland. The Junior Public Examination is taken at the end of third year, at about the age of fifteen and a half. The Senior Public Examination conducted by the University of Queensland is taken at the end of fifth year, at about the age of seventeen and a half, and matriculation is obtained on results in this examination.

South Australia. The Intermediate Examination taken at the end of the third year, at about the age of fifteen and a half, was held for the last time in 1968 and has not been replaced by any other public examination. The Leaving Examination is taken at the end of the fourth year and a Matriculation Examination is held at the end of the fifth year.

Western Australia. The Junior Certificate Examination is taken at the end of third year, at about the age of fifteen and a half. Students who pursue a less academic course may take the High School Certificate Examination at this level. The Leaving Certificate Examination is taken at the end of fifth year, at an average age of seventeen and a half, and matriculation is gained on results in this examination.

Tasmania. An internal examination, the School Certificate, is taken at the end of fourth year, at about the age of sixteen, and the Higher School Certificate (Matriculation) conducted by the Schools Board is taken at the end of the fifth or sixth year. Matriculation requirements are determined by the University of Tasmania.

Numbers of schools, teachers and pupils

The statistics which follow relate generally to schools providing education according to the primary or secondary school curricula of the various State education departments, or both, whether provided in government or non-government schools. Junior technical schools, correspondence schools, and schools in institutional homes, hospitals and similar establishments are included. Institutions providing only pre-school education, senior technical and agricultural colleges, evening schools, continuation classes, and institutions such as business colleges and coaching establishments are, as a rule, excluded.

School censuses are conducted annually at or about the beginning of August throughout all States and Territories of Australia. The numbers of pupils in the tables which follow refer to enrolments at the school census date. The numbers of schools and teachers refer to the position at dates which vary from State to State and in some instances from year to year. While it has not been possible to present all figures on a uniform basis between States, continuity of the figures for any one State over the period of years shown has been maintained as far as possible.

Schools, teachers and pupils

The numbers of government and non-government schools, teachers and pupils in 1968 and earlier years are shown in the following tables.

NUMBERS OF SCHOOLS AND PUPILS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1968

Category of school	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas	N.T.	A.C.T.	Aust
		SCI	HOOLS						
Government	. 2,552	2,247	1,264	663	570	291	68	39	7,694
Non-government—									
Denominational— Church of England .	. 34	35	17	11	9	4		3	113
			17	11	,	*	• •	3	
Hebrew	. 3	6	• ;	::	1	• •	• :	• •	10
Lutheran	. 3	8	4	14	• •	• •	1		30
Methodist	. 6		(a) 5	4	3	1	2		25
Presbyterian	. 13	14	5	2	2	2			38
Roman Catholic .	. 654	483	293	129	171	50	10	17	1,807
Seventh-day Adventist	. 19	9	8	5	7	4	٠.		52
Other		4	1	2	2	4	2		1.5
Undenominational .	. 57	16	9	4	4	3	3		96
Total, non-government	. 789	579	342	171	199	68	18	20	2,186
Grand total	. 3,341	2,826	1,606	834	769	359	86	59	9,880

⁽a) Presbyterian and Methodist Schools Association.

NUMBERS OF SCHOOLS AND PUPILS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1968—continued

Category of school	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust
		PUPILS	(CENSU	S ENRO	OLMENT)			
Government Non-government— Denominational—	725,773	555,838	285,428	222,019	161,416	76,109	10,338	20,586	2,057,507
Church of England .	13,373	16,328	5,550	4,211	3,930	1,889		1,460	46,741
Hebrew	436	2,642	_ * =		150				3,228
Lutheran	254	746	953	1,545	1:	- : -	153		3,651
Methodist	3,125	4,206	(a)2,157	2,160	1,751	317	496		14,212
Presbyterian	5,692	8,515	989	1,492	1,308	638	::	: :	18,634
Roman Catholic .	190,472	149,286	73,847	25,462	32,471	10,600	1,783	6,897	490,818
Seventh-day Adventist	1,286	628	447	165	579	144			3,249
Other	::	2,467	171	413	176	1,201	180	• •	4,608
Undenominational .	6,480	3,755	4,093	1,177	203	185	58	• •	15,951
Total, non-government	221,118	188,573	88,207	36,625	40,568	14,974	2,670	8,357	601,092
Grand total	946,891	744,411	373,635	258,644	201,984	91,083	13,008	28,943	2,658,599

⁽a) Presbyterian and Methodist Schools Association.

NUMBERS OF TEACHERS: STATES AND TERRITORIES, 1968(a)

			Governmen	nt schools		Non-gover	nment schoo	ls	All school	5	
				Part-time	, 		Part-time			Part-time	
State or Territory			Full-time	No.	Eq. f.t.u. (b)	Full-time	No.	Eq. f.t.u. (b)	Full-time	No.	Eq. f.t.u. (b)
New South Wales			30,907	1,392	687	7,630	(c)1,918	589	38,537	3,310	1,276
Victoria Queensland .	:	:	23,562 10,808	(d)2,541 593	(d)1,523 47	6,363 2,820	1,534 666	331 149	29,925 13,628	4,075 1,259	1,854 196
South Australia .			9,021	547	195	1,319	396	138 74	10,340 7,422	943 .	333
Western Australia Tasmania	:	:	6,020 3,383	189 284	74 71	1,402 559	281 194	65	3,942	470 478	148 136
Northern Territory Australian Capital T	errit	огу	470 846	3 34	1 14	(e)78 303	(e)3 (c)64	(e)1 24	548 1,149	6 98	2 38
Total .			85,017	5,583	2,612	20,474	5,056	1,371	105,491	10,639	3,983

⁽a) Excludes teachers-in-training generally. (b) The methods used for calculating equivalent full-time units of part-time teaching vary from State to State, between government and non-government schools, and between primary and secondary schools within States. For most schools the information is based on either the total hours worked or total number of class periods taken in a week by part-time teachers, in relation to the normal hours worked or periods taken by full-time teachers. (c) Visiting teachers who attend more than one school are counted as part-time in each. (d) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical schools), if his teaching load in the junior school is less than 75 per cent. (e) Excludes unqualified teachers and teaching assistants at mission schools.

NUMBERS OF SCHOOLS AND PUPILS: AUSTRALIA, 1964 TO 1968

			1964	1965	1966	1967	1968
Schools—							
Government .			7,872	7,844	7.826	7.757	7,694
Non-government			2,205	2,221	2,194	2,187	2,186
Total schools			10,077	10,065	10,020	9,944	9,880
Pupils(a)—							
Government .			1,801,364	1,857,120	1,921,263	1,993,572	2,057,507
Non-government			565,415	580,532	583,067	594,767	601,092
Total pupils .		٠	2,366,779	2,437,652	2,504,330	2,588,339	2,658,599

⁽a) Census enrolment.

NUMBERS OF TEACHERS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1968(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Government schools-	_	20.007	22.562	10.000	0.001	C 020	2 202	470		0000
Full-time . Part-time—	•	. 30,907	23,562	10,808	9,021	6,020	3,383	470	846	85,017
Number . Eq. f.t.u.(c) .	•	. 1,392 . 687	(b)2,541 (b)1,523	593 47	547 195	189 74	284 71	3 1	34 14	5,583 2,612
	•	. 007	(0)1,323		175	,-	′1	•	14	2,012
Non-government sch Baptist—	oois									
Full-time .	•		137	••	(d)23	••	2	• •	••	162
Part-time— Number .			44		(d)3					. 47
Eq. f.t.u.(c)	•	• ••	10	••	••	•:•	• •	••	••	10
Church of England	1	010	965	205	210	220	109		71	2 (05
Full-time . Part-time	•	. 818		285	219	228	109	••	71	2,695
Number .	•	. 224	223 75	47 20	69 25	41 14	38 13	••	21 10	663 247
Eq. f.t.u.(c)	•	. ,	,,	20	23	14	13	••	10	247
Hebrew— Full-time .	_	. 30	174			6				210
Part-time—	•		39							
Number . Eq. f.t.u.(<i>c</i>)	:	: 3	10	••	••	3 2	••		• •	47 15
Lutheran-										
Full-time .		. 17	35	45	67		••	6		170
Part-time— Number .	_	. 4	5	10	19					38
Eq. f.t.u.(c)	:	i	Ĭ	4	5		••	::	::	11
Methodist-										
Full-time . Part-time—	•	. 169	229	(e)101	103	99	19	16	••	736
Number .		. 43	74	(e)22	30	29	9			207
Eq. f.t.u.(c)	•	. 24	11	(e)8	12	8	3	••	••	. 66
Presbyterian—		. 333	514	53	75	79	32			1,086
Full-time . Part-time—	•	-						••	••	
Number . Eq. f.t.u.(c)	•	. 61	134 26	12 4	25 12	13 2	31 13	••	• •	276 85
	•	•								
Roman Catholic— Full-time .	•	. 5,703	4,031	2,123	761	945	311	45	232	14,151
Part-time— Number .		. 1,454	919	542	219	179	104	3	43	3,463
Eq. f.t.u.(c)	:	408	177	106	71	43	31	1	14	851
Seventh-day Adver	atist—	,								
Full-time . Part-time—	•	. 65	35	19	11	30	10	• •	••	170
Number .		. 24	9	6	1	11	1			52
Eq. f.t.u.(c)	•	. 5	2	• •	••	3	••	••	••	10
Other denomination	nal		13	6		7	69	8		103
Part-time—	•	•		·	••	,			••	
Number . Eq. f.t.u.(c)	:	: ::	7 2		• •	• • • • • • • • • • • • • • • • • • • •	7 2	• • •		14 4
_		•		• •	• •	• •				
Undenominational Full-time		. 495	230	188	60	8	7	3		991
Part-time—. Numder .		. 103	80	27	30	5	4			249
Eq. f.t.u.(c)	:	. 30	17	7	13	2	3	::	::	72
Total, non-governmen	ıt									
schools— Full-time		. 7,630	6,363	2,820	1,319	1,402	559	(f)78	303	20,474
Part-time-	•	•	-	•		•				5,056
Number . Eq. f.t.u.(c)	:	. (g)1,918 . 589	1,534 331	666 149	396 138	281 74	194 65	(f)3 (f)1	(g)64 24	1,371
Grand total— Full-time .		. 38,537	29,925	13,628	10,340	7,422	3,942	548	1,149	105,491
Part-time—	•	-	-	•			•		98	10,639
Number . Eq. f.t.u.(c) .	•	. 3,310 1,276	4,075 1,854	1,259 196	943 333	470 148	478 136	6 2	38	3,983

⁽a) Excludes teachers-in-training generally. (b) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical, schools), if his teaching load in the junior school is less than 75 per cent. (c) For basis of calculating equivalent full-time units of part-time teaching see footnote (b) on page 487. (d) Baptist and Congregational. (e) Schools conducted by the Presbyterian and Methodist Schools Association. (f) Excludes unqualified teachers and teaching assistants at mission schools. (g) Visiting teachers who attend more than one school are counted as part-time in each.

NUMBERS OF TEACHERS: GOVERNMENT AND NON-GOVERNMENT SCHOOLS(a) STATES AND TERRITORIES, 1964 TO 1968

		Governme	ent schools		Non-gove	rnment schoo	ols	All school	's	
		Number of full-	Part-time	teachers	Number of full-	Part-time	teachers	Number of full-	Part-time	teachers
		time teachers	Number	Eq.f.t.u. (b)	time teachers	Number	Eq.f.t.u. (b)	time teachers	Number	Eq.f.t.u. (b)
New Sou	th Wales-									
1964			(c)25,993		6,541	(d) 1,621 (d) 1,743	n.a.	n.a.	n.a.	n.a.
1965		26,846	878	415	6,842	(d) 1,743	443	33,688	2,621	858
1966		27,898	1,056	520	6,717	(d) 1,821	471	34,615	2,877	991
1967 1968	: :	29,288 30,907	1,178 1,392	582 687	6,842 6,717 7,179 7,630	(d) 1,821 (d) 1,976 (d) 1,918	530 589	36,467 38,537	3,154 3,310	1,11 2 1,276
Victoria-	_									
1964		19,026	(e) 1,568	n.a.	5,326	1,004	n.a.	24,352	2,572	n.a.
1965		20,083	(e) 1,816	1 1 2 4	5,551	1 149	278	25,634	2 065	1.412
1966		20,083 20,788	(e) 2,275	1,357	5,551 5,854	1,237	313	26,642	3.512	1,670
1967		22,144 23,562	(e) 1,816 (e) 2,275 (e) 2,229 (e) 2,541	1,357 1,272 1,523	6,050	1,237 1,388	292	28,194	3,617	1,670 1,564
1968		23,562	(e) 2,541	1,523	6,363	1,534	331	29,925	4,075	1,854
Queensla	nd—									
1964		9,058	819	n.a.	2,472	539	n.a.	11,530	1,358	n.a.
1965		9,316	696	56	2,543 2,649 2,701	492	107	11,859	1,188	163
1966		9,637	677	54	2,649	568	131	12,286 12,808	1,245 1,237	185
1967 1968	: :	10,107 10,808	630 593	51 47	2,701	607 66 6	134 149	13,628	1,257	185 196
South Au	ıstralia									
1964		7,340 7,872	477	n.a.	1,231 1,252 1,306 1,315	329	n.a.	8,571	806	n.a.
1965		7,872	468	143	1,252	355	114	9.124	823	257
1966		8,189	481	174	1,306	371	116	9,495 9,984	852	290
1967 1968	: :	8,669 9,021	650 547	235 195	1,315 1,319	396 396	136 138	9,984 10,340	1,046 943	371 333
	Australia									
1964		4,818	103	16	1,194	141	32	6,012	244	48
1965		5,009	119	39	1,255	186	46	6,264	305	85
1966		5,298	135	39	1,255 1,278	221	67	6,576	356	106
1967		5,619	174	63	1,347	243	64	6,966	417	127
1968		6,020	189	74	1,402	281	74	7,422	470	148
Tasmania										
1964		3,016	141	n.a.	503	132	n.a.	3,519	273	n.a.
1965		3,131	194	55	509	157	29	3,640	351	. 84
1966 1967		3,183	279 316	69 71	523 542	164 155	35 40	3,706 3,847	443 471	104
1968	: :	3,305 3,383	284	71	559	194	65	3,942	478	111 136
Northern	Territory-	-								
1964		241	6	n.a.	(f) 63		n.a.	304	6	n.a.
1965		281	4	1	(f) 72	1		353	. 5	1
1966		340	13	1 2 1	(f) 75	٠٠:	• •	415	13	2
1967 1968	: :	379 470	6	i	(5) 75 (5) 72 (5) 78	(f) 3	'i	451 548	7 6	1 2
	n Capital									
1964			(c) 554		215	(d) 27 (d) 28	n.a.	n.a.	n.a.	n.a.
1965		596	34	24	240	(d) 28	6	836	62	30
1966		695	16	.9	261	(d) 41	13	956	57	22
1967 1968	: :	745 846	32 34	15 14	269 303	(d) 63 (d) 64	29 24	1,014 1,149	95 98	44 38
Australia	_									
1964		n.a.	n.a.	n.a.	17,545 18,264	3,793	n.a.	n.a.	n.a.	n.a.
1965		73,134	4 209	1.867	18,264	4,111	1 023	91,398	8,320	2 890
1966		76,028	4,932 5,215 5,583	2,224 2,290	1X 663	4,423	1,146 1,225 1,371	94,691	9,355	3,370 3,515
1967		80,256	5,215	2,290	19,475 20,474	4,829	1,225	99,731	10,044	3,515 3,983
1968		85,017	2,283	2,612	20,474	5,056	1,3/1	105,491	10,639	3,783

⁽a) Excludes teachers-in-training generally. (b) For basis of calculating equivalent full-time units for part-time teachers see footnote (b) on page 487. (c) Includes numbers of full-time teachers (including casual teachers) and part-time casual teachers expressed in equivalent full-time units. (d) Visiting teachers who attend more than one school are counted as part-time in each school visited. (e) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical, schools) if his teaching load in the junior school is less than 75 per cent. (f) Excludes unqualified teachers and teaching assistants at mission schools.

Ages of pupils

The ages of pupils at school census dates for 1968 and earlier years are shown in the following tables.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY AGE AND SEX AUSTRALIA, 1968

(Census enrolment)

4 lant b			Government	schools		Non-govern	ment school	s	Total		
Age last bi (years)	rinaay —		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Under 6			84,332	79,471	163,803	20,940	21,186	42,126	105,272	100,657	205,929
6.			100,565	94,712	195,277	25,487	25,587	51,074	126,052	120,299	246,351
7.			100,834	94,192	195,026	26,282	26,395	52,677	127,116	120,587	247,703
8.			97,878	91,475	189,353	25,780	26,496	52,276	123,658	117,971	241.629
9.			96,818	91,095	187,913	25,437	26,025	51,462	122,255	117,120	239,375
10 .			94,990	89,235	184,225	25,523	26,032	51,555	120,513	115.267	235,780
11 .			93,153	86,659	179,812	25,447	26,039	51,486	118,600	112,698	231,298
12 .		-	92,126	83,193	175,319	25,097	26,789	51,886	117,223	109,982	227,205
iā .	:	•	89,206	81,724	170,930	24,494	26.872	51,366	113,700	108,596	222,296
14 .	:	•	87,107	78,568	165,675	22,866	25,673	48,539	109 973	104,241	214,214
iš :	:	•	69,141	59,459	128,600	20,674	22,827	43,501	89,815	82,286	172,101
1.6	_	•	42,616	31,715	74,331	15,587	14,317	29,904	58,203	46,032	104,235
17	•	•	21,478	14,005	35,483	10,049	7,721	17,770	31,527	21,726	53,253
	•	•		3,603		3,859	1,611	5,470	12,016	5.214	
18 and (over	٠	8,157	2,003	11,760	3,639	1,011	3,470	12,010	3,214	17,230
To	tal .		1,078,401	979,106	2,057,507	297,522	303,570	601,092	1,375,923	1,282,676	2,658,599

SCHOOLS: PUPILS, BY AGE, STATES AND TERRITORIES, 1968 (Census enrolment)

Age last bi years)	rthday	<i>y</i>	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Under 6			84,430	62,214	20,513	19,230	8,188	7,262	1,197	2,895	205,929
6.			87,863	67,373	36,164	22,682	19,501	8,511	1,492	2,765	246,351
7 .			87,167	67,472	36,471	23,756	19,894	8,702	1,489	2,752	247,703
8 .	÷		84,189	65,596	36,166	23,366	19,683	8,669	1,343	2,617	241,629
9 .			83,150	65,807	35,539	23,339	19,245	8,383	1,310	2,602	239,375
10 .			82,994	64,284	34,831	22,637	19,243	8,134	1,252	2,405	235,780
ii .	•		80,732	63,756	34,141	22,434	18,895	7,932	1,133	2,275	231,298
12 .	-	·	78,816	62,149	33,627	22,050	19,183	8,136	1,029	2,215	227,205
i3 .	:	-	77,027	60,846	33,270	21,694	18,629	7,675	1,003	2,152	222,296
14 .	:	•	75,155	58,703	31,675	21,258	17,283	7,322	816	2,002	214,214
îś :	:	•	60,358	49,900	22,741	18,267	12,549	5,955	575	1,756	172,101
i6 .	•	•	36,596	33,796	11,617	11,682	6.054	2,873	263	1,354	104,235
iř :	•	•	20,894	17,181	5,371	4,882	2,865	1,166	74	820	53,253
18 and	over	:	7,520	5,334	1,509	1,367	772	363	32	333	17,230
To	al.		946,891	744,411	373,635	258,644	201,984	91.083	13,008	28,943	2,658,599

SCHOOLS: PUPILS, BY AGE AND SEX, AUSTRALIA, 1964 TO 1968 (Census enrolment)

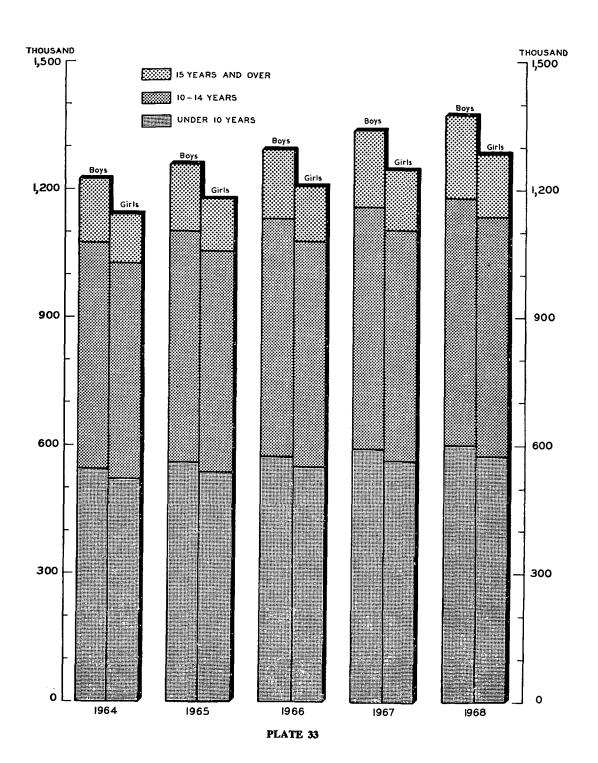
			1964		1965		1966		1967		1968	
Age last birti (years)	hday		Boys	Girls								
Under 6			97,651	93,404		95,811	104,222	99,495	105,396	101,154		100,657
6.			114,888	109,812	118,565	113,600	120,709	114,770	125,527	118,844	126,052	120,299
7 .			113,685	108,423	116,512	111,748	120,392	115,466	122,494	116,952	127,116	120.587
8 .		-	111,882	106,358	114,660	109.538	117,903	112.841	121,575	116,202	123,658	117,971
ğ .	•	-	109,601	105,826	113,810	107,719	115,761	110,778	119,065	113,949	122,255	117,120
10 .	•	Ī	108,446		111,359	107,105	115,380	108,806	117,468	112,051	120,513	115,267
11	•	•	109,593		110,026	104,874	112.832	107,872	116,618	109,812		112,698
12	•	٠	107,342	102,220	110,091	105,816	110,945	105,536	113,615	108,466		109 982
13 :	•	•	105,434	100,668	107,850	102,728	111,659	106,397	110,724	106,305	113,700	108.596
1.4	•	٠	99,617	94,053	101,907	97,432		100,241	109,505	104,414		104,241
13 :	•	•	71.619	61,317	77,735	68,958	80,972	72,015	85,254	75,619	89,815	82,286
	•	•	43,843		46,095	35,604	49,666	38.554	52,957	41,179	58,203	46,032
16 .	•	٠	22,826		22,624	13,936	22,008	13.207	29,321	19,303		
17 .	•	٠	22,020	13,642								21,726
_ 18 and ove		٠	7,072		8,249	2,901	7,279	2,662	10,374	4,196	12,016	5,214
Not stated(a)	٠	1,549	1,540		• •	• •	• •	• •			• •
Total			1,225,048	1.141.731	1.259.882	1,177,770	1,295,690	1.208.640	1.339.893	1.248.446	1.375.923	1.282.676

⁽a) Comprises Aboriginal children at special schools whose ages were not collected in 1964.

Grades of pupils

The numbers of pupils enrolled in grades in each State and Territory are shown in the following table. The grading of pupils differs for the various school systems in Australia because of the differences in curricula set by education departments. In addition, the methods of allocating classes to

SCHOOL PUPILS, BY AGE GROUP: AUSTRALIA 1964 TO 1968



grades vary from State to State, and there are also differences in the administrative methods of aggregating grades of a more or less similar nature. The figures presented in the table represent essentially the system of grading adopted in each different State and are therefore not comparable between States. Pupils not allocated to grades (i.e. physically, mentally, or socially handicapped children) are shown as being in special grades or schools or as 'ungraded'. However, the numbers shown in special grades or ungraded should not be taken as the total number of handicapped pupils in a State because some handicapped children are included in normal grades.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC. AND SEX, STATES AND TERRITORIES, 1968

	Governmen	nt schools		Non-gove	rnment schoo	ols	All schools	;	
Grade, year or form	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
			NEW	SOUTH	WALES			_	
Infants—									
Kindergarten .	35,916	33,551 37,371	69,467	10,052	9,929	19,981	45,968	43,480	89,448
1	41,077	37,371	78,448	10,394	10,066	20,460	51,471	47,437	98,908
Primary—	37,038	34,079	71,117	10,276	10,172	20,448	47,314	44,251	91,565
3	34 383	32,091	66 474	9 715	9 913	19.628	44,098	42,004	86,102
4 : : :	34,383 33,368 33,022	31.917	66,474 65,285 64,268	9,715 9,488	9,913 9,503 9,755	19,628 18,991 19,369	42.856	41,420	84,276
5	33,022	31,917 31,246	64,268	9,614	9,755	19,369	42,856 42,636	41,001	84,276 83,637
6	32,579	30,436	63,015	9,593	9,700	19,293	42,172	40,136	82,308
Special primary grades(a) .	5,143	3,487	8,630	1,109	987	2,096	6,252	4,474	10,726
Secondary— Form I (or 7)		20.004	C1 056	0.000	0.460	10 120	40.022	20.262	00.20.
Form I (or /)	31,952 31,229	29,904	61,856	8,980	9,459	18,439 17,882	40,932 39,862	39,363	80,295 77,983
Form II (or 8) . Form III (or 9) .	24,681	28,872 23,040	60,101 47,721	8,633 7,874	9,249 8,537	16,411	39,862	38,121 31,577	64,132
Form IV	10 825	17,434	37 259	7,304	7,623	14,927	27,129	25,057	52,186
Form V	9,226	6,476	37,259 15,702	4,160	2,955	7,115	13,386	9,431	22,817
Form V . Form VI .	19,825 9,226 7,984	5,258	13,242	3,623	2,455	7,115 6,078	11,607	9,431 7,713	19,320
Special secondary		-,	,-	-,	_,	-,	,	.,	,
grades(a) . Correspondence	652	185	837	• •	• •	••	652	185	837
school pupils.	1,161	1,190	2,351	• •	••	• •	1,161	1,190	2,351
Total .	379,236	346,537	725,773	110,815	110,303	221,118	490,051	456,840	946,891
				VICTORI	A				
Primary—									
1(b)	55,599 26,892	51,207	106,806	15,117	15,061	30,178 16,896 16,759	70,716	66,268	136,984
2	26,892	24,871	51,763	8,439	8,457	16,896	35,331	33,328	68,659
3	25,500	23,628	49,128	8,312	8,447	16,759	33,812	32,075	65,887
4	25,208	23,408 22,995	48,616	8,558	8,393	16,931	33,766 32,778	31,801	65,567
6	24,477 24,280	22,993	47,472 46,920	8,301 8,190	8,279 8,405	16,951 16,580 16,595	32,778	31,274 31,045	64,052 63,51
Ungraded(c)	1,542	22,640 870	2,412	122	176	298	1,664	1,046	2,710
Secondary—	1,542	0,0	2,112			2,0	1,001	1,010	2,,10
7 or I	25,564	22,426	47,990	7,064	8,539 8,179	15,603	32,628	30,965	63,593
7 or I 8 or II	25,564 24,790	21,696	46,486	6.825	8,179	15 004	31,615	29,875	61,490
ш	23,092	19,426	42,518	6,218	7,701	13,919	29,310	27,127	56,437
IV	19,196	15,805	35,001	5,886	6,892	13,919 12,778 10,547	25,082	22,697	47,779
<u>v</u>	12,528	9,631 3,776	22,159	5,098	5,449	10,547	17,626	15,080	32,706 15,032
vi	4,791	3,776	8,567	3,581	2,884	6,465	8,372	6,660	
Total .	293,459	262,379	555,838	91,711	96,862	188,573	385,170	359,241	744,411
			Q	UEENSL	AND				
Primary									
Preparatory .	29	34	63	309	304	613	338	338	670
1	17,308	15,635	32,943	4,552	4,346	8,898	21,860	19,981	41,84
2	16,330	34 15,635 15,003 14,151	32,943 31,333 28,999	4,284	4,045 4,082	8,329	20,614	19,048	39,66 37,09
4	14,046	14,131	28,854	4,013 3,865	3 030	7 705	18,861 18,908 18,191	19,048 18,233 17,741 17,255	36,64
3	14 531	13,611	28,038	3,660	3,930 3,748	7 408	18 191	17.255	35,44
2	16,330 14,848 15,043 14,531 14,202	13,811 13,507 13 462	27,664	3,660 3,706	3,717	8,095 7,795 7,408 7,423	17.908	17,179	35,08
7	14,134	12,819	26,953	3,709	3,926	7,635	17,843	16,745	34,58
Ungraded(a)	1,466	740	2,206	32	34	66	17,843 1,498	774	2,27
Secondary—	12,769	12,013	24,782	4,243	4.192	8,435	17,012	16,205	33,21
9 : : :	11,894	11,248	23,142	4,243	4,150	8,191	15,935	15,398	31,33
	10,578 3,304	9,519 2,428	20,097	3,802	3,848	7,650	14,380	13,367	27,74
101	10,576	2,317	6 722	2,329	1,770	4,099	5,633	4,198	9,83
10	3 (114	24/8	3.732						
10 11 12	3,304 2,655	1,967	5,732 4,622	2,116	1,454	3,570	4,771	3,421	8,19

⁽a) Pupils in special classes at ordinary schools and ungraded pupils at special schools. (b) In Victoria, owing to differences in ages of commencing school, many younger children may not reach grade 2 until they have been at school for two years. (c) All pupils at special schools.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC. AND SEX, STATES, ETC., 1968—continued

Grade, year or	Governme	nt schools		Non-gover	nment schoo	ols	All school	5	
form	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Tota
			SOUT	H AUSTI	RALIA				
Pre-primary .				84	128	212	84	128	212
Primary— Preparatory(a) .	3,237	3,037	6,274				3,237	3,037	6,27
I	11,598	10,569 10,574	22,167 21,894	1,810 1,545	1,782 1,613	3,592 3,158	13,408	12,351 12,187	25,759
ıii : : :	11,320 11,139	10.427	21,566	1,533	1,656	3,189	12,865 12,672	12,083	25,052 24,75
IV	10,694 10,536	10,259 9,790	20,953 20,326	1,465 1,523	1,627 1,659	3,092 3,182	12,159 12,059	11,886 11,449	24,045 23,508
vi : :	10,338	9,915	20,313	1,545	1,625	3,170	11,943	11,540	23,48
VII Ungraded(b) .	9,920 1,423	9,597 898	19,517 2,321	1,665 13	1,738 15	3,403 28	11,585 1,436	11,335 913	22,920 2,349
Secondary—	10 204	0.449	10.752	1 602	1.726	2 220	11.007	11 174	22.00
VIII or 1st IX or 2nd	10,304 9,524	9,448 8,856 7,548	19,752 18,380	1,603 1,510 1,554	1,726 1,622	3,329 3,132	11,907 11,034	11,174 10,478	23,08 21,51
X or 3rd .	9,524 8,505	7,548	16,053	1,554 1,293	1,635	3,189	10.059	9,183	19,242
XI or 4th . 5th .	5,209 1,926	4,017 1,112	9,226 3 038	923	1,163 570	2,456 1,493	6,502 2,849	5,180 1,682	11,682 4,53
Ungraded(c) .	149	90	239	18,066		36,625	149 133,948	90 124, 69 6	239
Total .	115,882	106,137	222,019		18,559	30,023	133,946	124,090	258,644
			WESTE	RN AUST	TRALIA				
Primary— Kindergarten .				159	170	329	159	170	329
1	9,397	8,286	17,683	1,951	1 969	3.920	11,348	10.255	21,603
2	8,857 8,445	8,024 7,836	16,881 16,281	1,810 1,717	1,899 1,871	3,709 3,588	10,667 10,162	9,923 9,707	20,590 19,869
4	8,225	7,716	15,941	1,585	1,794	3,379	9.810	9,510	19,320
5 6	8,024 8,174	7,507 7,463	15,531 15,637	1,529 1,580	1,819 1,754	3,348 3,334	9,553 9,754	9,326 9,217	18,879 18,971
7	8,065 807	7,082 372	15,147 1,179	1,583	1,894	3,477	9,648 807	8,976 372	18,624 1,179
Special classes . Secondary—	807	312	1,179	••	••	• • •	807	312	1,17:
1	7,811	7,007	14,818	1,975	2,266	4,241	9,786	9,273	19,059
2	6,942 6,091	6,413 5,643	13,355 11,734	1,804 1,690	2,084 2,003	3,888 3,693	8,746 7,781	8,497 7,646	17,243 15,427
4 : : :	1,896 1,362	1,503	3,399	1,028	996	2,024	2,924	2,499	5,423
5	1,362 333	1,000 189	2,362 522	856	769	1,625	2,218 333	1,769 189	3,987 522
Special schools(d).	5 7 3	373	946	. 8	.5	13	581	378	959
Total .	85,002	76,414	161,416	19,275	21,293	40,568	104,277	97,707	201,984
			т.	ASMANI	Α				
Pre-school	1,464	1,397	2,861	89	. 100	189	1,553	1,497	3,050
Primary— Kindergarten .	1,240	1,141	2,381	437	509	946	1,677	1,650	3,327
1	4,985	4,336 3,788	9.321	747	740	1,487	5,732	5,076	10,808
2 · · · · · · · · · · · · · · · · · · ·	3,966 3,675	3,788 3,537	7,754 7,212	575 571	571 598	1,146 1,169	4,541 4,246	4,359 4,135	8,900 8,381
4	3,747	3,409	7,156	571	659	1.230	4,318	4,068	8,386
5 6	3,612 3,605	3,332 3,366	6,944 6,971	604 567	59 9 738	1,203 1,305	4,216 4,172	3,931 4,104	8,147 8,276
Secondary—	2,000	2,500	0,214				.,	.,	-
I	3,691 3,296	3,421	7,112	727 627	733 714	1,460 1,341 1,293	4,418 3,923	4,154 3,839	8,572 7,762
II · · ·	2,970	3,125 2,963	6,421 5,933	586	707	1,293	3,556	3,670	7,226
IV	1,912	1.635	3,547	658 278	629 260	1,287	2,570 835	2,264 746	4,834
V(e)	557 448	486 260	1,043 708	210	143 27	538 353 27	658	403	1,581 1,061
Special schools(d).	456	289	745	• •	27	27	456	316	772
Total	39,624	36,485	76,109	7,247	7,727	14,974	46,871	44,212	91,083

⁽a) 'Preparatory' refers to children who commenced school at the mid-year intake. (b) Relates to occupation centres, opportunity classes, speech and hearing classes, and children in schools at spastic centres. (c) Speech and hearing classes and opportunity classes. (d) All pupils at special schools for physically and mentally handicapped or delinquent children. (e) The final secondary school grade may be taken in one year (Year V) or spread over two years (Years V and VI).

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC. AND SEX, STATES, ETC., 1968—continued

Canda wasa sa	Governmen	t schools		Non-govern	ment school	5	All schools		
Grade, year or form	Boys	Girls	Total	Boys	Gir is	Total	Boys	Girls	Tota
		1	NORTHE	ERN TER	RITORY				
Primary—									
Preparatory(a).	155	149	304	4:	.11	.::	155	149	30
<u>I</u>	592	500	1,092	94	105	199	686	605	1,29
<u>II</u>	503	461	964	72	81	153	575	542	1,11
III	459	408	867	73	79	152	532	487	1,01
IV	423	380	803	77	68	145	500	448	94
_ <u>v</u>	327	362	689	57	52	109	384	414	79
<u>vi</u>	375	334	709	60	66	126	435	400	83
VII	311	300	611	40	46	86	351	346	69
Ungraded(b) .	1,403	1,338	2,741	772	782	1,554	2,175	2,120	4,29
Secondary—	287	277	564	42	34	76	329	311	640
VIII or 1st . IX or 2nd .	234	227	364 461	22	21	43	256	248	50-
X or 3rd .	173	176	349	14	13	27	187	189	376
XI or 4th .	65	49	114				65	49	114
5th .	36	75	45	• •	• •	• •	36	9	4:
Ungraded(b) .	13	12	25	• •	• • •		13	12	2
Total .	5,356	4,982	10,338	1,323	1,347	2,670	6,679	6,329	13,00
	_	AUSTI	RALIAN	CAPITAL	TERRIT	ORY	•		
Infants—									
Kindergarten .	1,139	1,103	2,242	385	207	782	1.524		
remontant .					397		1,324	1,500	3,02
1	1,192	1,034	2,226	422	402	824	1,614	1,436	3,05
1			2,226 2,120						3,05
1	1,192 1,145	1,034 975	2,226 2,120	422 423	402 400	824 823	1,614 1,568	1,436 1,375	3,05 2,94
1	1,192 1,145 968	1,034 975 930	2,226 2,120 1,898	422 423 404	402 400 353	824 823 757	1,614 1,568 1,372	1,436 1,375 1,283	3,05 2,94 2,65
1	1,192 1,145 968 967	1,034 975 930 907	2,226 2,120 1,898 1,874	422 423 404 364	402 400 353 324	824 823 757 688	1,614 1,568 1,372 1,331	1,436 1,375 1,283 1,231	3,05 2,94 2,65 2,56
1	1,192 1,145 968 967 893	1,034 975 930 907 842	2,226 2,120 1,898 1,874 1,735	422 423 404 364 356	402 400 353 324 314	824 823 757 688 670	1,614 1,568 1,372 1,331 1,249	1,436 1,375 1,283 1,231 1,156	3,05 2,94 2,65 2,56 2,40
1	1,192 1,145 968 967	1,034 975 930 907	2,226 2,120 1,898 1,874	422 423 404 364	402 400 353 324	824 823 757 688	1,614 1,568 1,372 1,331	1,436 1,375 1,283 1,231	3,05 2,94 2,65 2,56 2,40
1	1,192 1,145 968 967 893	1,034 975 930 907 842	2,226 2,120 1,898 1,874 1,735	422 423 404 364 356	402 400 353 324 314	824 823 757 688 670	1,614 1,568 1,372 1,331 1,249	1,436 1,375 1,283 1,231 1,156	3,05 2,94 2,65 2,56 2,40 2,37
1	1,192 1,145 968 967 893 868	1,034 975 930 907 842 820	2,226 2,120 1,898 1,874 1,735 1,688	422 423 404 364 356 343	402 400 353 324 314 347	824 823 757 688 670 690	1,614 1,568 1,372 1,331 1,249 1,211	1,436 1,375 1,283 1,231 1,156 1,167	3,05 2,94 2,65 2,56 2,40 2,37
1	1,192 1,145 968 967 893 868	1,034 975 930 907 842 820	2,226 2,120 1,898 1,874 1,735 1,688	422 423 404 364 356 343	402 400 353 324 314 347	824 823 757 688 670 690	1,614 1,568 1,372 1,331 1,249 1,211	1,436 1,375 1,283 1,231 1,156 1,167	3,05 2,94 2,65 2,56 2,40 2,37
1	1,192 1,145 968 967 893 868	1,034 975 930 907 842 820	2,226 2,120 1,898 1,874 1,735 1,688	422 423 404 364 356 343	402 400 353 324 314 347	824 823 757 688 670 690	1,614 1,568 1,372 1,331 1,249 1,211	1,436 1,375 1,283 1,231 1,156 1,167	3,05 2,94 2,65 2,56 2,40 2,37 16
1 2	1,192 1,145 968 967 893 868 83	1,034 975 930 907 842 820 80	2,226 2,120 1,898 1,874 1,735 1,688 163 1,616 1,454	422 423 404 364 356 343 	402 400 353 324 314 347 	824 823 757 688 670 690	1,614 1,568 1,372 1,331 1,249 1,211 83	1,436 1,375 1,283 1,231 1,156 1,167 80 1,149	3,05 2,94 2,65 2,56 2,40 2,37 16
Primary— 3 4 5 5 6 Special primary grades(c) Secondary— Form II Form III Form IV	1,192 1,145 968 967 893 868 83 811 763 625 616	1,034 975 930 907 842 820 80 805 691 641 498	2,226 2,120 1,898 1,874 1,735 1,688 163 1,616 1,454 1,266 1,114	422 423 404 364 336 343 378 361 335 274	402 400 353 324 314 347 	824 823 757 688 670 690 	1,614 1,568 1,372 1,331 1,249 1,211 83 1,189 1,124	1,436 1,375 1,283 1,231 1,156 1,167 80 1,149 984 897 766	3,05 2,94 2,65 2,56 2,40 2,37 16 2,33 2,10 1,85
1	1,192 1,145 968 967 893 868 83 811 763 625	1,034 975 930 907 842 820 80 80 805 691 641	2,226 2,120 1,898 1,874 1,735 1,688 163 1,616 1,454 1,266	422 423 404 364 356 343 378 361 335	402 400 353 324 314 347 344 293 256	824 823 757 688 670 690 722 654 591	1,614 1,568 1,372 1,331 1,249 1,211 83 1,189 1,124 960	1,436 1,375 1,283 1,231 1,156 1,167 80 1,149 984 897	3,05 2,94 2,65 2,56 2,40 2,37 16 2,33 2,10 1,85 1,65
Primary— 3	1,192 1,145 968 967 893 868 83 811 763 625 616	1,034 975 930 907 842 820 80 805 691 641 498	2,226 2,120 1,898 1,874 1,735 1,688 163 1,616 1,454 1,266 1,114	422 423 404 364 336 343 378 361 335 274	353 324 314 347 344 293 256 268	824 823 757 688 670 690 722 654 591 542	1,614 1,568 1,372 1,331 1,249 1,211 83 1,189 1,124 960 890	1,436 1,375 1,283 1,231 1,156 1,167 80 1,149 984 897 766	3,02- 3,05(2,94: 2,65: 2,40: 2,378 163: 2,33: 2,10: 1,85: 1,65: 9,81

(a) 'Preparatory' refers to children who commenced school at the mid-year intake. (b) Relates to opportunity classes, classes for physically handicapped children, and Aboriginal children at special schools at settlements, missions and on pastoral properties. (c) Pupils in special classes at ordinary schools and ungraded pupils at special schools.

Other aspects of school education

Information relating to school medical and dental services is given in the chapter Public Health, and particulars of school savings banks in the chapter Private Finance.

Provisions for isolated areas

Although the task of bringing education to isolated areas in Australia presents problems, all education authorities have aimed at providing opportunities for country children comparable to those available to city children. Country children follow the same curricula (with local adaptation, if desirable) and are under the guidance of teachers who are trained for service in country and city schools alike.

In areas where there are sufficient children of school age a 'one-teacher' school may be formed with all primary grades in a single classroom under the control of the one teacher. Special training is given to teachers undertaking work of this kind. Children who complete a primary course in a one-teacher school and cannot attend a secondary school may do secondary correspondence lessons under the teacher's supervision.

In districts where a number of small centres are scattered around a larger centre or country town the tendency is to close the one-teacher schools and transport pupils each day by buses to a 'consolidated' school in the larger centre. Consolidated schools provide primary instruction and from two to four years of post-primary instruction. The post-primary curriculum adopted is usually directed towards practical activities and training in subjects bearing on the primary industries of the locality.

Where a group of children is too small to warrant the establishment of a one-teacher school at public expense, a 'subsidised' school may be opened. The education department pays part of the cost and in some States appoints a teacher. Some States also administer 'provisional' schools, which are completely financed by the government but which are not large enough, or sufficiently assured of adequate continued attendance of pupils, to warrant classification as permanent schools.

Correspondence schools. These have been established in each State capital city to meet the needs of children whose daily attendance at school is prevented by distance between home and school, by illness or by physical disability. The correspondence schools also cater for inmates of penal institutions, Australian children overseas, pupils of other schools in which particular courses are not available, and, as well, for members of the Defence Forces and other adults completing their secondary education. Where children are involved, lessons are done with the help of a supervisor, usually a member of the child's family, and posted back to the correspondence school in the capital city, where they are corrected and returned with comments. Every endeavour is made to maintain a personal link between teacher and pupil. Correspondence schools began with primary grades only, but were soon extended to cater for secondary pupils, and it is now possible to do a complete secondary course to matriculation standard by correspondence. Each year more than 20,000 students receive all or part of their instruction by correspondence.

Schools of the air. These are intended to give the outback child of school age some of the benefits of school life and to supplement correspondence education. The schools of the air keep the various correspondence schools informed of the progress of their pupils. Using the two-way wireless equipment developed first by the Royal Flying Doctor Service, children hundreds of miles apart participate in the same lesson, and teacher and pupils can talk directly with each other. The first school of the air was established in 1951 at Alice Springs in the Northern Territory; it has been followed by similar schools at Broken Hill in the far west of New South Wales; Ceduna and Port Augusta in South Australia; Charleville, Mount Isa and Charters Towers in Queensland; Meekatharra, Derby, Kalgoorlie, and Port Hedland in Western Australia; and Katherine in the Northern Territory. These twelve schools serve children in an area of a million square miles.

Handicapped children

Some provision is made for the education of physically and mentally handicapped children, both by the State authorities and by church and voluntary organisations, often working in conjunction. In some cases, where residential schools are necessary for particular groups, educational facilities and teaching staff are provided by a State education department, while a voluntary organisation provides accommodation and accepts responsibility for the general welfare of the children. Among the facilities available are: hospital schools for sick and crippled children; 'spastic centres' for cerebral palsied children; schools and classes for deaf children; schools for blind children; and special schools and classes for mentally retarded children. Special schools and classes have involved the appointment of departmental specialists, the provision of special courses for the training of teachers of the deaf in New South Wales and Victoria, a training course for teachers of the mentally and physically handicapped at Melbourne Teachers College, and close liaision wth school health services. In some States, clinics attached to hospitals, or functioning as an independent child welfare service, handle cases of personality maladjustment and work in co-operation with the psychological services of the education departments.

Physical education and National Fitness Councils

Each education department has a physical education branch which guides and develops physical education in schools and maintains liaison with the State National Fitness Council. Physical education includes not only organised instruction but also sports, swimming, folk-dancing, and camping.

Trainee primary teachers at State teachers colleges learn to teach all the subjects in the syllabus, including physical education. For secondary schools, courses designed to train physical education teachers are offered in universities in all the States, and in four States at teachers colleges as well.

The State National Fitness Councils, with the help of Commonwealth and State government grants, train voluntary youth leaders, develop community playing areas and facilities, open play centres for school children on vacation, and maintain camps for schools and youth groups.

Educational guidance

Each Australian State has a system of educational guidance administered by educational psychologists. The functions of these services are to provide advice on suitability of various secondary studies for particular children, diagnosis and guidance of atypical children, preliminary guidance, and, in some States, research. The weight given to each of these functions varies from State to State, but the aim is to provide educational guidance for all children.

Throughout Australia branches of the Commonwealth Employment Service co-operate with State education departments by giving post-school vocational guidance, using the data obtained during the school careers of the children and made available by the education departments. In New South Wales a similar service is also provided by the Vocational Guidance Bureau of the State Department of Labour and Industry.

Research

All State education departments have branches undertaking research directed towards departmental activities. The work of the research branches is concerned with such matters as curriculum content, new teaching methods, evaluation procedures, wastage rates, and educational statistics. Education research is also carried out by the faculties and departments of education in the universities, the Commonwealth Department of Education and Science and the Australian Council for Educational Research.

School broadcasting and television

Over the years a school broadcasting system has been developed in Australia by the co-operative efforts of the Australian Broadcasting Commission and education authorities. The Australian Broadcasting Commission's Education Department is responsible for preparing and broadcasting programmes, but it draws on the advice and services of teachers and maintains permanent liaison with State education departments. In 1968, 92 per cent of Australian schools were equipped to receive radio broadcasts.

Most school broadcasts are presented as part of the regular Australian Broadcasting Commission programmes without separate stations or wave lengths. Special efforts are made to relate the broadcasts to school work by the extensive distribution of booklets, giving details of programmes in advance, and subject notes accompanied by picture sheets, work books, and teachers' notes. Broadcasting has proved to be an effective way of reaching the outback children of Australia, and radio lessons have been designed to supplement correspondence lessons.

In the years 1967 and 1968 there was an increase in the number of schools receiving television broadcasts and in the number of programmes produced. The Australian Broadcasting Commission has increased its output of school television programmes, especially instructional programmes in mathematics and science for secondary schools. Direct teaching lessons designed for the senior forms were presented. At the same time most education departments began to subsidise the purchase of television sets, and by mid 1968 approximately 4,200 Australian schools were equipped to use educational television programmes.

Scholarships and bursaries

All States have schemes of financial assistance to school pupils, mostly at the secondary level, through scholarships or bursaries. As tuition in government schools is free, this assistance is usually in the form of maintenance allowances, both for children living with their parents and for those living away from home. These may be paid in a lump sum or in instalments throughout the year. Awards are usually made on the results of a competitive examination, and sometimes a means test is applied. Other government and private authorities, such as the Repatriation Department and the Legacy War Orphans Fund, assist certain categories of pupils with their school education. Many non-government schools also award scholarships, on a competitive basis, which enable students to attend the particular schools without payment of fees.

In 1964 the Commonwealth Government, with the co-operation of the State departments of education, introduced a programme of secondary scholarships to encourage successful candidates to complete the final two years of secondary schooling. Ten thousand of these scholarships are awarded each year. Further details of the Commonwealth secondary scholarship scheme and the Commonwealth technical scholarship scheme are given on page 526.

Sudsidised transport to and from school

All the States have systems of subsidies by which transport is free or at a concession rate for children who have to travel to and from school daily. In some States an allowance is paid if private transport has to be used.

Subsidies to children living away from home

For children whose homes are too far away from a secondary school to allow daily travel, some States run hostels or give financial assistance to privately owned hostels. The States also pay boarding allowances to the holders of State bursaries or scholarships and in some cases, agricultural scholarships include free board at an agricultural high school.

School buildings

The increase in the school population in the last decade led to an expansion in school building. To cope with this growth in population, it has been necessary to make use of temporary and emergency structures. Quite large schools are being built in stages to match increases in local population in new and rapidly developing suburbs in metropolitan areas. Authorities are giving attention to the use of new materials and to the planning of sites. Gymnasiums which may also serve as assembly halls are sometimes included, and lighting, heating and ventilation to meet different climatic conditions are planned. For details of assistance provided by the Commonwealth for the building and equipping of science laboratories, see page 527.

Textbooks, materials and other equipment

The State education departments supply government schools, free of charge, with essential equipment, including scientific apparatus, maps, blackboards, chalk, and cleaning materials, and non-consumable equipment for commercial, home science and manual training. Garden tools and physical training equipment are also supplied in most States. Readers and writing equipment for individual pupils are sometimes supplied free in primary schools, and several education departments produce monthly school magazines which are supplied free or at a nominal price. In primary schools (except in one State where textbooks are made available free to children in both government and nongovernment primary schools) and in secondary schools, textbooks must, however, be purchased by students. In several States, schools own stocks of textbooks which are hired to students, and in one State, secondary textbooks are sold at reduced prices. In four States certain textbook costs are subsidised for pupils attending government and non-government schools. The parent and citizen organisations, with the assistance of subsidies from the education departments, are usually responsible for providing equipment such as radios and television sets, film strip projectors, pianos, duplicators and, in particular, library books.

The design of school furniture is undergoing change following research on posture and the physical measurement of children. Dual desks are now being replaced in many schools by individual tables and chairs, provided in a range of sizes suitable for each class. In line with modern educational practice, the new type of furniture has been designed to allow more flexible arrangements of the classroom.

Visual aids

Each of the State education departments has a visual education branch to handle the production and distribution of such materials. Film strips and posters are distributed free or at low cost. Films are held in central libraries and are requisitioned by schools as required for teaching purposes.

Pre-school education

Pre-school centres are maintained by voluntary organisations such as the kindergarten unions, churches, and committees of interested citizens. Over the years an increasing amount of financial assistance has been provided by State governments to approved pre-school centres. Grants are available for teachers' salaries and, in some areas, towards buildings and equipment. In the mainland territories of Australia and in Papua/New Guinea, the Commonwealth Government provides pre-school centres and employs the teachers, but parents assist in the provision of equipment.

The Australian Pre-school Association is a national body whose members seek to promote the health and welfare of young children. It aims to co-ordinate and strengthen pre-school education. It is responsible for the administration, on behalf of the Commonwealth Government, of six Lady Gowrie Child Centres for child-study and demonstration.

Pre-school centres are located in city and country areas, and programmes are adapted to meet the needs of the children attending. A typical pre-school centre provides half-day sessions for children. Crèches and day-nurseries provide full-day care in closely settled areas. In a few centres, occasional or residential care is available. During the past ten years the number of children attending pre-schools in Australia has increased.

Radio and television bring a form of education within the reach of practically every pre-school child in Australia. The Australian Broadcasting Commission pioneered the programme 'Kindergarten of the Air', a session of twenty-five minutes each week-day broadcast throughout the country and overseas through Radio Australia. This session was designed to reach children in isolated areas. The half-hour television programme 'Play-school' is also available each week-day to children of kindergarten age in all State capital cities and in many country regions.

Technical education

The following description of technical education refers to training in technical fields given by institutions other than secondary schools and universities. Students may proceed to this kind of training after completing three to five years at secondary school. Each State has developed a system of technical education based on institutions set up in all the State capital cities and in some country areas. These institutions are known variously as technical colleges, institutes of technology and schools of mines. The earliest began as local and even private ventures in the second half of the nineteenth century, but almost all of them have now come under the control of the State governments.

The technical colleges in Queensland, South Australia, Western Australia, and Tasmania are administered by branches of the State education departments. In Western Australia and South Australia the Institutes of Technology function as autonomous institutions. New South Wales has a separate State Department of Technical Education. In Victoria there is a dual system with a number of the older colleges controlled by their own 'councils' in addition to government-controlled colleges administered by the Technical Education Branch of the Education Department. The council-controlled colleges receive government grants-in-aid. The diploma awarding schools or sections of technical institutions are in process of being separated from the trade, certificate and other sections of technical education, and of being developed as colleges of advanced education. Most of the diploma and other tertiary courses of technical institutions are now receiving Commonwealth financial assistance under the arrangements covering colleges of advanced education as outlined on pages 521-2.

Australian technical colleges offer training in all the major industrial skills and in a wide variety of commercial, artistic and domestic occupations. The three main types of courses are described in the following paragraphs.

Trade courses

These offer part-time training for apprentices. In developing a system of technical education, the Australian authorities took cognisance of the British tradition which regards practical experience on the job as the fundamental training procedure, to be supplemented by theoretical and practical training at an appropriate school. In each of the Australian States there is an apprenticeship authority which supervises the administration of apprenticeships, and an education authority which provides technical education through its technical colleges.

Most students who wish to become tradesmen leave school on the completion of three or four years of secondary schooling at about sixteen years of age. An increasing proportion, however, is entering at higher educational levels and receiving credit for this. On entering apprenticeship in one of the trades, the young apprentice is required to enrol in an appropriate trade course in one of the network of technical colleges in capital cities and large country towns.

The time spent on training varies from three to five years in different trades and States. Between four and eight hours' instruction a week is required. Much of this takes place in the employer's time, and it is unusual for more than two hours a week to be spent in attending classes outside working hours.

Certificate courses

These courses are designed to provide training in technical occupations and in some cases can be counted towards a diploma course. Certificate courses vary in length from State to State, but generally they last from two to seven years. Attendance may be full-time for all or part of the course, or wholly part-time. Usually there are no occupational requirements for admission to a certificate course, and students who have completed a related trade course may be admitted together with other students to a certificate course. Educational requirements in most cases specify possession of an Intermediate

level examination certificate, which may need to include passes at appropriate levels in certain specified subjects. In addition, in New South Wales the Department of Technical Education conducts the Certificate Entrance Examination, a pass in which qualifies a student for attendance at a technical college. Courses are offered in subjects such as accountancy, industrial electronics, wool classing and architectural drafting.

Diploma courses

The diploma courses which generally have a vocational emphasis cover a range of subjects including art, architecture, business studies, engineering, agriculture, applied science, pharmacy, and librarianship. Study may be undertaken on a full-time or part-time basis and three years full-time, or its equivalent, is the normal minimum length of a course. One full year of employment in an appropriate occupation is a requirement before certain qualifications may be obtained.

Other technical courses

Most colleges provide short post-diploma and refresher courses to keep students in touch with new developments in their fields, as well as courses of general interest, such as handicrafts and motor mechanics. Training in certain technical aspects of agriculture such as farm mechanics and wool classing is often given in the technical colleges. Some also offer general secondary courses to enable adults to prepare for matriculation and other public examinations.

Technical correspondence teaching

Each State has a system of technical education by correspondence to extend the facilities of a metropolitan college to rural students. Entrance qualifications are identical with those for the regular classes. A major problem of correspondence work is the linking of theory with practice. This is overcome to a certain extent by holding practical sessions at appropriate training centres once or twice a year at the technical college where the correspondence school is based, or at a mobile workshop stationed for the time at a focal point within the district. In New South Wales these mobile workshops are rail cars equipped with machinery and fittings to make them self-contained training schools for engineering and other trades. Among practical courses offered by correspondence are trade drawing, fitting and machinery, welding, diesel engine operation, automotive engineering and workshop practice, and farm mechanics.

Technical colleges, teachers and students

The numbers of colleges, teachers and enrolments during the years 1963 to 1967 are given in the following table. The statistics include senior technical schools and colleges, institutes of technology and colleges of advanced education providing technical education, and their teachers and students at all levels.

TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS STATES AND TERRITORIES, 1963 TO 1967

					Teachers			Students er	rolled	
State or Ter	ritory	,		Colleges	Full-time	Part-time	Total	Males	Females	Persons
New South		s(a)(b))	, <u>.</u>				·		
1963 .	•			52	1,474	2,732	4,206	87,477	40,219	127.696
1964 .	÷		•	53	1,535	3,099	4,634	94,663	41,022	135,685
1965 .	•	•		54	1,570	3,140	4,710	98,840	41,377	140,217
1966 .	•	•	•	54	1,625	3,566	5,191	104,839	44,774	149,613
1967 .	•	•	•	57	1,747	3,623	5,370	108,160	48,985	157,145
Victoria(e)-	_ •	•	•	٠,	2,,	5,025	5,570	100,100	10,202	101,110
1963(f)				73	3,080	2,290	5,370	50,325	13,456	63,781
1964(f)				73	3,378	2,363	5,741	52,031	13,399	65,430
1965		-	·	79	3,724	2,586	6.310	n.a.	n.a.	79,287
1966 .	·			82	4,151	2,639	6,790	n.a.	n.a.	82,230
1967 .	·		-	83	4,339	2,788	7,127	n.a.	n.a.	84,259
Queensland	(d)—		•		-,	_,	,,,	22		- 1,
1963 .	()			15	229	977	1,206	29,044	12,860	41,904
1964 .				15	235	1,067	1,302	31,082	12,002	43,084
1965(g)				14	308	921	1,229	29,715	6,740	36,455
1966 .				16	389	1,004	1,393	28,269	5,520	33,789
1967 .				18	481	889	1,370	21,829	2,091	23,920

For footnotes see next page.

TECHNICAL EDUCATION: COLLEGES,	TEACHERS AND ENROLMENTS
STATES AND TERRITORIES.	1963 TO 1967—continued

					Teachers			Students en	irolled	
State or Ter	ritor	V		Colleges	Full-time	Part-time	Total	Males	Females	Persons
South Aust	ralia-	_								
1963(h)				24	453	954	1,407	18,661	11,291	(h)34,330
1964(h)				25	462	1,101	1,563	19,956	11,503	(h)35,93
1965(h)				25	520	1,153	1,673	21,805	13,214	(h)39.850
1966(h)				25	549	1,214	1,763	21,685	14,332	(h)41,190
1967(h)				25	682	1,248	1,930	n.a.	n.a.	(h)39,188
Western Au	strali	a(d)(i)	_							
1963 .		•		32	373	1,257	1,630	30,251	15,362	45,61
1964 .				32	444	1,398	1,842	34,399	16,711	51,110
1965 .				36	505	1.632	2,137	37,326	18,114	55,44
1966 .				36	606	1,710	2,316	39,161	19,396	58,55
1967 .			•	36	658	1,834	2,492	41,168	20,362	62,530
Tasmania—	-									•
1963 .				11	104	438	542	5,491	1,994	7.48
1964 .				11	110	498	608	5,520	2,023	7,54
1965 .				12	146	442	588	5,501	2,110	7,61
1966 .			,	11	154	591	745	5,433	2,229	7,66
1967 .			•	10	173	614	787	5,580	2,264	7,84
Northern T	errito	rv—							·	,
1963 .				2	1	66	67	706	552	1,25
1964 .			-	2	1	72	73	712	579	1,29
1965 .			-	2 2	1	100	101	947	942	1,88
1966 .				2	1	112	113	1,032	930	1,96
1967 .				2	6	153	159	993	1,314	2,30
Total									•	-
1963(h)				209	5,714	8,714	14,428	221,955	95,734	(h)322,06
1964(h)				211	6,165	9,598	15,763	238,363	97,239	(h)340,08
1965(h)				222	6,774	9,974	16,748	n.a.	n.a.	
1966(h)				226	7,475	10,836	18,311	n.a.	D.a.	
1967(h)		·	Ċ	231	8,086	11,149	19,235	n.a.		(h)377,19

(a) Students enrolled represent gross enrolments, no allowance having been made for students enrolled in more than one course.

(b) Includes Australian Capital Territory. Gross enrolments at Canberra Technical College were as follows: 1963, 2,895; 1964, 3,551; 1965, 4,267; 1966, 4,855; 1967, 5,578.

(c) Figures include teachers and students at technical colleges and other centres, such as high school classrooms, in which technical classes are conducted.

(d) Includes correspondence course teachers and students.

(e) Teachers include those at both senior and junior technical colleges.

(f) Student enrolment figures for 1963 and 1964 are not comparable with those shown for later years because as from 1965 students taking single subjects only were included and the census date was altered from 1 August to 31 May.

(g) The figures for 1965 reflect the major reorganisation of technical education introduced at the beginning of the year. In addition to the establishment of the Institute of Technology entry standards were raised, and the minimum number of students required to commence classes was also raised.

(h) Total students includes students enrolled in correspondence courses. Teacher figures include correspondence course teachers.

(i) Teachers represent number of teaching positions.

Teacher education

State education departments recruit most prospective teachers for government service from students leaving schools after a secondary course. Each department offers training awards annually on the basis of academic merit and personal suitability. These awards cover the cost of a teacher training course (which may include university studies) and provide a living allowance. Students are usually required to enter into an agreement to serve for a specified number of years in the government schools of the State where they have trained. In some States intending teachers can obtain a scholarship at the first public secondary examination to enable them to complete teachers college entrance requirements. Such an award entails a bond of service for a longer period.

The State education departments conduct teachers colleges to train teachers for government schools. These colleges are co-educational and, in the larger States, have been established in country areas as well as in cities. The principal and staff of the colleges are responsible to the Director-General of Education in the State concerned. Teachers colleges are also conducted by other organisations.

The following table shows the number of teachers colleges, i.e. institutions set up to provide courses of professional teacher training for pre-schools and schools, including technical schools. The institutions covered are the government teachers colleges, denominational and independent teacher training colleges, and kindergarten training colleges.

NUMBER OF TEACHERS COLLEGES, 1968(a)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
Government—								
Primary only	2	6	1	1	1			11
Secondary only .		3		2	1			6
Primary and secondary	6	3	1	2	1	2		15
Total government								
colleges	8	12	2	5	3	2		32
Non-government—								
Kindergarten	2	1	1	1	1			6
All other	9	6	1	••	••		1	17
Total colleges .	19	19	4	6	4	2	1	55

⁽a) There are no teachers colleges in the Northern Territory. The figures do not include the Australian School of Pacific Administration (see page 524).

Teachers for government schools

Training of primary school teachers. In most States teachers for government primary schools are trained in teachers colleges. A minimum three year course for primary teachers is being introduced in all Australian States. The basic subjects taken in the various courses are history and principles of education, general and special methods of teaching in the primary school, school organisation, and educational psychology. In addition, students undertake courses in English (including speech training) mathematics, handicrafts, music, art, social studies, natural science, and physical and health education. Optional subjects may include dramatic art, visual aids, and so on. Supervised practice teaching in schools and the observation of demonstration lessons form part of all training courses. Since primary teachers in Australia may be called upon at some time to teach grouped classes in a small school or a 'one-teacher' school, special training for this kind of work is included in their course.

Training of secondary school teachers. Secondary teachers are normally specialists in a combination of subjects, such as english and history, modern languages, or mathematics and science. Intending secondary school teachers either obtain a university degree with additional professional teaching training such as a Diploma of Education, or are required to hold a diploma or certificate from a teachers college. Training also includes practice teaching under the supervision of teachers college and university staff, and the observation of demonstration lessons.

At several Australian universities, students wishing to take up teaching as a profession can receive their professional training along with the study of their teaching subjects as part of a first degree course in education. The time taken to complete such a Bachelor of Education degree course is three or four years.

Training for specialist teaching. Teachers of specialist subjects, such as music, art, manual arts, domestic science, and commercial subjects, receive from two to five years training which varies according to the institution concerned and the type of school in which the teacher is to serve. In several States the shorter courses are provided wholly by the teachers colleges. In five States teachers of music receive their specialist training at a conservatorium of music. Where the specialist course is given at an institution other than the teachers college—e.g. at a university, technical college, or conservatorium of music—as is usual for teachers of specialist subjects in high schools, students are required to attend teachers college or university lectures in education, and in some cases the specialist course is followed by a year of professional training. Courses designed to train physical education teachers are offered in universities in most States, and in at least one teachers college in every State.

Training for teachers of agricultural subjects in secondary schools is available in three States and consists of either an agricultural college diploma or a university degree course together with professional training. In Victoria there is a three-year agricultural college diploma course which follows on the normal two-year primary teachers course, whereas in Queensland students undertake a course at the Queensland Agricultural College, followed by two years of teacher education, one at university and one at a teachers college. In South Australia most students undertake a Bachelor of Science degree concurrently with professional training and with special training in agricultural science. Teachers of technical subjects in secondary schools may be trained in manual or industrial arts courses of two to four years' duration, at teachers colleges, technical colleges, or, in one State, at a university. These courses include basic training in such subjects as wood and metal work, and geometrical drawing. In Victoria there is a separate Technical Teachers College. Some teachers of trade subjects in technical schools are recruited from the ranks of qualified tradesmen engaged in industry or commerce. Upon appointment these teachers usually receive instruction in classroom teaching techniques and approcedures.

The following table shows departmental students undergoing teacher education courses in 1968. Departmental students are those awarded State education department scholarships or fellowships and who have executed an agreement for periods of teaching service after completion of their teacher education. The table also shows private students at government colleges, including those sponsored by government departments other than State education departments. The figures exclude enrolments for short refresher courses and summer schools. The figures include 1,000 departmental students at various universities who have not been enrolled at a teachers college. Some students enrolled at universities may take part of their university course at a teachers college (e.g. graduate students in New South Wales undergoing a 'professional year' leading to the award by the university of Diploma in Education).

GOVERNMENT TEACHERS COLLEGES: ENROLMENTS, STATES, 1968(a)

							Australi	a	
	N.S.W.	Vic.(b)	Qld	S.A.	W.A.	Tas.	Males	Females	Persons
		DEPART	MENTA	L STUI	ENTS				
Attending teachers college and not enrolled elsewhere—									
For primary teaching— 2 year course 3 year course	2,524	2,377 1,926	1,946}	1,217	${845 \atop 117}$	242 131 }	2,406	8,919	11,325
Total	2,524	4,303	1,946	1,217	962	373	2,406	8,919	11,325
For secondary teaching— 2 year course 3 year course	692 345	43	534	138	23 43	17 12	335 263	931 318	1,266 581
4 year and longer courses		669	•••	73			417	325	742
Total	1,037	712	534	211	66	29	1,015	1,574	2,589
Enrolled at university or other institution—									
For primary caching— 2 year course 3 year course		14	••	106 162	32		35 56	103 120	138 176
4 year and longer courses	••	87	••	24		••	59	52	111
Total	• •	101	• •	292	32	• •	150	275	425
For secondary teaching— 2 year course 3 year course 4 year and longer courses	5,436	412 4,386	285 72 221	521 1,252	124 770	iò	82 363 5,832	203 776 6,233	285 1,139 12,065
Total	5,436	4,798	578	1,773	894	10	6,277	7,212	13,489
Not specified as primary or	3,430	4,750	370	1,//3	024	10	0,277	7,212	15,405
secondary teaching— 3 year course						97	42	.55	9
4 year and longer courses	• •	••	• •	• •	• •	310	139	171	310
Total	••	••	••	••	••	407	181	226	40
Special courses(c)— For primary teaching— 1 year course		94					35	59	9,
2 year course	• • • • • • • • • • • • • • • • • • • •	5	• •				2	3	
For secondary teaching— 1 year course Not specified—		22	88		7		66	51	11
1 year course						20	9	.11	20
2 year course	••	• • • • • • • • • • • • • • • • • • • •	••	• •	• •	207	90	117	20
Total	• •	121	88	• •	7	227	202	241	44.
Grand total— Primary	2,524	4,503	1,946	1,509	994	373	2,593	9,256	11,849
Secondary	6,473	5,532	1,200	1,984	967	39	7,358	8,837	16,19
Not specified	• •	••	• •	• •	• •	634	280	354	634
All departmental students	8,997	10,035	3,146	3,493	1,961	1,046	10,231	18,447	28,678
		ОТ	HER ST	UDENT	'S				
For primary teaching	27	33	11	54	39	3	66	101	16
For secondary teaching .	165	50	2	28	2	iż	91 23	156	247
Not specified	75 267				41			64	81
Total	267	83	13	82	41	15	180	321	50.
Total students $(b)(d)$.	9,264	10,118	3,159	3,575	2,002	1,061	10,411	18,768	29,17

⁽a) There are no government teachers colleges in the Australian Capital Territory and the Northern Territory. (b) Enrolments in part-time courses at the Technical Teachers College, Victoria, are excluded from this table. They comprise 354 departmental 'student instructors', 201 practising teachers from government schools and council controlled technical colleges, and 81 'other students'. The figures also exclude 245 Technical Teachers College students undergoing one or two years industrial experience. (c) Special courses are chiefly extension courses for students who have qualified as teachers and for practising teachers. Student enrolments are, (i) at teachers college only: Victoria, 92 in primary and 22 in secondary courses (and 38 practising teachers who have been excluded from the figures in the table); Queensland, this course is for students already holding approved subject qualifications; and (ii) at university or other institutions: Victoria, 7 (in primary courses); Western Australia, 7; and Tasmania, 227 in courses not specified as primary or secondary. (d) This table excludes 28 male and 17 female students enrolled in courses for primary teaching, and 64 male and 30 female students enrolled in courses for secondary teaching at the Australian School of Pacific Administration.

The following table shows departmental students enrolled in the first year of their courses and also those enrolled in the final year of their courses. The figures exclude enrolments in one year courses (see footnote (c) to the preceding table).

DEPARTMENTAL STUDENTS ENROLLED IN THE FIRST AND IN THE FINAL YEAR OF COURSE, 1968

							Austra	lia	
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Males	Females	Persons
Enrolled in first year of course—					-				
For primary teaching. For secondary teaching. Courses not specified as primary or secondary	1,189 3,093	1,957 1,893	1,085 564	675 637	553 319	140 18	1,228 2,738	4,371 3,786	5,599 6,524
teaching		• •				201	96	105	201
Total	4,282	3,850	1,649	1,312	872	359	4,062	8,262	12,324
Enrolled in final year of course—									
For primary teaching. For secondary teaching. Courses not specified as primary or secondary	1,248 1,472	1,735 1,049	861 439	656 461	439 245	168 14	1,190 1,481	3,917 2,199	5,107 3,680
teaching					• •	329	144	185	329
Total	2,720	2,784	1,300	1,117	684	<i>511</i>	2,815	6,301	9,116

In-service training. As almost all teachers now enter the profession by way of teachers colleges or universities, where they receive basic professional training, in-service training in Australia is directed chiefly towards keeping teachers abreast of developments and adding to their basic training. In-service training usually takes the form of short courses held sometimes during vacations, sometimes during school-time or in the evening. In some States in-service courses for teachers in remote areas are provided by correspondence. Courses consist of discussions and lectures given by senior staff members of education departments and university and teachers college lecturers on such subjects as classroom techniques and supervision, librarianship, visual aids, music, arts and crafts, and physical education. In some States there are also in-service courses for special groups of teachers such as headmasters or teachers in one-teacher schools. In addition, district inspectors are responsible for organising short conferences of teachers, where professional topics are discussed. Education departments encourage teachers to pursue university courses and in some States pay the cost of courses undertaken by selected teachers.

In January 1969 groups of Australian teachers again attended refresher courses in New Caledonia for Australian and New Zealand teachers of French. These courses have been offered to the Australian Government by the French Government. Official publications of the education departments contain articles dealing with educational theory and practice. Magazines of the teachers' organisations, which reach the majority of government teachers, also contain articles of this type.

Status of teachers. Most teachers in government schools are permanent public servants and have security of tenure, superannuation rights, and the right of appeal in matters of promotion. The centralised education systems and the general policy of providing fully trained teachers for both city and country areas mean that teachers are subject to transfer to any part of the State in which they serve. It is common for a teacher's first appointment to be to a country school.

In each State there are unions of State school teachers and these together form a federal body, the Australian Teachers' Federation. Teachers in non-government schools have formed similar organisations. Their aim is to advance the teachers' status and conditions and to stimulate community interest in education problems.

Training of technical teachers

Prior to the 1939-45 War technical colleges were staffed chiefly by trained teachers in the employment of the education departments or technicians drawn from industry. Although some of the latter were highly qualified, the great majority had not been trained as teachers.

To preserve links with industry and trade practice, schemes have been developed which continue the recruitment of specialist tradesmen as teachers but provide also for their training in educational method and teaching techniques. In Victoria, the Technical Teachers College provides training for students with appropriate diploma or trade qualifications and suitable industrial experience. In New South Wales technical college lecturers and tradesmen-teachers receive an in-service course of teacher training in general education theory and teaching method, while correspondence courses and visiting lecturers assist the newly appointed tradesman-teacher in country colleges. Variations of this scheme are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers colleges.

Training of non-government school teachers

Teachers for non-government schools receive their training in a number of ways. The Roman Catholic Church staffs both its primary and secondary schools largely with members of religious orders. In recent years there has been an increase in the number of lay teachers being employed in Catholic schools, and training of students to become lay primary teachers has been instituted. Secondary teachers receive their academic training mostly through courses provided by Australian universities.

Other non-government schools tend to recruit their staffs from teachers who have already obtained qualifications in Australia or overseas. In New South Wales and Victoria, non-government school authorities offer courses designed specially for teachers in their schools. Non-government schools also recruit university graduates, who are then given professional guidance by senior members of the school staff. Private students may enrol at government teachers colleges on payment of a fee, but the number of places available is limited. Some teachers destined for non-government schools train in this way

The following table shows, for non-government teachers colleges, the number of students enrolled, and the number in the final year of their courses.

NON-GOVERNMENT TEACHERS COLLEGES: ENROLMENTS(a), AUSTRALIA, 1968

			Enrolm	ents		Students in final year of course			
			Males	Females	Persons	Males	Females	Persons	
For primary teaching . For secondary teaching .	:	:	267 174	851 121	1,118 · 295	86 32	351 29	437 61	
Total			441	972	1,413	118	380	498	

⁽a) These figures include students taking university degree courses whether instruction is given at the university or the college. They exclude students at kindergarten teachers colleges.

During vacations many non-government teachers attend in-service training courses organised by education departments. In recent years vacation courses have been provided by bodies other than education departments for teachers from both government and non-government schools. For example, an independent body, the Science Foundation for Physics within the University of Sydney, has provided such courses for teachers of science in secondary schools in New South Wales.

Kindergarten teachers colleges

The kindergarten unions, which are non-government organisations, have established colleges providing three-year courses in all States except Tasmania, where an infant and pre-school course is provided by the Hobart Teachers College, The minimum entrance age is usually seventeen years and applicants with matriculation status are preferred. In New South Wales, the Sydney Day Nursery and Nursery Schools Association maintains a training college which provides a course for pre-school and kindergarten teachers. These colleges provide full-time diploma courses which are similar in content and standards. Teachers are trained for work with children between the ages of two and seven years. The training programme consists of a number of general education subjects (including music, literature, art, mathematics, and science), some professional education subjects (such as the principles of educational theory and the psychology of growth and development), and subjects forming the basis for pre-school programmes. Teaching practice forms an integral part of the course. The Melbourne Kindergarten Teachers College offers a one year full-time post-diploma course of advanced studies for teachers holding recognised qualifications and having a minimum of four years teaching experience.

The following table shows, for kindergarten teachers colleges, the number of students enrolled, and the number in the final year of their courses.

KINDERGARTEN TEACHERS COLLEGES ENROLMENTS, AUSTRALIA, 1968

	Enrolments Females(a)	Students in final year of course Females(a)
Diploma course	758	228
One year professional course(b).	2	
Post-diploma course(c)	6	
Total	766	228

⁽a) There are no male students enrolled in kindergarten teachers colleges.
(b) For overseas students.
(c) One year full-time course for qualified kindergarten teachers.

Government expenditure on schools and technical education

The following tables show particulars of the total net expenditure (i.e. gross expenditure less receipts for services rendered) from certain funds on government schools, education departments and technical education (including colleges of advanced education). The data have been compiled on the same basis as far as differences in organisation and accounting methods between States and Territories will permit. The tables include only expenditure from the consolidated revenue funds and certain trust or special funds. They exclude loan fund expenditure; expenditure on debt charges, pay-roll tax and superannuation payments, in so far as it is possible to identify these-items; and some items for which information cannot be obtained from the public accounts of all States. In particular, the following tables exclude specific purpose expenditure by the Commonwealth for schools and technical colleges in the States, such as science laboratory grants, and Commonwealth (Advanced Education) grants.

Government schools' and education departments' expenditure

The figures relate throughout to years ended 30 June. Net expenditure per pupil relates the total net expenditure to the mean of the numbers of pupils enrolled at government schools at two consecutive school censuses. Net expenditure per head of population relates the total net expenditure to the mean population.

GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: NET EXPENDITURE STATES AND TERRITORIES, 1963-64 TO 1967-68

A.C.T.	N.T.(a)	Tas.	W.A.	S.A.	Qld	Vic.	N.S.W.	Year
	•	RE	ENDITU	NET EXP	TOTAL	-		
				(\$'000)				
2,498	1,087	12,966	23,894	33,363	37,246	84,756	119,778	1963–64
3,264	1,352	14,413	26,810	36,380	40,011	91,593	140,803	1964–65
3,563			30,751	40,408	43,008	101,617	148,835	1965–66
								1966–67
4,801	2,009	18,997	38,855	49,412	56,677	127,337	180,504	1967–68
)	PUPIL(b	JRE PER	(PENDIT	NET EX	TOTAL		
	, 			(\$)				
192.06	182.14	184.86	176.11	175.24	145.81	194.07	190.18	1963–64
226.13	202.33	202.63	192.51	183.16	153.87	203.37	218.83	1964–65
223.83	214.30	214.83	213.67	195.65	161.54	218.11	224.50	1965–66
230.44	211.93	236.36	220.21		175.80	231.79	241.16	1966–67
246.00	205.65	252.66	245.61	225.08	200.70	257.03	253.20	1967–68
)	LATION(b	F POPUI	HEAD O	JRE PER	PENDITU	NET EX	TOTAL	
				(\$)				
32.44	21.74	35.74	29.91	32.60	23.35	27.58	29.37	1963–64
38.67	25.61	39.34	32.81	34.58	24.59	29.20	33.99	1964–65
38.48	29.49	41.87	36.73	37.35	25.91	31.81	35.36	1965–66
40.47	31.93	46.37	38.55	41.37	28.62	34.35	38.73	1966–67
44.37	32.99	50.08	43.52	44.19	32.99	38.56	41.52	1967–68
	2,498 3,264 3,563 4,043 4,801 192.06 226.13 223.83 230.44 246.00	1,087 2,498 1,352 3,264 1,634 3,563 1,855 4,043 2,009 4,801 182.14 192.06 202.33 226.13 214.30 223.83 211.93 230.44 205.65 246.00 ATION(b) 21.74 32.44 25.61 38.67 29.49 38.48 31.93 40.47	12,966 1,087 2,498 14,413 1,352 3,264 15,476 1,634 3,563 17,340 1,855 4,043 18,997 2,009 4,801 PUPIL(b) 184.86 182.14 192.06 202.63 202.33 226.13 214.83 214.30 223.83 236.36 211.93 230.44 252.66 205.65 246.00 PF POPULATION(b) 35.74 21.74 32.44 39.34 25.61 38.67 41.87 29.49 38.48 46.37 31.93 40.47	23,894 12,966 1,087 2,498 26,810 14,413 1,352 3,264 30,751 15,476 1,634 3,563 33,237 17,340 1,855 4,043 38,855 18,997 2,009 4,801 URE PER PUPIL(b) 176.11 184.86 182.14 192.06 192.51 202.63 202.33 226.13 213.67 214.83 214.30 223.83 220.21 236.36 211.93 230.44 245.61 252.66 205.65 246.00 HEAD OF POPULATION(b) 29.91 35.74 21.74 32.44 32.81 39.34 25.61 38.67 36.73 41.87 29.49 38.48 38.55 46.37 31.93 40.47	NET EXPENDITURE (\$'000) 33,363 23,894 12,966 1,087 2,498 36,380 26,810 14,413 1,352 3,264 40,408 30,751 15,476 1,634 3,563 45,674 33,237 17,340 1,855 4,043 49,412 38,855 18,997 2,009 4,801 CPENDITURE PER PUPIL(b) (\$) 175.24 176.11 184.86 182.14 192.06 183.16 192.51 202.63 202.33 226.13 195.65 213.67 214.83 214.30 223.83 213.70 220.21 236.36 211.93 230.44 225.08 245.61 252.66 205.65 246.00 URE PER HEAD OF POPULATION(b) (\$) 32.60 29.91 35.74 21.74 32.44 34.58 32.81 39.34 25.61 38.67 37.35 36.73 41.87 29.49 38.48 41.37 38.55 46.37 31.93 40.47	TOTAL NET EXPENDITURE (\$'000) 37,246 33,363 23,894 12,966 1,087 2,498 40,011 36,380 26,810 14,413 1,352 3,264 43,008 40,408 30,751 15,476 1,634 3,563 48,309 45,674 33,237 17,340 1,855 4,043 56,677 49,412 38,855 18,997 2,009 4,801 NET EXPENDITURE PER PUPIL(b) (\$) 145.81 175.24 176.11 184.86 182.14 192.06 153.87 183.16 192.51 202.63 202.33 226.13 161.54 195.65 213.67 214.83 214.30 223.83 175.80 213.70 220.21 236.36 211.93 230.44 200.70 225.08 245.61 252.66 205.65 246.00 PENDITURE PER HEAD OF POPULATION(b) (\$) 23.35 32.60 29.91 35.74 21.74 32.44 24.59 34.58 32.81 39.34 25.61 38.67 25.91 37.35 36.73 41.87 29.49 38.48 28.62 41.37 38.55 46.37 31.93 40.47	TOTAL NET EXPENDITURE (\$'000) 84,756 37,246 33,363 23,894 12,966 1,087 2,498 91,593 40,011 36,380 26,810 14,413 1,352 3,264 101,617 43,008 40,408 30,751 15,476 1,634 3,563 111,640 48,309 45,674 33,237 17,340 1,855 4,043 127,337 56,677 49,412 38,855 18,997 2,009 4,801 TOTAL NET EXPENDITURE PER PUPIL(b) (\$) 194.07 145.81 175.24 176.11 184.86 182.14 192.06 203.37 153.87 183.16 192.51 202.63 202.33 226.13 218.11 161.54 195.65 213.67 214.83 214.30 223.83 231.79 175.80 213.70 220.21 236.36 211.93 230.44 257.03 200.70 225.08 245.61 252.66 205.65 246.00 NET EXPENDITURE PER HEAD OF POPULATION(b) (\$) NET EXPENDITURE PER HEAD OF POPULATION(b) (\$) 27.58 23.35 32.60 29.91 35.74 21.74 32.44 29.20 24.59 34.58 32.81 39.34 25.61 38.67 31.81 25.91 37.35 36.73 41.87 29.49 38.48 34.35 28.62 41.37 38.55 46.37 31.93 40.47	TOTAL NET EXPENDITURE (\$'000) 119,778 84,756 37,246 33,363 23,894 12,966 1,087 2,498 140,803 91,593 40,011 36,380 26,810 14,413 1,352 3,264 148,835 101,617 43,008 40,408 30,751 15,476 1,634 3,563 165,495 111,640 48,309 45,674 33,237 17,340 1,855 4,043 180,504 127,337 56,677 49,412 38,855 18,997 2,009 4,801 TOTAL NET EXPENDITURE PER PUPIL(b) (\$) (\$) 190.18 194.07 145.81 175.24 176.11 184.86 182.14 192.06 218.83 203.37 153.87 183.16 192.51 202.63 202.33 226.13 224.50 218.11 161.54 195.65 213.67 214.83 214.30 223.83 241.16 231.79 175.80 213.70 220.21 236.36 211.93 230.44 253.20 257.03 200.70 225.08 245.61 252.66 205.65 246.00 TOTAL NET EXPENDITURE PER HEAD OF POPULATION(b) (\$) (\$) 190.18 194.07 145.81 175.24 176.11 184.86 182.14 192.06 218.83 203.37 153.87 183.16 192.51 202.63 202.33 226.13 224.50 218.11 161.54 195.65 213.67 214.83 214.30 223.83 241.16 231.79 175.80 213.70 220.21 236.36 211.93 230.44 253.20 257.03 200.70 225.08 245.61 252.66 205.65 246.00 TOTAL NET EXPENDITURE PER HEAD OF POPULATION(b) (\$)

⁽a) Figures for 1963-64 to 1966-67 include expenditure on adult education which amounted to \$916 in 1963-64, \$1,092 in 1964-65, \$887 in 1965-66, and \$2,372 in 1966-67. (b) Expenditure figures exclude expenditure on special education of Aboriginal children, while pupil and population figures include Aborigines.

The following table shows, for the six States, the net expenditure on government schools and education departments classified into the following headings: primary education, secondary education, administration, transportation of school children and students, and training of teachers. Expenditure on technical and agricultural education is excluded from the tables. It has been necessary

to estimate some items of expenditure, largely because the meanings of 'primary' and 'secondary' differ between States and because elementary and higher educations are sometimes given in the same school by the same teachers. Expenditure on government schools in the Northern Territory and Australian Capital Territory is not included in the following table because the detail is not available.

GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: CLASSIFICATION OF EXPENDITURE, STATES, 1963-64 TO 1967-68
(\$'000)

					(\$'000)				
Year			N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total(a)
				PRIMA	RY EDUC	ATION	·		·- · · · · · · · ·
1963–64			60,824	42,590	21,066	15,586	12,258	4,990	157,314
1964-65			70,199	45,492	20,995	16,640	13,800	5,521	172,647
1965-66			70,612	49,930	22,050	18,136	15,714	5,868	182,310
1966–67			75,819	52,495	24,392	20,462	16,821	6,731	196,720
1967–68	• .	•	80,902	58,881	28,142	21,739	19,792	7,169	216,625
				SECONI	DARY EDU	CATION			
1963-64			40,706	23,852	10,458	12,699	6,686	5,034	99,435
1964-65			49,992	26,027	12,778	14,193	7,522	5,678	116,190
1965-66			54,337	29,463	13,809	15,915	9,247	6,080	128,851
1966-67			62,454	34,452	16,076	18,092	9,864	6,633	147,571
1967–68	•	•	70,053	40,848	19,460	20,006	11,984	7,474	169,826
				ADI	MINISTRAT	TION			
1963-64			4,522	1,906	1,484	698	858	810	10,278
1964-65			5,503	2,232	1,571	813	1,021	833	11,973
1965–66			6,237	2,357	1,794	848	909	904	13,049
1966-67			7,095	2, 773	2,010	975	1,058	1,048	14,958
1967–68	•	•	7,471	2,747	2,151	1,043	1,090	1,055	15,556
		TRA	NSPORTAT	ION OF SC	CHOOL CH	ILDREN A	ND STUDE	NTS	
1963–64			5,582	5,600	2,076	1,270	2,362	1,336	18,226
1964-65			5,867	6,009	2,474	1,312	2,611	1,418	19,691
1965-66			7,342	6,414	2,770	1,424	2,673	1,500	22,123
1966-67			9,074	6,940	2,995	1,582	3,044	1,574	25,209
1967–68	٠	•	10,703	7,637	3,443	1,678	3,156	1,684	28,300
				EDUCAT	TION OF T	EACHERS			
			8,144	10,808	2,162	3,110	1,730	796	26,750
1963-64			9,242	11,833	2,193	3,422	1,856	963	29,509
1963–64 1964–65			7,274	11,000					
	•	•	10,307	13,453	2,585	4,085	2,208	1,124	33,762
1964-65	•								

⁽a) Excludes Northern Territory and Australian Capital Territory.

Technical education expenditure

The following table shows the net expenditure on technical education (including expenditure relating to colleges of advanced education) from the State consolidated revenue funds, together with expenditure in the Australian Capital Territory. The table excludes specific purpose Commonwealth grants to the States, i.e. it shows expenditure on technical education and colleges of advanced education by the States from their own resources. For Commonwealth payments, see page 527.

TECHNICAL EDUCATION: NET EXPENDITURE, STATES AND AUSTRALIAN CAPITAL TERRITORY, 1963-64 TO 1967-69 (\$'000)

Year	 	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
1963–64		10,684	18,048	2,044	1,330	2,772	732	211	35,821
1964-65		12,637	19,963	1,892	1,386	3,426	813	305	40,422
1965-66		13,137	22,864	2,677	1,216	4,240	946	445	45,525
1966-67		14,465	25,597	3,175	1,046	4,851	988	585	50,707
1967-68		15,918	29,829	3,969	1,095	5,496	1,225	720	58,252

Non-government schools finance

Most Roman Catholic parish schools charge fees, but payment is not insisted on in the case of families who cannot afford it. At the majority of non-government secondary schools, privately endowed scholarships are available in varying numbers, and reductions in fees are normally made for children of clergy or for two or more members of one family attending the same school. With these exceptions, pupils of non-government schools must pay fees.

Certain State scholarships and bursaries are tenable at approved non-government secondary schools. Since the establishment of educational systems by the State governments, official policy has been largely against the provision of direct financial assistance to non-government schools, but since 1967, all States have introduced some system of direct assistance to non-government schools, usually in the form of student allowances. Most States have also come to assist non-government schools in approved building projects. For details of Commonwealth finance for the building and equipping of science laboratories and school libraries, see pages 527-8.

Universities

Applicants for enrolment in Australian universities are required to have passed the matriculation examination in one of the States after five or six years of secondary education. Each university has its own regulations for matriculation, specifying the number and combination of subjects to be passed or the level of performance required. Students entering the universities have the choice of undergraduate study in various faculties. All universities provide also post-graduate courses of study. The Australian universities, with their faculties or schools, are listed below in the order of their foundation.

University of Sydney, 1850, Sydney, New South Wales: Agriculture, Architecture, Arts (including Education, Music and Social Studies), Dentistry, Economics, Engineering, Law, Medicine, Science, Veterinary Science.

University of Melbourne, 1853, Melbourne, Victoria: Agriculture, Applied Science, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

University of Adelaide, 1874, Adelaide, South Australia: Agricultural Science, Architecture and Town Planning, Arts, Dentistry, Economics, Engineering, Law, Medicine, Music, Science, Technology and Applied Science.

University of Tasmania, 1890, Hobart, Tasmania: Agricultural Science, Arts, Commerce, Education, Engineering, Law, Medicine, Science.

University of Queensland, 1909, Brisbane, Queensland: Agriculture, Architecture, Arts, Commerce and Economics, Dentistry, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

University of Western Australia, 1912, Perth, Western Australia: Agriculture, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Science.

Australian National University, 1946, Canberra, Australian Capital Territory: Institute of Advanced Studies—John Curtin School of Medical Research, Research School of Biological Sciences, Research School of Chemistry, Research School of Physical Sciences, Research School of Social Sciences, Research School of Pacific Studies; School of General Studies (formerly Canberra University College, established in 1930)—Arts, Economics, Law, Oriental Studies, Science.

University of New England, 1954 (formerly New England University College, established in 1938), Armidale, New South Wales: Agricultural Economics, Arts, Economics, Rural Science, Science.

University of New South Wales, 1958 (formerly the New South Wales University of Technology, established in 1948), Sydney, New South Wales: Applied Science, Architecture, Arts, Biological Sciences, Commerce, Engineering, Medicine, Science.

Monash University, 1958, Melbourne, Victoria: Arts, Economics and Politics, Education, Engineering, Law, Medicine, Science.

University of Newcastle, 1965 (formerly Newcastle University College, established in 1951), Newcastle, New South Wales: Applied Science, Architecture, Arts, Economics and Commerce, Engineering, Science.

Flinders University of South Australia, 1966, Bedford Park, South Australia: Language and Literature, Social Sciences, Physical Sciences, Biological Sciences.

La Trobe University, 1967, Bundoora, Victoria: Agriculture, Biological Sciences, Humanities, Physical Sciences, Social Sciences.

Macquarie University, 1967, North Ryde, New South Wales: Behavioural Sciences, Biological Sciences, Chemistry, Earth Sciences, Economic and Financial Studies, Education, English Studies, Historical, Philosophical and Political Studies, Mathematics and Physics, Modern Languages.

Each of the universities was established by an Act of Parliament as an autonomous institution, with its own Governing Council or Senate. Nevertheless, the Australian universities receive substantial government support from both State and Commonwealth sources, only part of their income being derived from students fees, private donations and bequests.

There are also three university colleges. Townsville University College, founded in 1961, is a part of the University of Queensland. Degree courses in Arts, Economics, Commerce, Education, Science, and Civil Engineering are available. In addition, the first two years of courses in all branches of Engineering and of Applied Science may be taken and first year courses in Agriculture, Forestry, Dentistry, Medicine, Pharmacy, Veterinary Science, and Law are available. Wollongong University College was opened in 1962 and is part of the University of New South Wales. It offers courses in the faculties of Applied Science, Arts, Commerce, Engineering, Science, and Medicine. The W.S. and L.B. Robinson University College of Broken Hill, established in 1954, is part of the University of New South Wales. It offers courses in Engineering and Science.

Also, the University of New South Wales has responsibilities for university level education at the Royal Military College, Duntroon and the Royal Australian Naval College, Jervis Bay (A.C.T.).

Organisation of courses

Bachelor degree courses are from three to six years in length, depending on the faculty. Certain courses may be undertaken by part-time or evening students. The university academic year begins in March and finishes in early December. At most universities two short vacation periods divide the year into three terms, but there are four terms in some universities.

Several universities make provision for external tuition, whereby students living away from university towns may take a restricted number of courses by correspondence. The University of Queensland has developed a system of correspondence tuition which now caters not only for students within the State but also for those in the Northern Territory, in the Territory of Papua and New Guinea, and for Colombo Plan Scholarship holders in south-east Asia. External students living in Queensland receive tutorial assistance at university centres in the principal country towns.

The University of New England's Department of External Studies offers a wide range of subjects for external study, leading to the degrees of Bachelor of Arts, Bachelor of Letters, Bachelor of Education, the Diploma in Education, and the Diploma in Educational Administration. External students must attend short annual residential schools of instruction in their subjects, usually held at the university.

Macquarie University also conducts courses for external students who reside in New South Wales or the Australian Capital Territory. At present there is an emphasis on science programmes. It also requires attendance at short residential schools of instruction.

Post-graduate courses leading either to a Master degree or to a Doctorate are available at all universities. Facilities cover the humanities, social sciences and pure and applied sciences. Additional courses are constantly being introduced by the universities at both the undergraduate and the post-graduate level to cover new fields of knowledge and specialisation.

Research

A programme of research work and training in research techniques is carried out by the universities as part of their normal functions. Post-graduate students and members of university staff are engaged in research, both as part of their work for post-graduate degrees and also as part of group and departmental research programmes. Support for research in universities is derived from public and private sources, including funds and foundations established to encourage research in a particular field.

University expansion and development

Since the 1939-45 War the Australian universities have had to face increasing demands on their facilities, firstly from large numbers of ex-service personnel in the immediate post-war years and later from increasing numbers of students leaving secondary schools each year. By 1969 the total enrolments in Australian universities had reached approximately 101,000 compared with an early post-war peak of 32,453 in 1948.

To assist the universities to cope with these demands, increasing co-operation between the Commonwealth Government and the State governments in university finance became necessary. The Commonwealth Government set up a Committee on Australian Universities, whose 1957 report ('The Murray Report') led to more finance becoming available to universities and to the setting up of a permanent body, the Australian Universities Commission, to advise the Commonwealth Government on university development. In the years since the Murray Report the following major developments have taken place in the Australian university structure; the University of New South Wales was created from the earlier University of Technology in 1958; in the same year Monash University was established in Victoria; in 1960 the Australian National University was reconstituted. combining both undergraduate and post-graduate facilities, and now consists of the Institute of Advanced Studies and the School of General Studies created from the Canberra University College; the University of Oueensland set up the University College of Townsville in 1961; the University of New South Wales established the Wollongong University College in 1962; in 1965 the University of Newcastle was created from the Newcastle University College: in 1966 the University of Adelaide at Bedford Park became The Flinders University of South Australia; and in 1967 Macquarie University and La Trobe University were established in New South Wales and Victoria respectively.

The Queensland Government is proceeding with plans for the construction of a third university institution at Mount Gravatt.

University teaching and research staff

UNIVERSITIES: TEACHING AND RESEARCH STAFF(a), 1968

	Full-time te	aching and re	search staff					
University	Professors	Associate professors and rofessors readers		Assistant lecturers lecturers, lecturers and strators, lecturers etc.(b)		Part-time teaching staff(c)	Full-time research only staff	Part-time research only staff(d)
Australian National .	36	29	159	49	273	62	794	
Sydney	96	96	539	246	977	1,416	374	10
New South Wales .	85	80	493	213	871	759	140	7
New England	31	24	160	91	306	58	64	
Newcastle	21	9	116	8	154	153	8	1
Macquarie	19	6	71	28	124	97	12	
Melbourne	94	96	523	202	915	8 2 3	260	21
Monash	72	28	363	168	631	481	83	3
La Trobe	21	3	62	22	108	16	10	t
Oueensland	77	83	495	273	928	770	162	2
Adelaide	65	58	320	69	512	689	266	8
Flinders	23	4	75	14	116	63	23	6
Western Australia .	53	45	237	68	403	481	148	6
Tasmania	28	20	93	28	169	253	23	17
Total	721	581	3,706	1,479	6,487	6,121	2,367	82

⁽a) Filled positions. Teaching and research staff includes all staff with teaching functions, but excludes research only staff which is shown separately.

(b) Includes tutors and teaching fellows.

(c) Teaching hours in units of 100 hours per annum.

(d) In equivalent full-time units of 35 hours per week.

UNIVERSITIES: TEACHING AND RESEARCH STAFF(a), AUSTRALIA, 1964 TO 1968

			Full-time te	aching and res	earch staff					
Year			Professors	Associate professors and readers	Senior lecturers and lecturers	Assistant lecturers, demon- strators, etc.(b)	Total	Part-time teaching staff(c)	Full-time research only staff	Part-time research only staff(d)
1964			463	409	2,847	1,004	4,723	4,325	1,675	45
1965			522	449	3,048	1,085	5,104	5,116	1,744	63
1966		•	615	487	3,297	1,261	5,660	5,615	2,057	82
1967			663	547	3,497	1,337	6,044	5,354	2,249	78
1968	•	•	721	581	3,706	1,479	6,487	6,121	2,367	82

⁽a) Filled positions. Teaching and research staff includes all staff with teaching functions, but excludes research only staff which is shown separately. (b) Includes tutors and teaching fellows. (c) Teaching hours in units of 100 hours per annum. (d) In equivalent full-time units of 35 hours per week.

University students enrolled

UNIVERSITIES: STUDENTS ENROLLED, 1968

	Degree d	courses	Diploma	courses		0.1	
University	 Higher degree	Bachelor degree	Post- graduate	Sub- graduate	Certificate courses	Other courses (a)	Adjusted total(b)
Australian National	618	3,014			••	276	3,877
Sydney	2,209	12,708	902	49		385	15,908
New South Wales .	1,630	11,472	603	88	323	590	14,688
New England .	267	4,018	497		1	97	4,853
Newcastle	161	1,952	103			70	2,264
Macquarie	211	1,745		251		91	2,047
Melbourne	1,199	11,569	178	676		843	13,992
Monash	599	7,551	426			108	8,466
La Trobe	63	1,044				57	1,163
Oueensland	788	13,413	209	311	71	525	15,317
Adelaide	733	7,155	232	477	16	125	8,591
Flinders	88	1,089	17			18	1,212
Western Australia .	516	5,546	245			278	6,567
Tasmania	148	2,041	184	24		199	2,592
Total	9,230	84,317	3,596	1,876	459	3,662	101,537

⁽a) Includes post-doctoral courses, 'master preliminary' courses and students enrolled in one or more subjects of a normal course without having been admitted to the course as a whole.

(b) Adjustment made for students enrolled for more than one course.

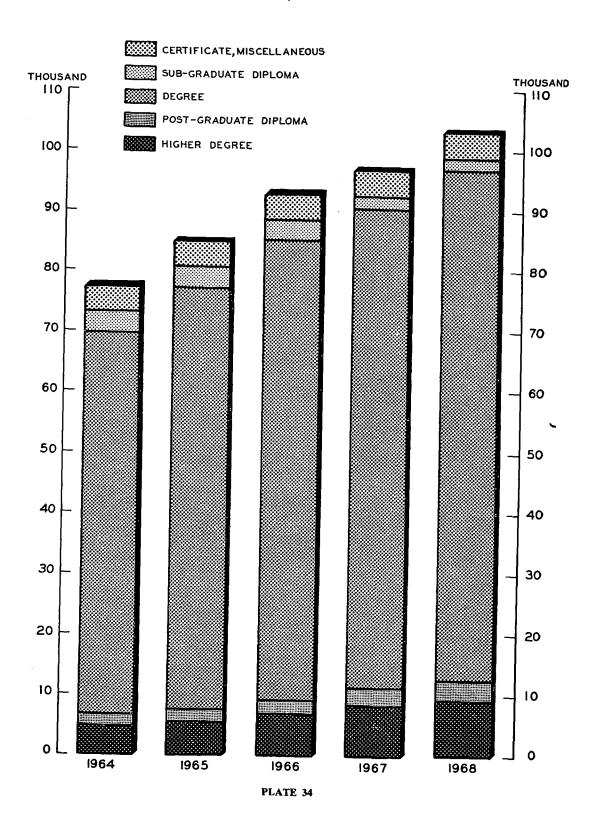
Of the students enrolled in 1968, 72,470 were males and 29,067 females.

UNIVERSITIES: STUDENTS ENROLLED, AUSTRALIA, 1964 TO 1968

		Degree co	urses	Diploma co	urses		Other		
Year		Higher degree	Bachelor degree			Certificate courses	courses (a)	Adjusted total(b)	
1964 .		4,944	62,936	1,984	3,377	650	3,195	76,188	
1965 .		5,672	69,540	2,160	3,277	361	3,444	83,349	
1966 .		6,995	76,453	2,472	2,625	267	3,556	91,291	
1967 .		8,562	78.825	3,075	2,093	495	3,555	95,380	
1968 .		9,230	84,317	3,596	1,876	459	3,662	101,537	

⁽a) See footnote (a) above. Some enrolments for 'master preliminary' now included in 'other course' were included in 'higher degree' in previous Year Books. (b) Adjustment made for students enrolled for more than one course.

UNIVERSITY STUDENTS ENROLLED: COURSES AUSTRALIA, 1964 TO 1968



University students commencing courses

UNIVERSITIES: STUDENTS COMMENCING HIGHER DOCTOR, PH D. MASTER AND BACHELOR DEGREE COURSES FOR THE FIRST TIME IN ANY AUSTRALIAN UNIVERSITY, 1968(a)

University					Higher doctor degree courses	Ph.D. degree courses	Master degree courses	Bachelor degree courses
Australian Na	tiona	1.				141	34	1,065
Sydney .					1	108	600	3,150
New South Wa	ales				4	121	460	3,910
New England						17	27	1,130
Newcastle						19	47	744
Macquarie						12	79	787
Melbourne(b)					n.a.	n.a.	n.a.	2,524
Monash .						64	141	2,204
La Trobe						5	31	549
Oueensland					15	89	113	3,062
Adelaide					10	70	61	1,499
Flinders .						17	18	503
Western Austr	alia					51	78	1,517
Tasmania	•		•	•	2	18	14	582
Total					n.a.	n.a.	n.a.	23,226

⁽a) These statistics, available from 1968, replace statistics of new students enrolled which were shown for 1967 and earlier years. Some universities have been unable to supply figures on this basis for 1968. (b) Students enrolling for the first time at that university.

Of students commencing courses in 1968, 17,337 were males and 8,356 were females.

Full-time and other university students by level of course

UNIVERSITIES: FULL-TIME, AND OTHER STUDENTS ENROLLED, BY LEVEL OF COURSE, 1968

	Highe	r degree coi	irses	Bachel degree	or courses	Other courses enrolm		All students			
University	Full- time	Staff(a)	Part- time	Full- time	Other	Full- time	Other	Full- time	Other	Total	
Australian National	485	54	79	1,459	1,555	37	208	1,981	1,896	3,877	
Sydney	638	280	1,276	10,606	1,930	747	431	11,991	3,917	15,908	
New South Wales .	553	330	747	7,208	4,263	544	1,043	8,305	6.383	14,688	
New England .	100	118	47	1,266	2,730	118	474	1,484	3,369	4,853	
Newcastle	74	39	48	981	971	53	98	1,108	1,156	2,264	
Macquarie	29	31	151	642	1,103	2	89	673	1,374	2,047	
Melbourne	721	138	340	8,622	2,568	491	1,112	9,834	4,158	13,992	
Monash	365	125	108	6,116	1,244	319	189	6,800	1,666	8,466	
La Trobe	34	15	14	855	189	10	46	899	264	1,163	
Oueensland	263	284	241	6.745	6,668	305	811	7,313	8,004	15,317	
Adelaide	377	114	242	4,768	2,336	294	460	5,439	3,152	8,591	
Flinders	62	10	16	988	101	16	19	1,066	146	1,212	
Western Australia .	227	70	219	3,707	1,834	145	365	4,079	2,488	6,567	
Tasmania	68	33	47	1,575	465	120	284	1,763	829	2,592	
Total	3,996	1,641	3,575	55,538	27,957	3,201	5,629	62,735	38,802	101,537	

⁽a) These are full-time university staff enrolled in higher degree courses. sub-graduate diploma, certificate and other non-degree courses and enrolments.

⁽b) Includes post-graduate diploma,

UNIVERSITIES: FULL-TIME, AND OTHER STUDENTS ENROLLED, BY LEVEL OF COURSE AUSTRALIA, 1964 TO 1968

				Highe	r degree coi	urses	Bache degree	lor courses	Other courses enrolm		All students(c)			
Year				Full- time	Staff(a)	Other	Full- time	Other	Full- time	Other	Full- time	Other	Total	
1964 1965		:	:	2,342 2,658	n.a. n.a.	2,602 3,014	39,883 44,942	23,053 24,598	3,018 3,521	6,286 5,891	44,500 50,202	31,688 33,147	76,188 83,349	
1966 1967				3,354 4,088	n.a. n.a.	3,641 4,474	50,500 51,841	25,953 26,984	3,540 3,347	5,633 5,887	56,279 58,325	35,012 37,055	91,291 95,380	
1968	:	:	:	4,004	1,645	3,581	56,271	28,046	3,819	5,774	62,735	38,802	101,537	

⁽a) These are full-time university staff enrolled in higher degree courses sub-graduate diploma, certificate and other non-degree courses and enrolments, more than one course.

Assistance to university students

The Commonwealth Government, through the Commonwealth Scholarships Board, grants undergraduate and post-graduate scholarships to university students. (Details of the Commonwealth Scholarship Scheme are given on page 525.) Commonwealth, State and local governments also award cadetships and other assistance to their employees. Foreign students are assisted by the Commonwealth Government under arrangements such as the Colombo Plan. The universities themselves grant exhibitions and scholarships as well as special assistance to teachers, etc.

UNIVERSITIES: ASSISTED STUDENTS, 1968

		Source of as.	sistance					
		Common- wealth	State				Type of co	urse
University		Govern- ment	Govern- ments	Uni- versities	Other	Adjusted total(a)	Higher degree	Other
Australian National		887	330	551	64	1,791	536	1,255
Sydney		5,762	2,708	3,846	93	9,327	705	8,622
New South Wales .		2,955	528	2,995	444	6,449	784	5,665
New England .		427	129	2,204	42	2,762	189	2,573
Newcastle		392	569	815	189	1,403	112	1,291
Macquarie		260	245	671	19	964	54	910
Melbourne		5,578	2,351	3,139	173	9.380	508	8,872
Monash		3,070	1,773	2,715	46	5,951	485	5,466
La Trobe		213	389	507	5	726	44	682
Oueensland		4,175	943	710	164	5,992	564	5,428
Adelaide	•	2,587	1,834	1,307	158	5,733	531	5,202
Flinders		370	520	44	8	924	83	841
Western Australia .		1,912	1,659	810	172	4,550	296	4,254
Tasmania		766	611	121	82	1,489	103	1,386
Total		29,354	14,589	20,435	1,659	57,441	4,994	52,447

(a) Adjustment made for students assisted from more than one source.

UNIVERSITIES: ASSISTED STUDENTS, AUSTRALIA, 1964 TO 1968

			Source of a	issistance					
			Common- wealth	S4-40				Type of a	ourse
Year			Govern- ment	State Govern- ments	Uni- versities	Other	Adjusted total(a)	Higher degree	Other
1964			19,361	11,674	13,765	1,771	39,416	2,913	36,503
1965			21,233	13,660	14,875	1.904	44,078	3,218	40,860
1966			24,611	14,793	15,298	2,161	48,800	3,938	44,862
1967			27,320	15,499	16,204	1,813	53,466	4,738	48,728
1968			29,354	14,589	20,435	1,659	57,441	4,994	52,447

⁽a) Adjustment made for students assisted from more than one source. No adjustment has been made for students who received assistance for a higher degree course and another course.

⁽b) Includes post-graduate diploma, (c) Adjusted for students enrolled for

^{11104/69-17}

Resident university students

The following table shows the numbers of students classified according to the place in which they lived during term.

UNIVERSITIES: TERM RESIDENCE OF STUDENTS, 1968

University					Halls of residence	Residential colleges	At home	Elsewhere	Total
Australian N	Vatio	nal			736	189	1,845	1,107	3,877
Sydney .					233	999	(a)11,493	(a)3,183	15,908
New South	Wale	s.			574		11,697	2,417	14,688
New Englan	d				1,193		3,469	191	4,853
Newcastle							1,775	489	2,264
Macquarie							1,715	332	2,047
Melbourne					167	(a)1,958	(a)9,036	(a)2,831	13,992
Monash					539	•••	6,573	1,354	8,466
La Trobe					232		769	162	1,163
Queensland					131	1,359	11,434	2,393	15,317
Adelaide						400	6,798	1,393	8,591
Flinders						33	925	254	1,212
Western Aus	strali	a .			156	543	4,845	1,023	6,567
Tasmania		•	•		125	261	1,438	768	2,592
Total					4,086	5,742	73,812	17,897	101,537

(a) Estimated.

University degrees conferred, etc.

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED YEAR ENDED 30 JUNE 1968

	Degrees				Diplomas		
University(a)	Higher doctor	Ph.D.	Master	Bachelor	Post- graduate	Sub- graduate	Certificates
Australian National	2	93	41	397			
Sydney	4	70	236	2,557	629	31	
New South Wales		48	129	1,365	245	15	244
New England .		23	18	480	158		
Newcastle		5	10	264	82		
Melbourne	· 12	67	157	1,993	168	149	
Monash		26	12	887	251		
Oueensland .	2	32 (7)	56 (4)	1,568 (1)	144	110	190 (24)
Adelaide	10	79	42	1.093 (8)	88	241	`
Flinders		1	4	10	4		
Western Australia	2	32 (3)	33	638	113		
Tasmania	••	12	6	329	57	11	37
Total .	32	488 (10)	744 (4)	11,581 (9)	1,939	557	471 (24)

⁽a) No awards have yet been made at Macquarie and La Trobe Universities. Figures shown in brackets refer to number included in both 1967 and 1968 details.

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED 1964 TO 1968(q)

			Degrees				Diplomas		
Year	Higher doctor		Ph.D.	Master	Bachelor	Post- graduate	Sub- graduate	Certificates	
1964 .			34	203	387	7,037	888	443	427
1965 .		_	37	276	475	7,839	1,050	498	332
1966 .			47	336	565	9,019	1,304	499	331
1967 .			40	327	635	10,393	1,454	445	570
1968 .		-	32	488 (10)	744 (4)	11,581 (9)	1,939	557	471 (24)

⁽a) Figures for the years 1964 to 1967 refer to the year ended 31 July; those for 1968 refer to the year ended 30 June. Figures included in both 1967 and 1968 are shown in brackets against 1968 figures.

University finance

Australian universities are incorporated by statute. Since their establishment they have come to depend greatly on government grants for their income. In recent years large amounts have been required for new buildings, as well as for current expenditure to provide staff and equipment to cope with increased student enrolments. In 1967 income from other than State and Commonwealth grants, including student fees, amounted to just over one-fifth of the total income. Income from non-government sources includes grants, mainly for research purposes, from businesses, international foundations, and private individuals. Some income is also received from endowments.

Financial assistance to universities from the Commonwealth Government

Prior to 1939 Commonwealth assistance was almost entirely concerned with research projects carried out by or in collaboration with the universities. During and since the 1939-45 War the Commonwealth extended assistance to university students, at first to increase the number of highly trained people required for the war effort, then with the object of rehabilitating ex-servicemen, and finally as a social service benefit to the community. For the purpose of reconstruction training the Commonwealth Government made available to the universities approximately \$2 million for buildings and \$1 million for equipment.

Following a report submitted by a committee of inquiry appointed to report on university finances and requirements, the Commonwealth, since 1951, has made grants to the States for recurrent expenditure on university purposes and for university halls of residence and affiliated residential colleges. Since 1958 the Commonwealth has also assisted with the capital needs of the universities for building projects and for equipment, and grants for the building programmes of residential colleges affiliated with universities, including university halls of residence. In the 1961–63 triennium the Commonwealth gave grants for buildings at teaching hospitals and in 1960 instituted grants for research at universities. As well as making grants available for State universities, the Commonwealth has continued to support the university institutions for which it is responsible.

In 1959, following the Report of the Committee on Australian Universities, the Commonwealth Government established the Australian Universities Commission under the Australian Universities Commission Act 1949. The principal function of the Commission is to advise the Minister for Education and Science on financial assistance for the maintenance and development of Australian universities. The Commission commenced its work in July 1959. The first report of the Commission presented in October 1960 and covering the years 1961 to 1963, recommended Commonwealth grants totalling \$86 million for State universities. The Comission later recommended a Commonwealth grant of \$4 million for teaching hospitals. The States Grants (Universities) Act 1960-1964 gave effect to the financial recommendations contained in the Commission's first report and subsequent recommendations for 1961-63. The Commission's second report was presented in August 1963, and recommended Commonwealth grants totalling more than \$121 million for State universities, subsequently increased by \$3.4 million for teaching hospitals, for the period 1964 to 1966. The Universities (Financial Assistance) Act 1963-1966 gave effect to the financial recommendations contained in the Commission's second report and subsequent recommendations for 1964-66. In August 1966 the third report was presented. It recommended Commonwealth grants to the State universities of almost \$200 million for the period 1967-69, including almost \$6 million for teaching hospitals. The Commonwealth Government grant, including \$5.7 million for teaching hospitals, was fixed following discussion with State governments, at \$181 million (including its share of the cost of increases in academic salaries as from 1 July 1967). The Act giving effect to these grants is the Universities (Financial Assistance) Act 1966-67.

Commonwealth grants for recurrent expenditure in universities. This is a continuation of grants provided since 1951. The maximum amounts available in 1964 to 1969 are shown in the following table

STATE UNIVERSITIES, ETC.: COMMONWEALTH GRANTS FOR RECURRENT EXPENDITURE, 1964 TO 1969
(\$'000)

University, etc.					1964	1965	1966	1967	1968	1969
Sydney					4,640	5,154	5,676	6,139	6,699	7,043
New South Wales(a)				4,450	4,352	4,832	5,247	5,748	6,186
New England					1,364	1,454	1,550	1,678	1,824	1,920
Newcastle .						618	704	809	938	1,028
Macquarie .						112	224	646	1,008	1,458
Melbourne .					3,868	4,298	4,796	5,265	5,763	6,032
Monash .					2,072	2,770	3,358	3,995	4,580	4,982
La Trobe .						106	218	554	924	1,275
Queensland .					2,808	3,238	3,644	4,153	4,696	5,068
Townsville .					160	192	278	378	489	608
Adelaide .					2,470	2,648	2,828	3,051	3,305	3,393
Flinders .					112	208	418	732	882	1,010
Western Australia					1,794	1,974	2,166	2,398	2,668	2,857
Tasmania .					744	844	942	1,073	1,214	1,324
South Australian	Inst	itute	of To	ech-					-	
nology .	•				230	258	290	(b)	(b)	(b)
Total .					24,712	28,226	31,924	36,118	40,738	44,184

⁽a) Includes grants for the university colleges at Wollongong and Broken Hill and, for 1964, the University College of Newcastle which became the University of Newcastle as from 1 January 1965. (b) In 1967-69 Commonwealth grants were made through the Commonwealth Advisory Committee on Advanced Education.

Since 1961 grants have been made on a basis of \$1 by the Commonwealth for every \$1.85 of income received by a university from fees and State grants. From 1951 to 1960 the ratio was, in general, \$1 to \$3.

Commonwealth grants for teaching and administrative costs of halls of residence and residential colleges. From 1964 the grants consisted of Commonwealth payments each year of \$5,000 (previously \$4,000) to each college affiliated with or administered by a university, plus the sum of \$30 for each resident student, and a further \$10 for each non-resident student receiving tutorial assistance. The total Commonwealth grant paid in 1966 was \$512,390. In the period 1967 to 1969 the basic grant for affiliated residential colleges was varied according to the size of the colleges. Colleges with fewer than 100 students continued to receive \$5,000 per annum, while colleges enrolling 100, 120, 140, 160, and 180 students received extra grants in increments of \$500 up to a maximum grant of \$7,500 for a college of 180 or more students. For university halls of residence a Commonwealth grant of \$5,000 per annum is payable without variation for the number of students.

Commonwealth grants for recurrent expenditure in university teaching hospitals. Since 1965 the Commonwealth Government has supported recurrent expenditure at teaching hospitals affiliated with universities. During 1966 the Commission held discussions concerning capital and recurrent grants for the 1967–69 triennium with the eight universities having medical schools. The Commonwealth Government support for recurrent grants in 1967 to 1969 relates to three items of expenditure. These are maintenance and service costs incurred on behalf of clinical students, administrative costs involved in clinical teaching, and books for students at libraries of teaching hospitals. The table below sets out the Commonwealth recurrent grants for teaching hospitals for 1965 and 1966 and those approved for each year of the 1967–69 triennium.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR RECURRENT EXPENDITURE AT TEACHING HOSPITALS, 1965 TO 1969

University					1965	1966	1967	1968	1969
Sydney					38,600	74,000 \	100 141	102 646	105 070
New South Wa	ales				7,800	19,000	100,141	102,646	105,979
Melbourne .					26,200	54,400	51,228	52,912	53,860
Monash .					9,400	22,000	27,579	31,298	33,404
Oueensland .					15,200	31,600	37,544	39,509	40,141
Adelaide .					13,600	27,600	20,505	20,315	20,315
Western Austra	alia				9,600	19,400	18,758	19,305	19,557
Tasmania .						1,400	4,211	4,617	6,196
Total .					120,400	249,400	259,966	270,602	279,452

The basis of these grants is \$1 from the Commonwealth for every \$1.85 of income received by a university from fees and State grants for these purposes.

Commonwealth grants for building projects in universities. These grants, for the period 1967 to 1969, are shown in detail in the Second Schedule to the Universities (Financial Assistance) Act 1966-69. Payments are made up to a given maximum for each project, on the basis of \$1 from the Commonwealth for every \$1 of State grants. Since 1964 the grant, where appropriate, has included an allowance for furnishings and equipment. Previously, separate grants were provided for these items. Also, since 1964 the schedule showing grants for university building projects includes grants for university computing facilities, but grants for the erection and alteration of buildings for halls of residence administered by universities are shown elsewhere. The total Commonwealth grant for building projects for each university is shown in the following table.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR BUILDING PROJECTS, ETC., 1964 TO 1969 (\$'000)

University			1964–66	1967–69
Sydney			4,679	4,049
New South Wales			3,800	3,799
Wollongong			. 7 9	506
New England			1,353	1,300
Newcastle .			1,020	1,800
Macquarie .			2,100	3,905
Melbourne .			4.813	4,080
Monash .			4,470	4,830
La Trobe .			1,410	5,838
Oueensland .			2,736	3,280
Townsville .			380	1,768
Mount Gravatt			100	100
Adelaide .			832	1,484
Flinders .			2,835	2,161
Western Australia			1,921	2,000
Tasmania .			936	1,008
Total .			33,464	41,908

Commonwealth grants for buildings for halls of residence and affiliated residential colleges. The States Grants (Universities) Act 1963 shows the grant available to each university for both types of student residence in the Fourth Schedule. Previously, grants for buildings for university-administered halls of residence were included in the Schedule showing university building projects. Payments were made up to a given maximum for each project. For halls of residence the grant comprised \$1 from the Commonwealth for every \$1 of State grants. For affiliated residential colleges Commonwealth grants were up to half of the cost of a project, the other half being met from college or State government sources. For the 1964-66 triennium, however, payments were made up to a given maximum for

each project on the basis of \$1 from the Commonwealth for every \$1 of residential college funds and State grants. This basis is to be continued for the 1967-69 triennium. The maximum Commonwealth grants available for each State university in this triennium are shown in the following table.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR BUILDINGS FOR HALLS OF RESIDENCE AND AFFILIATED RESIDENTIAL COLLEGES, 1964 TO 1969

(\$)

University	-					1964–66	1967–69
Sydney .						773,250	528,000
New South W	/ales	•	•	-	•	687,000	1,026,000
New England		-	-	-		898,500	1,134,000
Melbourne				-		1,017,082	1,062,000
Monash						1,110,000	1,566,000
La Trobe						440,000	586,000
Oueensland					•	647,259	926,000
Townsville						400,000	919,000
Adelaide						309,200	430,000
Flinders						35,000	• • •
Western Aust	ralia					756,500	374,000
Tasmania						262,500	401,000
Total	•		•	•	•	7,336,291	8,952,000

Commonwealth grants for building projects in teaching hospitals. Since 1961 the Commonwealth Government has supported building grants recommended by the Commission for teaching hospitals. The total Commonwealth grants under this heading for 1961-63, 1964-66 and 1967-69 are shown in the following table. Payments are made on the basis of \$1 from the Commonwealth for every \$1 of income received by universities from fees and State grants for this purpose. Where appropriate the grants include an allowance for furnishings and equipment.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR BUILDING PROJECTS, ETC. AT TEACHING HOSPITALS, 1961 TO 1969

(\$)

University		1961–63	1964–66	1967–69
Sydney		746,370	582,700	222 222
New South Wales		588,920	179,500	900,000
Melbourne .		685,475	617,500	1,417,000
Monash		832,195	384,600	673,300
Oueensland .		565,310	525,150	269,300
Adelaide		216,510	640,400	92,500
Western Australia		65,106	63,350	795,000
Tasmania			118,500	780,000
Total .		3,699,886	3,111,700	4,927,100

Commonwealth grants for special research projects in universities. A Commonwealth grant of \$1 million was made in the 1961-63 triennium for research equipment on the basis of \$1 from the Commonwealth for every \$1 of State grants. For the 1964-66 triennium the Australian Universities Commission recommended a Commonwealth grant for special research purposes of \$5 million for the State universities on the basis of \$1 from the Commonwealth for every \$1 of State grants. Of this amount, a Commonwealth grant of \$3 million was allocated by the Commission in agreement with State governments. The remaining \$2 million was allocated by the Australian Research Grants Committee (see page 525) to individuals or research teams whether inside or outside universities. For the 1967-69 triennium the Commonwealth is providing \$9 million for allocation by the Committee. Grants to universities for special research purposes are being made by the States.

University income and expenditure

The following tables show particulars of the income and expenditure of each university in 1967 and the totals for 1963 to 1967.

UNIVERSITIES: INCOME, 1967

				(\$'000)				
			Governmen grants(a)	nt	Other income	,		
University			Cwlth Govern- ment grants	State Govern- ment grants	Donations and endow- ments(b)	Student fees(c)	Other income	Total income
	п	1COM	ie for sp	ECIFIC CA	APITAL PUR	POSES(d)		
Australian National			5,784		9		141	5,934
Sydney			2,082	1,723	80			3,885
New South Wales .			798	1,216	360	• • • • • • • • • • • • • • • • • • • •	36	2,411
New England .			608	511	111	• • •	96	1.326
Newcastle		-	212	450	66	•••		728
Macquarie		-	1,628	1,453		• • • • • • • • • • • • • • • • • • • •	2	3.083
Melbourne	-	·	2,397	863	194	• • • • • • • • • • • • • • • • • • • •	44	3,500
Monash	•	•	1,195	1,195	139	• • • • • • • • • • • • • • • • • • • •	•••	2,530
La Trobe	•	•	933	2,223		• • • • • • • • • • • • • • • • • • • •	•••	3,157
Oueensland	•	•	1,162	1,301		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	2,462
Adelaide	•	•	683	683	5			1,371
Flinders	•	•	928	923	-	••	i	1,853
Western Australia	•	•	476	436	• •	• •		912
Tasmania	•	·	360	360	• •	••	••	719
Total			19,246	13,336	964		321	<i>33</i> ,868
			INCOME F	OR OTHE	ER PURPOSE	S.		
Australian National			15,692		355	391	1,276	17,716
Sydney			7,942	8,235	2,813	3,520	943	23,454
New South Wales .			6,449	7,531	681	2,475	918	18,052
New England .			2,117	2,578	68	527	974	6,263
Newcastle			828	1,238	. 87	271	51	2,475
Macquarie			646	1,067	173	135	39	2,060
Melbourne			6,900	6,766	1.407	3,752	1.062	19,887
Monash		-	4,300	5,651	527	1,880	638	12,995
La Trobe			625	899	38	130	101	1,793
Queensland	:	·	5,429	6,035	1.982	2,915	625	16,985
Adelaide	·		4,391	4,761	552	1,207	709	11,619
Flinders	•	•	873	1.285	41	108	22	2,329
Western Australia	•	•	3,215	3,363	682	1,253	723	9,236
Tasmania	•	•	1,218	1,560	90	581	197	3,647
	•	•	,	,				•
Total	•	•	60,626	50,967	9,496	19,145	8,277	148,511

For footnotes see next page.

UNIVERSITIES: INCOME, 1967—continued (\$'000)

		Government grants(a)		Other income			
University	Cwlth Government grants		State Government grants	Donations and endow- ments(b)	Student fees(c)	Other income	Total income
			TOTAL	INCOME			
Australian National		21,476	••	364	391	1,418	23,650
Sydney		10,024	9,958	2,893	3,520	942	27,338
New South Wales		7,247	8,747	1,041	2,475	954	20,463
New England .		2,725	3,088	179	527	1,070	7,589
Newcastle		1,040	1,688	153	271	51	3,203
Macquarie		2,274	2,519	173	135	41	5,143
Melbourne .		9,297	7,630	1,602	3,752	1,106	23,387
Monash		5,495	6,846	666	1,880	638	15,524
La Trobe		1,558	3,122	38	130	101	4,950
Queensland .		6,591	7,335	1,982	2,915	625	19,447
Adelaide		5,074	5,444	557	1,207	709	12,990
Flinders		1,801	2,208	41	108	23	4,181
Western Australia		3,692	3,798	682	1,253	723	10,148
Tasmania	•	1,578	1,920	90	581	197	4,366
Total .		79,872	64,304	10,461	19,145	8,597	182,379

⁽a) Includes funds expended by various government departments and other bodies in respect of universities but not controlled by the universities. (b) In the case of endowments, only income from property and other investment of these endowments is included. The treatment of donations depends on the terms of the gift, etc. When the capital sum is specified to be expended over several years, only the portion of the capital sum allotted to each year is shown as income in that year, but if the capital sum is available for spending without limitation as to time, the full amount is recorded as income in the year it is received, irrespective of whether it is spent in that year or not. The capital value of land and buildings donated to the universities is not recorded as income, unless these properties are sold, in which case the amounts realised are included. (c) Excludes fees collected on behalf of student unions, adult education fees, ad hoc course fees and public examination fees. (d) Income received specifically for new buildings, major alterations and additions to buildings, installation of services, purchase of land and buildings and major equipment.

UNIVERSITIES: INCOME, 1963-1967 (\$'000)

			Other income		Government grants(a)		
Total income	Other income	Student fees(c)	Donations and endow- ments(b)	State Government grants	Cwlth Government grants		ear
107,504	4,372	10,260	8,440	39,162	45,269		63.
126,652	5,598	11,833	8,569	46,449	54,203		64 .
152,178	5,895	14,869	9,885	56,993	64,537		65 .
171,008	7,053	16,653	10,781	65,509	71,012		66 .
182,379	8,597	19,145	10.461	64,304	79,872		67 .

For footnotes see previous table.

UNIVERSITIES: EXPENDITURE, 1967 (\$'000)

University	 	Teaching and research	Adminis- tration and general overhead	Libraries	Buildings, premises, grounds	Sundry auxiliary expendi- ture	Total expendi- ture
Australian National		14,020	1,612	798	5,662	1,542	23,635
Sydney		16,823	2,014	1,201	7,295	988	28,321
New South Wales .		12,351	1,560	780	4,139	1,078	19,908
New England .		3,626	759	266	2,320	1,015	7,986
Newcastle		1,787	232	205	969	89	3,282
Macquarie		983	440	289	3,697	41	5,451
Melbourne		14,288	1,684	803	6,747	1.267	24,789
Monash		9,093	1,322	886	3,333	790	15,424
La Trobe		899	332	340	4,153	96	5,819
Oueensland		13,017	1,173	820	3,350	522	18,881
Adelaide		8,842	789	574	1,866	587	12,659
Flinders		1,761	272	285	1,556	35	3,910
Western Australia		6,303	702	416	2,046	790	10,258
Tasmania	•	2,593	406	250	926	215	4,391
Total		106,386	13,298	7,915	48,061	9,056	184,714

UNIVERSITIES: EXPENDITURE, 1963-1967 (\$'000)

Year		Teaching and research	Adminis- tration and general overhead	Libraries	Buildings, premises, grounds	Sundry auxiliary expenditure	Total expenditure
,	-						
1963		56,502	6,818	3,903	33,269	4,667	105,160
1964		69,886	7,870	4,664	33,929	5,508	121,857
1965		83,256	10,159	5,830	43,976	6,526	149,747
1966		93,410	11,915	6,857	42,498	7,779	162,459
1967		106,386	13,298	7,915	48,061	9,056	184,714

Colleges of advanced education

The Committee on the Future of Tertiary Education in Australia recommended that interim capital grants be made by both the States and the Commonwealth to twelve specified institutions in five States during 1965–66 preliminary to an arrangement for the expansion and development of tertiary education outside the universities. This recommendation was accepted by all governments, and has led to development of such institutions in all States. The colleges of advanced education are receiving substantial governmental financial support during the 1967–69 triennium. Commonwealth grants are conditional on the States providing \$1 for every \$1 of Commonwealth money for capital purposes and \$1.85 of State money and student fees combined for every \$1 of Commonwealth Money for recurrent purposes. The Commonwealth has also established the Commonwealth Advisory Committee on Advanced Education to advise it on the development of the colleges. It is envisaged that the colleges will provide training with a vocational emphasis, as distinct from the academic education provided by the universities. In some States, colleges of advanced education are being developed from existing technological institutions. In the Australian Capital Territory and Tasmania, separate colleges of advanced education are being established. The following table shows maximum Commonwealth grants for the 1967–69 triennium.

COLLEGES OF ADVANCED EDUCATION: MAXIMUM COMMONWEALTH GRANTS, TRIENNIUM 1967 TO 1969

(\$'000)

State			Grants for capital purposes	Grants for recurrent purposes	Grants for library materials(a)	Total grants
New South Wales			8,834	2,069	160	11,063
Victoria			7,912	8,981	180	17,073
Oueensland .			4,040	1,826	60	5,926
South Australia			2,971	1,809	50	4,830
Western Australia			3,743	2,577	40	6,360
Tasmania	-	•	1,300	554	10	1,864
Total			28,800	17,816	500	47,116

(a) A special unmatched grant for the improvement of library facilities in colleges.

The colleges to be supported with Commonwealth funds during the 1967-69 triennium are as follows.

New South Wales. New South Wales Institute of Technology, New South Wales State Conservatorium of Music, National Art School, Sydney Technical College (art course), New South Wales College of Nursing, New South Wales College of Occupational Therapy, School of Physiotherapy at the Royal Prince Alfred Hospital, Speech Therapy Training School at the Royal Alexandra Hospital for Children, and Hawkesbury Agricultural College.

Victoria. Bendigo Institute of Technology, Caulfield Institute of Technology, Footscray Institute of Technology, Gordon Institute of Technology, Preston Institute of Technology, Royal Melbourne Institute of Technology, Swinburne College of Technology, Yallourn Technical College School of Mines and Industries, Ballarat, Emily McPherson College of Domestic Economy, Victoria Institute of Colleges, College of Nursing, Australia, Occupational Therapy School of Victoria, Physiotherapy School of Victoria, Victorian School of Speech Therapy, Victorian College of Pharmacy, Dookie Agricultural College, Longerenong Agricultural College, Burney Horticultural College, and the Victorian School of Forestry, Creswick.

Queensland. Queensland Institute of Technology (Brisbane, Capricornia, and Darling Downs), Queensland Conservatorium of Music, and Queensland Agricultural College.

South Australia. South Australian Institute of Technology, and South Australian School of Art. Western Australia. Western Australian Institute of Technology, School of Mines, Kalgoorlie, Royal Perth Hospital School of Occupational Therapy, and Royal Perth Hospital School of Physiotherapy.

Tasmania. Tasmanian College of Advanced Education (courses located at Hobart, Launceston, and Burnie Technical Colleges), Tasmanian Conservatorium of Music, Tasmanian School of Art, and Tasmanian School of Dental Nursing.

Australian Capital Territory. Canberra College of Advanced Education.

Agricultural and forestry education

There are seven State agricultural colleges—Hawkesbury and Wagga (New South Wales), Longerenong and Dookie (Victoria), Lawes (Queensland), Roseworthy (South Australia), and Muresk (Western Australia), offering a comprehensive course of two or three years leading to the award of a Diploma in Agriculture or in a specialised field such as animal husbandry, dairy manufactures or horticulture. The Burnley Horticultural College, Victoria, offers a three-year diploma course, Diploma courses are also offered by two independent institutions, the C. B. Alexander Presbyterian Agricultural College in New South Wales and the Marcus Oldham Farm Agricultural College in Victoria.

Most agricultural colleges are government institutions. The government institutions are administered by the State Departments of Agriculture in New South Wales, Victoria, South Australia, and Western Australia, and by the State Department of Education in Queensland. Their purpose is to teach the principles and practices of agriculture and its specialised branches to those intending to take up farming as a career and to those who propose to enter such occupations as agricultural field officer or technical officer in food processing industries.

The minimum entrance standard is usually the penultimate major secondary examination of the State-concerned, except in Western Australia where it is the sub-leaving examination. As entry is competitive, there is a tendency for students to hold better than the minimum qualifications. All the colleges are fully residential and the minimum age at which students may enter them varies from fifteen to seventeen years, depending on the college and the type of course.

In addition to their formal courses of training, agricultural colleges offer short courses of three days to one month for farmers and teachers in country districts.

Training in forestry is provided by a Department of Forestry in the Faculty of Science within the Australian National University's School of General Studies. A four-year degree course is offered. At the Victorian School of Forestry, Creswick, a three year diploma course can be taken.

State expenditure on agricultural and forestry education from Consolidated Revenue and certain special funds is shown in the following table. The figures exclude expenditure on pay-roll tax and superannuation, expenditure out of Commonwealth grants to the States for this purpose, and expenditure on agricultural and forestry education in universities.

EXPENDITURE ON AGRICULTURAL AND FORESTRY EDUCATION: STATES, 1963-64 TO 1967-68

(\$'000)

State					1963–64	1964-65	1965–66	1966–67	1967–68
New South Wales	•		•		954	974	1,025	1,504	1,587
Victoria .					590	664	697	822	875
Oucensland .					618	641	655	799	964
South Australia					236	232	232	261	302
Western Australia					176	208	213	258	324
Tasmania .		•		•	2	3	3	2	3
Total .					2,576	2,722	2,825	3,646	4,055

Other education

Conservatoria of music, schools of art, etc.

There are conservatoria of music in five States. Those in Victoria and South Australia are attached to the Universities of Melbourne and Adelaide respectively. The New South Wales State Conservatorium, the Queensland State Conservatorium and the Tasmanian Conservatorium are controlled by the respective departments of education. All five conservatoria offer diploma courses for entry to which matriculation status is not required; at the universities of Sydney, Melbourne, Adelaide, and Western Australia degree courses are also available.

The Canberra School of Music, established in July 1965, is administered by the Department of Education and Science. A three-year full-time diploma course, consisting of both practical and theoretical studies, is available.

The South Australian School of Art, founded in 1861, is the oldest in the country. The South Australian School of Art, the National Art School in Sydney, the National Gallery Art School in Melbourne and the Tasmanian School of Art offer courses in painting, sculpture and design. Several of the larger technical institutes also offer courses in the plastic and industrial arts, ranging from pottery to print-making, stained glass production and television design.

The National Institute of Dramatic Art in Sydney and the Australian Ballet School in Melbourne offer diploma courses of one to four years' duration for students of the theatre.

Educational training in the defence services

Each of the three defence services maintains institutions for the training of officers. The Royal Australian Naval College, Jervis Bay, Australian Capital Territory, became an affiliated college of the University of New South Wales in 1968. Selected matriculated cadets complete first year degree studies in science or engineering at the College, and subsequent years of degree studies at the university. The Royal Military College, Duntroon, Australian Capital Territory, became a college of the University of New South Wales in 1968. The Royal Australian Air Force Academy, Point Cook, Victoria, has evolved from the Royal Australian Air Force College, which was established in 1948 as a tertiary training centre to provide a professional education for permanent officers of the Air Force.

It is affiliated with the University of Melbourne and has adopted that University's Bachelor of Science course. The Academy is also permitted to present students for higher degrees in science and the degree of Doctor of Philosophy. Students may also proceed to the University of Sydney to take a degree in aeronautical engineering. The Australian Staff College and the Royal Australian Air Force Staff College provide one year courses for officers. Educational training is also provided in the apprentice training schools conducted by each of the Defence Services, and in the Royal Australian Navy School for Junior Recruits. The Royal Australian Air Force School of Languages, Point Cook, Victoria, conducts courses in French and Asian languages. In 1968 there were 45 students enrolled, of whom 7 were Royal Australian Air Force personnel.

The following table shows the number of officers, officer cadets and other ranks enrolled in the training establishments mentioned above.

SERVICE ESTABLISHMENTS PROVIDING EDUCATIONAL TRAINING AUSTRALIA, 1968

Establishment	ı	Enrolments	New entrants during year	Number completing course during year
OFFICERS AND	OFFI	CER CADET	S (a)	
Staff Colleges—				
Australian Staff College		70	70	70
Royal Australian Air Force Staff Colle	ge	24	24	24
Officer cadets—				
Royal Australian Navy				
Royal Naval College		121	52	23
H.M.A.S. Leeuwin	•	2	2	• •
Royal Military College	•	252	82	66
Royal Australian Air Force—				
R.A.A.F. Academy.	•	86	32	10
R.A.A.F. Diploma Squadron .	•	138	60	23
APPRENTICES ANI	OT!	HER RECRU	JITS (b)	
Royal Australian Navy—				
Naval artificer apprentices		702	184	186
Junior recruits		630	630	605
Topmen scheme		22	22	20
Army Apprentice School		305	n.a.	89
Royal Australian Air Force—				
School of Technical Training .		333	173	157
School of Radio		93	51	36

 ⁽a) Includes 164 cadets enrolled for university courses, 2 enrolled at teachers college, and 138 enrolled at an institute of technology.
 (b) Includes 124 apprentices enrolled at a technical college or institute of technology, and 18 enrolled for university courses.

The Australian School of Pacific Administration

The Australian School of Pacific Administration, controlled by the Department of Territories, trains students in the various aspects of service and administration in Commonwealth Territories, including teaching. In 1968, the number of students training as teachers was 28 males and 17 females in primary teaching courses, and 64 males and 30 females in secondary teaching courses. Eight of these students were also enrolled for a university degree course.

Australian Administrative Staff College

Opened in 1957, the Australian Administrative Staff College is a private organisation working in close co-operation with government and other public bodies, the armed services, and the trade union movement. It was founded, and is owned, by a large group of leading Australian companies and has its permanent premises at Mount Eliza, near Melbourne. The College conducts residential courses for administrators to further the study of the problems which arise in managerial work.

Commonwealth activities in education

Fields of activity

Although education is primarily the responsibility of the States, the Commonwealth has instituted a number of measures of direct assistance to educational institutions and to students. It is responsible for public education in its own Territories and is engaged in educational activities incidental to its responsibilities in such areas as defence, external relations, immigration, and social services. Education in Commonwealth Territories is described in the chapter The Territories of Australia; various schools and colleges for the Defence Services are referred to on pages 523-4 and other activities which may be considered broadly as educational are referred to in the section on Broadcasting and Television in the chapter Transport, Communication and Travel.

Department of Education and Science

The Commonwealth Department of Education and Science was created in December 1966. The Department, which absorbed the former Education Division of the Prime Minister's Department including the Commonwealth Office of Education, and subsequently, in 1968, the Education Branch of the Department of the Interior, is concerned with direct grants for educational purposes, e.g. for universities, colleges of advanced education, school libraries, technical schools, and science buildings, as well as with grants for building teachers and pre-school teachers colleges. It is responsible for assistance to students for the various Commonwealth scholarship schemes, for the scheme of Queen Elizabeth II Fellowships, and for special scholarships offered by overseas countries for Australians. Among the Department's other responsibilities are matters in the field of international relations in education, including Unesco and Commonwealth Co-operation in Education, and liaison with State and other education bodies throughout Australia. The Department provides professional advice on education to other Commonwealth departments and authorities. It administers grants to such bodies as the Academy of Science, the Humanities Research Council, the Social Sciences Research Council and the Institute of Aboriginal Studies, and is responsible for grants for scientific research such as those recommended by the Australian Research Grants Committee. It administers educational services in the Australian Capital Territory.

The Australian Universities Commission and the Commonwealth Advisory Committee on Advanced Education are responsible to the Minister for Education and Science. The Minister is also responsible for the Commonwealth Scientific and Industrial Research Organization, the National Standards Commission, the Australian National University, the Institute of Aboriginal Studies, and the College of Advanced Education in Canberra. The Prime Minister's Department continues to be responsible for the National Library and for art, literature and other cultural activities in which the Commonwealth is interested.

Commonwealth Scholarships Board

This Board, under its former title of the Universities Commission, was established by the Education Act 1945. Prior to 1945 the Commission had functioned under wartime National Security Regulations. The Board consists of a chairman and three other members. The main responsibility of the Board at present is advising the Government on the policy and administration of Commonwealth university and advanced education scholarships and Commonwealth post-graduate awards.

Advisory bodies

The Commonwealth Government has established various advisory bodies whose fields of concern relate to matters of education. Already mentioned (page 515) is the Australian Universities Commission, which advises the Commonwealth Government on university development. The Commonwealth Advisory Committee on Advanced Education advises the Minister on the balanced development of tertiary education outside universities. Within financial limits nominated by the Minister, the Committee recommends grants to the States for colleges of advanced education and directs grants to any such colleges established by the Commonwealth. The Australian Research Grants Committee advises the Minister on the merit of applications for research grants from individuals and research teams, and suggests the allocation of funds. The Queen Elizabeth II Fellowships Committee advises the Minister on the merit of applicants for these fellowships, which are awarded for post-doctoral study in the physical and biological sciences, and advises generally on the administration of this scheme of fellowships.

Assistance to students

The Commonwealth Government provides financial assistance to students through five major scholarship schemes. A total of 24,150 new awards were made available in 1969 under these schemes.

The Commonwealth University Scholarship Scheme made provision for 9,500 scholarships in 1969. Of these 7,500 are open entrance scholarships which are allocated amongst the States in proportion to population and are awarded on the basis of results achieved in Australian matriculation examinations. A small quota of open entrance awards is set aside as Mature Age Scholarships for students who have reached the age of twenty-five years. The remaining 2,000 scholarships are Later Year Awards for students who have already completed one or more years of a university course. Scholarship holders have their fees paid and may receive a living allowance subject to a means test. The maximum rates of living allowances are \$904.80 per annum in the case of scholars living away from their parents and \$559 for scholars living with parents.

The Commonwealth Advanced Education Scholarship Scheme provides 1,500 scholarships each year for students taking approved courses of advanced education at institutions other than universities. Conditions for selection and benefits are similar to those for university scholarships.

Under the Commonwealth Post-graduate Awards Scheme 650 new awards were made available in 1969 for students taking courses leading to higher degrees at Australian universities. The awards are for full-time study and may be renewed annually up to a maximum period of four years. The awards carry a stipend of \$2,350 per annum and certain other allowances.

Under the Commonwealth Secondary Scholarship Scheme students compete each year for 10,000 scholarships to assist them during the final two years at secondary school. Secondary scholarship benefits are free of means test and comprise a yearly living allowance of \$200, a textbook and equipment allowance of \$50 per annum and reimbursement of compulsory fees up to a maximum of \$150 per annum.

In 1964 the Commonwealth Government also introduced the Commonwealth Technical Scholarship Scheme under which it makes available 2,500 new awards annually to assist students to take approved technical courses. Most of these courses are at certificate level in technical colleges. Full-time Technical Scholarship holders receive the same benefits as Commonwealth secondary scholars. The benefits paid each year to part-time technical scholars are an allowance of \$100, free of means test, and reimbursement of compulsory fees up to a maximum of \$100.

International relations

An extension has taken place in relations and exchanges with other countries in the field of education. A significant encouragement to this growth has been membership of Unesco, to which Australia has belonged since 1946, when the organisation was founded.

Twelve specialist Unesco committees in Australia are responsible for activities within the areas of education, natural sciences, social sciences, culture, and communication. A major activity of the committees is the organisation of Australian seminars to which visiting overseas specialists make contributions. Other activities include the dissemination within Australia of information on Unesco and its activities and participation in the international programmes of the organisation, including for example the International Hydrological Decade, and the Associated Schools Project, a world-wide Unesco project linking schools and other educational institutions. There are also a number of Australians filling positions overseas as Unesco specialists in various fields.

With the co-operation of educational institutions, State education departments and other bodies, the Commonwealth has accepted increasing commitments in schemes of international assistance and co-operation. The Colombo Plan Technical Co-operation Scheme, the United Nations Expanded Programme of Technical Assistance, the Australian International Awards Scheme, the Australian South Pacific Technical Assistance Programme, and the Special Commonwealth African Assistance Plan are some of the programmes through which the Commonwealth Government is providing training for overseas students in Australia and is sending Australian experts and equipment to many of the newly developing countries, especially in Asia and Africa. Australia is also actively sharing with other Commonwealth countries in the scheme of Commonwealth Co-operation in Education, which includes the Commonwealth Scholarship and Fellowship Plan. The numbers of sponsored overseas students are shown on page 530.

In 1964, by agreement between the United States and Australian Governments, the Australian-American Educational Foundation, financed jointly by the two Governments, was established to operate a scheme of educational exchanges between the United States and Australia. This new scheme has similar aims and purposes to the Fullbright Scheme which it replaces and which had operated wholly on American funds.

Support is given to Australian participation in many international governmental and non-governmental organisations. For example, Australian educationists have attended meetings of the International Bureau of Education which has recently become part of Unesco, and regular contributions are made to that Bureau's international surveys into various aspects of education. Provision

is made for attendance at major overseas conferences, recent examples being the Commonwealth Conference on Mathematics in Schools and the International Conference on the Trends in the Teaching and Training of Engineers.

Grants for science laboratories in schools

During the period 1 July 1964 to 30 June 1968, \$42,291,200 was provided by the Commonwealth Government for the building and equipping of science laboratories in government and non-government secondary schools. A further \$37,721,400 has been provided for the three years from 1 July 1968. Non-government schools in the Australian Capital Territory and the Northern Territory will also receive cash grants for science facilities and for school libraries, in conjunction with the capital aid scheme under which the Commonwealth Government meets interest charges on loans and also repays, in equal annual instalments over a period of twenty years, capital borrowed for approved school building projects.

Grants for teacher training

The Commonwealth Government is providing, under the States Grants (Teachers Colleges) Act 1967, \$24,000,000 for the provision of teacher training facilities in a three year period ending 30 June 1970. These grants do not require any matching expenditure by the States and will finance projects selected by the States. The apportionment among the States is as follows.

GRANTS FOR TEACHER TRAINING, 1967 TO 1970 (\$'000)

State					Allocation
New South Wales		<u> </u>		•	7,500
Victoria .					5,350
Queensland .					3,750
South Australia					3,200
Western Australia					2,700
Tasmania .					1,500
Total					24,000

In addition the Commonwealth Government has introduced a new programme to assist the training of pre-school teachers. Legislation enacted in December 1968, provides \$2,500,000 for pre-school teacher training facilities in a three year period commencing in 1969, that is planned to double the existing capacity of training colleges in the States.

Grants for technical education

The present series of Commonwealth technical training grants will provide \$70,000,000 to the States over the seven years 1964-65 to 1970-71. The technical training grants are designed to assist trade and technician training, outside the normal secondary school system and below the tertiary level, conducted in State institutions. Agricultural colleges are being assisted as well as technical colleges. The grants, which do not have to be matched by the States, are available at a rate of \$10 million a year. They are apportioned between the States, on a population basis, as follows.

GRANTS FOR TECHNICAL EDUCATION 1964-65 TO 1970-71

(\$)

State						Allocation
New South	Wales			<u> </u>		26,103,000
Victoria						19,765,600
Queensland						10,162,200
South Austr						6,601,100
Western Au	stralia		•			5,055,100
Tasmania						2,313,000
Total						70,000,000

Grants for library facilities in schools

In August 1968, the Commonwealth Government announced a programme for the provision of \$27 million over three years for approved capital grants for the development of school libraries in government and non-government secondary schools in the States. Commonwealth grants will be available for the erection, alteration or extension of library buildings, and for the provision of furniture, equipment, basic reference books and materials. As with the science facilities scheme, it is proposed that two advisory bodies in each State, one for Roman Catholic schools and one for other non-government schools, will recommend on priorities. Expenditure on this programme during 1968–69 is estimated at \$3 million.

Grants for other educational purposes

The Commonwealth gives assistance to various educational schemes and institutions. Grants are made each year by the Commonwealth to the Australian Pre-school Association for the development of kindergarten education, to the Commonwealth National Fitness Council, to the Australian Council for Educational Research, to the Department of Adult Education at the University of Sydney for the publication of the Current Affairs Bulletin, and to assist in the provision of training in occupational therapy, physiotherapy and nursing.

Migrant education

The Commonwealth Government post-war immigration policy has brought to Australia a large number of immigrants with little or no knowledge of English. To assist the assimilation of these newcomers into the Australian community, a system of migrant education has been developed to teach them English and to give them information about Australia. This service is provided free of charge to immigrants above school leaving age.

Before arriving in Australia settlers who do not speak English are given some instruction in English by shipboard education officers. Some may have attended classes in Europe organised by the Inter-governmental Committee for European Migration, with which the Australian Government co-operates. In Australia, evening classes are arranged by State education departments wherever nine or more migrants in country areas, or twelve or more migrants in city areas, wish to learn English. There is also available through State education departments a free correspondence course in English. In addition, English lessons are broadcast regularly by the Australian Broadcasting Commission. The Department of Education and Science provides technical advice on all aspects of migrant education and is responsible for the preparation of teaching materials, while responsibility for the overall supervision of the programme rests with the Department of Immigration, which also meets the costs.

In February 1969, 14,076 migrants were enrolled in classes, and 6,933 were enrolled in radio and correspondence courses. From the inception of the programme in 1947 until February 1969, 674,729 migrants have been enrolled for English tuition.

Technical training by government departments

Although most needs of departments for trained staff are met by apprenticeship schemes and other technical college courses and by the universities, some departments provide training which is not available elsewhere. The most important field for which such training is provided is the training of telephone, telegraph, radio, and television technicians by the Postmaster-General's Department.

Commonwealth expenditure on education

An analysis of Commonwealth expenditure is provided in the following table. Under the heading of 'direct expenditure on goods and services' current expenditure includes the cost of the Department of Education and Science, the Australian Universities Commission and other administrative expenditure, expenditure by the Australian National University, and the provision of education services in the Australian Capital Territory and the Northern Territory (including re-imbursements to States for educational services in these Territories, such amounts being excluded from State expenditure). This expenditure is net of receipts in the form of fees, etc. 'Capital' expenditure, i.e., Commonwealth gross fixed capital expenditure, relates mainly to expenditure on new buildings and equipment by the Australian National University and for schools, etc. in the Northern Territory and the Australian Capital Territory.

COMMONWEALTH GOVERNMENT EXPENDITURE ON EDUCATION, 1963-64 TO 1967-68 (\$'000)

						_					
							1963–64	1964-65	1965-66	1966–67	1967–68
Direct expenditure	e on g	oods :	and s	service	.s—					-	
Department of											
Ĉurrent .							1,417	1,656	1,878	2,532	3,473
Capital .				•				• • •		· 9	48
Australian Univ	ersitie	s Cor	mmis	sion-	_						
Current .							122	159	155	195	197
Australian Cap	ital Te	rritor	v—								
Current .			٠.				3,060	4,044	4,451	5,254	6,207
Capital .							2,367	2,772	3,506	4,652	4,770
Northern Territ	огу—						•	•			
Current .	·						960	1,209	1.472	1.641	2,246
Capital .							845	1,356	1,504	1,242	992
Other—	•	•	•	•		•		-,,	2,201	-,	
Current .							503	587	617	694	770
Capital .	·	•	•	•	•	•	29	20	18	76	112
Total—	•	•	•	•	•	•		20	10	,,	112
Current							6,062	7,655	8,573	10,316	12,893
Capital	•	•	•	•	•	•	3,241	4,148	5,028	5,979	5,922
•	•	•	•	•	•	•	-	•			
Total, direc	t expe	nditur	re, go	ods a	nd ser	vices	9 , 303	11 , 803	13,600	16,295	18,815
G	·										
Grants to Austral				iversii	ιy—		0.600				
Current	•	•	•	•	•	•	8,639	11,400	12,658	14,223	16,698
Capital .	•	. :	•	•	•	•	4,678	5,392	5,062	5,316	5,570
Total gran						•	<i>13,317</i>	16,792	17,720	19,539	<i>22,268</i>
Grants to Canber	ra Col	lege c	of Ad	vance	d Edi	иса-					
tion—											
Current .							• •				43
Capital .							• •			25	439
Total, gran	ts to	Canh	orra	Colleg	re of	Ad-					
vanced E					, 0 0,					25	482
				-	•	•	• •	• • •	• •	25	.02
Payments to the S	tates(a	z)									
Current .		´ .					21,080	28,529	32,929	38,772	48,339
Capital .							12,780	32,652	32,074	40,091	53,958
•							•	-	-	-	-
Total, payn	nents t	o Stai	tes	•		•	33,859	61,180	65,003	78 , 864	102,297
Cash benefits to p	arcane										
Commonwealth			cch	omer_							
Post-graduate			, 3011	ciries-			834	1,236	1,733	2,432	2,899
		•	•	•	•	•	6,897		10,064	13,890	13,383
Advanced ed			•	•	•	•	•	7,903	198	660	754
		n	•	•	•	•	• •	2 202			
Secondary	•	•	•	•	•	•	• •	3,382	5,197	6,243	6,474
Technical	٠.		٠.	•	•	•	:	212	600	816	1,031
Soldiers' childre	en edu	cation	i scn	eme	•	•	2,273	2,282	2,534	2,462	2,720
Other	•	•	•	•	•		433	573	812	816	852
Total, cash	benefi	ts to p	perso	ns	•	•	10,435	15,588	21,140	27,319	28,113
Grants towards pr	rivate :	canita	ıl eyr	endit	1156						
Australian Cap								86	237	249	1,435
			•	•	•	•	••	28		247 7	
Northern Territ	•	•	•	•	•	•	• •		5	•	••
Other	•	•	•	•	•	•	• •	210	• •	• •	••
Total, gran	its tou	vards	prive	ate co	ipital	ex-					• •
penditure								324	242	256	1,435
pondriare		•	•	•	•	•	• •	327			
Total	•	•	•	•	•	•	66,915	105,687	117,703	142,299	173,411

(a) Specifically for education.

The foregoing table is based on an analysis by major function of all Commonwealth expenditure. The figures exclude expenditure on certain items which are related to education, such as payments for the Australian Broadcasting Commission education series, Australian Agricultural Council scholarships and the education of Aborigines, which are classified to other functional headings. The amounts involved in the above-mentioned items were: 1963-64, \$703,000; 1964-65, \$775,000; 1965-66, \$866,000; 1966-67, \$1,100,000; 1967-68, \$3,167,000.

Commonwealth figures shown in the table on page 532 differ from those shown in the above table because: education grants to the States by the Commonwealth (mainly for universities, science facilities in State schools, technical schools and, colleges of advanced education) are included here, while expenditure by the States from these education grants is included in the State education expenditure figures on page 532; grants by the Commonwealth Government to the Australian National University are shown here, while only the actual net expenditure by that university is included in Commonwealth direct expenditure on page 532.

Adult education

The term 'adult education' as used in Australia refers mainly to non-vocational educational and cultural activities for adults. While the nature of the recognised adult education authorities varies from State to State, their major activities have many common features. Regular courses of lectures are organised on such topics as literature, music, drama, international affairs, languages, and crafts. Some authorities also organise discussion groups, festivals and summer schools, and provide special services for groups in remote areas. In 1960 an Australian Association of Adult Education was formed, and its first annual conference was held in Adelaide in 1961. The Association handles matters pertaining to adult education at a national level and arranges liaison with similar bodies in other countries.

One of the first bodies active in the field of adult education in Australia was the Workers' Educational Association, which formed associations in all States in 1913. Its aims are to bring the universities into closer relationship with the community in general and to provide for higher education in civic and cultural subjects. These associations have been superseded by Adult Education Boards or Councils set up by the State governments in Victoria, Queensland, and Tasmania, and by the university in Western Australia. In the other two States, New South Wales and South Australia, the associations continue to co-operate with the universities in their extension work and are given direct grants by the governments concerned.

There are throughout Australia various other organisations which are active in the field of adult education. The World Education Fellowship, for example (see page 554) has since its inception in Australia been interested in adult education.

The organisation of adult education and some of the activities in each State are described in Year Book No. 53, pages 625 to 627.

Overseas students in Australian educational institutions

The development of closer ties in education between Australia and other countries and the demand for education in many countries in Asia, Africa, and the Pacific have brought about a growth in the number of overseas students who come to Australia to further their education. Part of the growth and much of the awareness of the facilities available may be attributed directly to the schemes mentioned on page 526. Australian institutions have shown a readiness to accept overseas students, and in many cases special provisions have been made to suit their needs. Nevertheless, population growth and the demand for education, especially for higher education, within Australia have forced many institutions to restrict the admission of overseas students in common with Australian students.

A survey by the Department of Education and Science in June 1968 identified 1,492 government sponsored overseas students in institutions of higher learning in Australia, 1,154 of them under the Colombo Plan Technical Co-operation Scheme. The largest numbers come from Malaysia (487), Indonesia (174) and Singapore (142). Altogether, 1,234 such students came from Asian countries and 145 from African countries. In addition to the numbers in tertiary level courses, it is estimated from information held by the Department of External Affairs that there were about 680 students under these types of sponsorship following other courses of training. Also, some personnel of overseas armed forces were taking courses at Australian Defence Colleges. Thus, about 2,200 government sponsored overseas students were in Australia in 1968. This compares with about 800 such students in 1956.

Estimates are also available of the total number of overseas students in Australian institutions of higher learning in 1967. Universities reported 5,380 students, technical colleges (diploma and higher certificate courses) 1,337, and 512 studied at other institutions, making a total of 7,229 students. Their fields of study were as follows: humanities 818, education 345, fine arts 494, law and social sciences 1,377, medicine and related fields 812, natural sciences, etc, 1,094, engineering 1936, agriculture 353. The above figures include government sponsored and private students, but exclude overseas students in courses of training below the advanced level (e.g. trade and certificate courses at technical colleges).

The Department of Immigration has estimated that, in 1968, there were about 10,000 persons in Australia, who came to Australia under private arrangements specifically for study at any level.

Organisations associated with education

Australian Council for Educational Research

The Australian Council for Educational Research, a non-governmental body, is engaged on educational research in a wide variety of fields, ranging from tertiary to pre-school education. It conducts surveys and inquiries, makes grants to approved educational investigators, serves as a centre for disseminating educational information, provides training for research workers, and standardises and distributes educational and psychological tests for use in Australia. Although this council is an autonomous body, the Commonwealth and State governments give substantial financial support.

World Education Fellowship

The World Education Fellowship is a world organisation of parents, educators and other citizens interested in the development of new educational practices. It was founded in London in 1915 and spread to Australia at the time of a regional conference held here in 1937. There are now sections in each State. Its Australia-wide journal *New Horizons in Education* is published twice a year.

Australian College of Education

The Australian College of Education was formed in 1959. Its aim is to bring together leading teachers and administrators in every field of education, to raise the standard of the profession of education in Australia, to establish and proclaim fundamental educational values, and to recognise outstanding contributions to educational practice. Chapters of the College have been set up in all States, and several of the addresses and papers delivered at meetings of the College have been issued in published form.

Parent and citizen organisations

In Australia, where all government schools are administered by central departments, there is limited opportunity for local participation in education. Public interest is expressed through parents committees or organisations of parents and other citizens interested in supporting their local school. The Education Acts of all States provide for the formation of groups of this type, whose aims are to promote an interest in the school by bringing parents and teaching staff together, to help provide supplementary teaching aids and recreation materials, to foster the regular attendance of children at school, and to help find accommodation for teachers. In several States the general maintenance of school buildings, equipment and grounds is a statutory responsibility of the parent groups, costs being covered by government grants. Lunch canteen services at local schools are maintained by groups in some States. Parent groups have established school children's insurance schemes, operated through State Government insurance offices or private insurance companies. These schemes cover accidents to children which occur between the time of leaving home for school and returning home by the usual direct route.

State-wide councils of federations of parents groups are associated in a federal body, the Australian Council of School Organisations.

Expenditure on education

The presentation in the following tables is based on the Australian National Accounts. The figures exclude expenditure on goods and services which do not enter the market, such as education provided in the home, or for which it is not practical to impute a value, such as the unpaid services of some teachers, or certain educational services which cannot be separated readily from other services, such as instruction on the job. Most of the education services provided by public authorities are included. Some education services are provided by trading enterprises, such as business colleges, but it is not possible to provide separate figures of their transactions. Nor is it possible to provide separate figures for the expenditure of non-profit organisations, such as non-government schools. Information for these organisations is insufficient to make direct estimates of the cost value of their services. Their contribution is included as part of personal consumption expenditure on education.

Current and capital transactions are shown separately. Current expenditure by public authorities on goods and services classified to education is measured net of receipts, such as fees. These fees are included in private consumption expenditure. Gross fixed capital expenditure represents the value of new capital assets, such as new buildings and additions to buildings, equipment, etc. While it is possible to show to some extent details of education expenditure incurred by the various public authorities, it is not possible to provide consistent figures in total of expenditure on various types of education. Generally, expenditure on libraries, cultural activities, and the like is excluded from 'education', as are most education services provided in the armed forces, at health and welfare institutions, prisons, and the like. Identifiable expenditure on education administration and educational research is, however, included. In many cases strict definitions cannot be applied. Thus it is not possible to differentiate between the components of scholarships which are intended for education fees, textbooks, etc. (clearly education expenditure) and those intended as living allowances.

University research cannot be separated from universities expenditure on teaching. With the exception of expenditure on fees, private expenditure on education (such as for books, equipment provided by parents associations, and the like) cannot be identified and is therefore excluded.

ESTIMATES OF EXPENDITURE ON EDUCATION: AUSTRALIA 1963-64 TO 1967-68

(\$ million)

	<i>y</i> minio <i>n y</i>				
	1963-64	1964–65	1965–66	1966-67	<i>1967–68</i> p
PUBLIC AU	THORITY	SECTOR			
Direct expenditure on goods and services classified to education(a)—					
Net current expenditure— Commonwealth authorities State and local government authorities .	13 399	17 458	20 499	22 555	28 625
Total net current expenditure	412	475	518	- 578	653
Gross fixed capital expenditure— Commonwealth authorities State and local government authorities .	8 114	8 127	8 155	10 164	13 172
Total gross fixed capital expenditure .	121	135	164	174	185
Total direct expenditure— Commonwealth authorities State and local government authorities .	21 513	25 585	28 654	33 719	41 797
Total, public authority sector	534	610	682	752	838
PRIVA?	TE SECTO	R(a)			
Personal consumption expenditure on education Gross private fixed capital expenditure on educa-	91	101	109	122	140
tion	25	26	32	35	31
Total, private sector	116	127	141	157	171
TOTAL EXPENDI	TURE ON	EDUCAT	ION		
Grand total	650	737	823	909	1,009

⁽a) Transfer payments from the public authority to the private sector are included in personal consumption expenditure and therefore excluded from the public authority sector.

Direct expenditure of public authorities excludes government payments to persons and non-profit organisations. Such transfer payments from the public authority to the private sector consist mainly of scholarships to persons and grants to non-government schools. They include all scholarship payments, whether or not they are intended towards the payment of fees or towards living expenses. Total government expenditure on education, including such transfer payments, is set out in the following table.

ESTIMATES OF PUBLIC AUTHORITY EXPENDITURE ON EDUCATION: AUSTRALIA 1963-64 TO 1967-68

(\$ million)

	1963–64	1964–65	1965–66	1966–67	1967–68р	
Direct expenditure of public authorities Transfer payments to the private sector— Cash benefits—	534	610	682	752	838	
From Commonwealth authorities	10	16	21	27	28	
From State and local government authorities Grants towards private capital expenditure—	7	8	13	14	18	
From Commonwealth authorities					1	
From State and local government authorities		3	3	3	5	
Total transfer payments	18	28	37	45	52	
Total expenditure on education by public authority sector	552	638	719	797	890	

Because of conceptual and accounting differences the figures above are not strictly comparable with figures of State expenditure on schools, technical education, etc., Commonwealth expenditure on education, and university expenditure shown in other sections of this chapter.

LIBRARIES 533

CULTURAL ACTIVITIES

Libraries

The Munn-Pitt report of 1935 greatly stimulated interest in libraries and librarianship throughout Australia. This is evidenced by the development of libraries, the passing of legislation in all States to increase library services, and the establishment in 1937 of the Australian Institute of Librarians to improve the standard of librarianship. This body was reconstituted in 1949 as the Library Association of Australia and incorporated by Royal Charter in 1963, and its functions now include the promotion and improvement of libraries and library services. The Association conducts annual examinations in all States, for which students are prepared by courses of instruction. Formal library schools are conducted by the National Library of Australia, Canberra, the Library Board of New South Wales (held at Newcastle Public Library), and the State Library of Victoria, Melbourne. In 1960 the first library school to be attached to an Australian University was opened in the University of New South Wales. The Royal Melbourne Institute of Technology set up a library school in 1963 and other colleges of advanced education are in the process of establishing library schools. In 1965 the New South Wales Department of Technical Education established a course in librarianship at the Sydney Technical College.

Commonwealth libraries

National Library of Australia. This Library grew directly from the Library of the Commonwealth Parliament established in Melbourne in 1901, the Committee of which soon afterwards announced its intention of developing a library patterned on the Library of Congress at Washington, U.S.A., capable of serving purposes beyond those essential to the Parliament itself, appropriate to a national library and on a national scale. This policy was steadily pursued, so that, in addition to its primary function of serving Parliament, it gradually became a central source of information for the Government and its departments and other agencies, and assumed increasing reference and bibliographical responsibilities in relation to scholarship and research in Australia and abroad. It was also influenced by the basic elements of the national library concept of the older countries of Europe: namely, that a national library is the proper place to collect the national literature systematically and to make it known and available for use, and that it is a place to which scholars may turn for what is most significant in the literature of other countries. For these growing extra-Parliamentary activities the Parliamentary Library Committee, in 1923, adopted the title of Commonwealth National Library.

In 1957 a committee appointed to examine the future control and functions of the Commonwealth National Library recommended its establishment as the National Library of Australia separate from the Parliamentary Library, with wide functions and controlled by a board subject to a Minister; the transfer, as a separate agency to an appropriate department, of its Archives Division, which constituted the Commonwealth's agency for the custody and organisation of departmental records of permanent value which need no longer be held within departmental offices; and that the Parliamentary Library be a separate library under separate Parliamentary control. Continuing co-operation, where possible, between the two libraries was also proposed.

Effect was given to these recommendations by the National Library Act 1960, which created the National Library of Australia as a body corporate under the control of a Council of nine members, of whom one is a Senator elected by the Senate, one a member of the House of Representatives elected by that House, and seven appointed by the Governor-General. Its functions are: to maintain and develop a national collection of library material, including a comprehensive collection relating to Australia and the Australian people; to make the national collection available to such persons and institutions in such manner and subject to such conditions as the Council determines with a view to its most advantageous use in the national interest; to make available such other services in relation to library matters and material, including bibliographical services, as the Council thinks fit, particularly for the purposes of the library of the Parliament, the departments and authorities of the Commonwealth, and the Territories of the Commonwealth; and to co-operate in library matters (including the advancement of library science) with authorities or persons, whether in Australia or elsewhere. Its collections and services are housed in the permanent National Library building, opened in August 1968.

The National Library comprehensively collects and preserves Australian books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving picture films, and sound recordings. It is assisted in this by the deposit provisions of the Copyright Act 1912–1966 and has also been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews Ornithological collection in 1940, the Nan Kivell collection of 16,000 items of Australian and Pacific interest including original paintings, prints, manuscripts, and printed material in 1959, and the Ferguson collection which is still under transfer.

A feature of the Library's Australian work is the copying on microfilm, in association with the Public Library of New South Wales, of all important unique material overseas relating to Australia, including over three million pages in the Public Record Office in London. The Library maintains a permanent exhibition of selected paintings, prints and other historical material from its collections.

The bibliographical and co-operative functions of the Library embrace a number of activities. including co-operation in the international shared cataloguing programme. Australian National Bibliography, which appears weekly, monthly and annually, lists books published in Australia and books dealing wholly or substantially with an Australian subject or written by Australian authors. Associated with this compilation the Library provides a catalogue card service to libraries and others wishing to use its catalogue cards for Australian books. The publications of Australian governments. included in Australian National Bibliography, are also listed annually in Australian Government Publications and a subject list of serials is published each year under the title Current Australian Serials. The Library has commenced work to bridge the gap between J. A. Ferguson's Bibliography of Australia and the commencement of its Annual Catalogue of Australian Publications by the preparation of a bibliography covering the years 1901 to 1935. To provide a guide to representative works relating to Australia the Library also publishes annually Australian Books: a Select List. The Library's principal activity in subject bibliography is its Australian Public Affairs Information Service, published monthly since 1945, with annual cumulations since 1955. This is prepared as a guide to material on Australian political, economic, social and cultural affairs. It indexes relevant articles in a wide range of periodicals published both in Australia and overseas and all articles, whatever their subject, in a selected list of Australian periodicals chosen for indexing because of their importance in the social sciences and the humanities. The Library is establishing an Australian centre for the International Medical Literature Analysis and Retrieval System.

Co-operative bibliographical activity includes recording, in a series of union catalogues, the holdings of the major Australian libraries. The national union catalogue of monographs was commenced in 1960, since when all the larger and an increasing number of the smaller libraries have reported their monograph accessions to the National Library. In addition, the National Library has microfilmed the catalogues of some 25 libraries and has converted the film to cards. The major published union catalogue is the loose leaf, continually revised Serials in Australian Libraries, Social Sciences and Humanities, which complements another catalogue, Scientific Serials in Australian Libraries published by the Commonwealth Scientific and Industrial Research Organisation. Other union catalogues published by the National Library with the co-operation of a number of libraries and repositories are the Guide to Collections of Manuscripts Relating to Australia and Newspapers in Australian Libraries: a Union List. On the union catalogues, the Library bases a location service which, through Telex communication, has become increasingly effective in expediting reference, inter-library loan and photocopying services.

The National Library provides resources for the work of the Australian Advisory Council on Bibliographical Services, through its Secretariat, which is administratively part of the Library. Though an advisory body only, it takes part in the co-ordination of library and bibliographical services in Australia. It represents the major libraries and library services through their governing bodies and principal librarians, and library activities generally through the Library Association of Australia. Its publications include Current Projects in Library Automation; an Australian Directory (1967, new edition in progress).

The Library acts as a central library of documentary and educational films, its film collection containing approximately 8,000 titles, together with Australian historical films and a great number of film strips. It published Australian Films: a Catalogue of Scientific, Educational and Cultural Films, 1940-58 in 1959 and annual supplements in succeeding years. A revised edition of the Catalogue of 16-mm. Films, which lists all films available for loan, was published in 1960. It was supplemented in 1964 and annual accession lists are issued. Special efforts are made to discover and preserve samples of early Australian film production.

Through its Extension Services Section the Library conducts the Canberra Public Library Service for residents of the Australian Capital Territory, to whom 959,707 loans were made during 1967-68. It also assists in the provision of similar services in the Northern Territory, the Territory of Papua and New Guinea, and Norfolk Island.

The National Library's collections contain approximately 1,000,000 volumes, 26,500 paintings, pictures and prints, 23,500 reels of microfilm, 1,860 running feet of manuscripts, 25,000 motion picture stills, 16,700 reels of moving picture films, 175,700 maps, and 450,000 aerial photographs. Special features of the book collection are its strong holdings of Australiana, materials relating to the Pacific area and east and south-east Asia, the publications of foreign governments and international organisations, and works in the social sciences, particularly in political theory and economics.

LIBRARIES 535

Patent Office Library. The Library of the Commonwealth Patent Office, Canberra, contains approximately 12,000 books and a wide variety of periodicals and other literature relating to pure and applied science, industrial technology and the industrial property (patent, trade mark, design and copyright) laws and practice of most countries. Patent specifications of inventions are received from the principal countries of the world; present holdings are more than 10,030,500. Indexes include a microfilm of a classified index to 3,000,000 U.S.A. patents and translations of abstracts of U.S.S.R. patents.

Commonwealth Scientific and Industrial Research Organization. The library holdings of the Organization cover the pure and applied sciences. In addition to the Central Library in East Melbourne, each of the Divisions and Sections has a specialised collection covering such subjects as food preservation, forest products, chemistry, physics, animal health, and fisheries. The collections are particularly strong in the publications of overseas scientific and technical research institutions, with many of which extensive exchange arrangements have been made.

The Central Library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries and is responsible for the following publications: Scientific Serials in Australian Libraries; Australian Science Index, an index of articles published in Australian scientific and technical periodicals; a Directory of Scientific and Technical Research Centres in Australia; and C.S.I.R.O. Abstracts, which include abstracts of papers published by C.S.I.R.O. officers, C.S.I.R.O. translations, translations available from other Australian organisations, and additions to the British Commonwealth Index of Scientific Translations. The larger libraries in the Organisation have photocopying facilities which, while normally for internal use, provide a service for the public when a publication is not held elsewhere in Australia.

The Australian War Memorial Library. In the War Memorial library are housed the documentary and pictorial records of Australia's fighting services in the 1914-18 and 1939-45 Wars, together with collections covering the war in Korea, 1950-53, and earlier wars in which Australian troops participated—Sudan, 1885; South Africa, 1899-1902; and the Boxer Rebellion in China, 1900-01. Books, periodicals and other records covering contemporary trends and events in the fields of military history and military science are constantly being added, including a coverage of operations in South Vietnam.

The printed records section contains over 70,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings of war leaders, personalities and events, war posters, and postage stamps. Many personal collections by distinguished soldiers and historical documents relating to the wars have also been placed in the Memorial's custody for preservation. Written records comprise correspondence files of headquarters and units of both World Wars, and the original war diaries compiled from day to day by each unit during its service. The collection of official war photographs covering the 1914–18, 1939–45 and Korean Wars numbers over 250,000, and a collection of official motion picture film depicts Australia at war. Facilities for public research are not yet fully developed, but requests for information are met where practicable.

Other Commonwealth Government libraries. Most Commonwealth authorities have specialised collections in their own fields and in addition draw largely on the National Library.

Northern Territory Library Service. The Northern Territory Library Service maintains five centres in the Territory. At 30 June 1968 stocks totalled 61,750 volumes which were held at the following centres: Darwin, 27,430; Nightcliff, 6,860; Alice Springs, 17,348; Tennant Creek, 5,438; Katherine, 4,674.

State libraries

State Public Libraries. In each of the capital cities there is a well-equipped public library, the libraries in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere in the world. The following paragraphs describe these libraries and other library services in each State.

New South Wales. The Free Library Movement in New South Wales, founded for the establishment of a system of public libraries on the basis suggested in the Munn-Pitt Report of 1935, helped to pave the way for the Library Act, 1939-1959, which was fully proclaimed as from 1 January 1944. At 30 June 1968, 178 councils had established libraries in terms of the Library Act. During 1968 they spent on their libraries \$4,998,184 including \$1,111,573 received in subsidy. There are 247 libraries, of which 82 are in the metropolitan area and 165 in the country. There are also 23 bookmobiles, of which 2 are in Sydney, 7 in the suburbs of Sydney, and 14 in country municipalities and shires. These libraries contain 3,746,489 volumes. The State Library provides a central cataloguing service for municipal and shire libraries constituted under the Act.

The State Library, known as the Public Library of New South Wales, includes a General Reference Department of 560,908 volumes, a Circulation Department, together with the Shakespeare Tercentenary Memorial Library, and the Mitchell and Dixson Libraries and Galleries which are mainly

devoted to Australian and Pacific material. The Circulation Department lends books to municipal and shire libraries and to individual borrowers. The total stock of the Department is 69,079 volumes, and 42,815 books were lent to public libraries and individual borrowers during 1967-68. The Mitchell Library, with more than 60,000 volumes and pamphlets and 300 paintings, was bequeathed to the trustees of the Public Library in 1907 by Mr D. S. Mitchell, together with an endowment of \$140,000. In 1968 there were 235,325 volumes in the library, in addition to valuable manuscripts, maps and other material. In 1929 Sir William Dixson gave a collection of historical pictures then valued at \$50,000. These were subsequently added to and at his death in 1952 Sir William bequeathed the whole of his collection of books, manuscripts, pictures and other material, together with an endowment of more than \$226,000, mainly for the printing or reprinting of historical documents relating to Australia and the Pacific. The total number of volumes in the State Library now exceeds 918,000 apart from manuscripts, historical pictures and other material. The State Library maintains an adult education section servicing adult education activities for the Universities of Sydney and New England and the Workers Educational Association.

The maintenance and control of the ordinary lending branch of the Public Library were transferred in 1908 to the Sydney Municipal Council to become the City of Sydney Public Library. The State Library, which had previously been the repository for State archives, transferred this responsibility to an Archives Authority in June 1961. The Authority consists of nine members, of whom the trustees of the Public Library have a right to nominate one.

Other important libraries in New South Wales are: Teachers Colleges, 326,043 volumes; the City of Sydney Public Library, 250,562; Technical Education Branch, 249,881; Railway Institute 169,853; Parliamentary Library, 135,000; Australian Museum, 35,630; Government Transport Institute, 25,818; New South Wales Teachers' Federation Library, 24,000; Workers' Educational Association, 15,000; and the Library at the National Herbarium, 11,226 volumes.

Victoria. The modern movement in municipal library service dates from the inception of the Free Library Service Board in 1947. The Free Library Service Board was a State Government instrumentality which planned, encouraged and subsidised the development of municipal library services. Under the Library Council of Victoria Act 1965 the control of the Board passed to the Library Council of Victoria and in 1966 its office was redesignated the Library Services Division of the Library Council.

In 1969, 151 Councils, representing 2,776,000 Victorians, shared Government library grants amounting to \$1,275,000. Of this amount, \$1,197,234 was direct municipal library subsidy. With the addition of expenditure from these Councils' own funds the total expenditure on municipal library services for 1968-69 will be nearly \$3,250,000, representing an average expenditure of approximately \$1.20 per head of the population served. In 1968, 610,000 borrowers used the free library services, now totalling 2.100.000 books, to the extent of 12,210.000 issues.

Particularly in the country, service has been developed by means of regional libraries. These services, of which there are 23 at present, comprising a total of 102 councils, consist of groups of councils which pool their resources, book-stocks and trained staff. A development since 1962 has been the formation of three Metropolitan Regional Library Services. The Victorian Government provides an Establishment and Regional Library Development Grant of \$60,000 per annum.

There are 9 bookmobile services operating in Victoria, 6 in country regions and 3 in the metropolitan area.

The State Library of Victoria was established in 1856. It is controlled by the Library Council of Victoria and receives its finance from the State Government. The reference collections now total about 860,000 items, and the lending and travelling libraries have another 185,000 volumes. In addition, the State Library receives 6,660 periodicals, annuals and newspapers. A copy of each book, periodical and newspaper published in Victoria is deposited in the Library. Special collections include the J. K. Moir Collection of Australiana, the M. V. Anderson Chess Collection, and the Green and Brodie Shipping Collections. The Victorian Historical Collection contains pictures, drawings, prints, and objects of historical interest. The Archives Division is responsible for the preservation of government records.

Queensland. The Library Board of Queensland was established in 1945 under the provisions of 'The Libraries Act of 1943'. Its duty is to attain the fullest co-operation and improvement of the library facilities of the State, with the object of placing such facilities on a sound basis for the benefit and educational improvement of the citizens generally. The Board consists of six members including the State Librarian as ex officio member and secretary. A general function of the Board is to ensure that the fullest co-operation exists with the Department of Education, the University of Queensland, local bodies, and other bodies having for their object the encouragement of education, literature and the arts and sciences. A specific function of the Board is the control and management of the Public Library of Queensland. Its policy is to build up the main collection of the Library as the State's reference centre.

LIBRARIES 537

The Country Extension Service, which is administered as a department of the Public Library, lends books on non-fiction to adults and children residing outside the metropolitan area and to municipal libraries in areas of low population.

The Oxley Memorial Library, established in 1923, has been administered as a department of the Public Library since 1946, but the collection has been kept separate. It contains books, manuscripts, pamphlets, and other graphic material relating to the history and literature of Australia, and of Queensland in particular, and provides facilities for research students in Queensland literature and history.

In 1958 the section of the Libraries Act dealing with the preservation of public records was proclaimed, and in 1959 an Archives Section of the Public Library was instituted.

The Library Board staffs 13 libraries for 11 government departments of which the largest is the Department of Primary Industries. The work is co-ordinated by an officer-in-charge, who also gives assistance and advice to independently staffed departmental libraries.

Since 1948 a course in librarianship has been held annually at the Public Library to prepare trainees for the examinations of the Library Association of Australia. In 1959 a course covering some subjects of the Association's Registration Examination was inaugurated at the Central Technical College, Brisbane.

The holdings of the Public Library of Queensland and its extension services in 1967-68 were: main reference collection, 201,350 volumes and 11,856 maps and pamphlets; Country Extension Service, 90,828; Oxley Memorial Library, 25,758 volumes and 33,150 maps, pamphlets and miscellaneous items.

Local authorities are empowered by the Libraries Act to establish and conduct library services as a function of local government. The Board encourages local authorities to use these powers. In 1967-68, 80 local authorities were conducting 140 library services. The Brisbane City Council has established 21 of these libraries. There were 113 libraries in Queensland free to adults. To help overcome the problems of a large area and sparse population, various local authorities provide library services on a regional basis. By 30 June 1968, 4 regional library services had been established; the South Western (7 shires), the Central Western (8 shires), the North Western (10 shires), and the Central Highlands (5 shires), with headquarters at Charleville, Barcaldine, Mount Isa and Emerald, respectively. During 1967-68 the Board received a grant of \$660,087 from consolidated revenue to finance the activities of the Public Library and to pay subsidies to local bodies conducting free library services of 50 per cent of endowable expenditure on books and the acquisition or improvement of library buildings and equipment with an upper limit of \$8,000 in respect of new library buildings, and seventy-five per cent of endowable expenditure on books, equipment and maintenance to local bodies conducting subscription libraries. Subsidies were paid to 4 regional library service boards, 75 local authorities and 33 other bodies.

The Parliamentary Library of Queensland was established by the first Parliament in 1860. At 30 June 1968 it contained 98,000 volumes and pamphlets. Included in its collection are long sets of periodicals, newspapers, statutes and government publications, which are currently maintained. The books are devoted largely to the social sciences, although history, geography and biography are well represented. Among the features of its service to Members of Parliament are its newspaper clippings file and copying facilities.

'The Libraries Act Amendment Act of 1949' provides for the Public Library and the Parliamentary Library each to receive a copy of all books, pamphlets, maps and other printed material published in Queensland.

South Australia. In the Reference Department of the State Library of South Australia there are 250,721 volumes, most of which may be borrowed. Approximately 5,000 periodical titles are filed and the collection of newspapers includes every newspaper printed in South Australia. There are 48,266 volumes in the Adelaide Lending Service; these books are available to persons living in the metropolitan area. The Country Lending Service has 360,965 volumes, of which more than one-third are suitable for children. The Adelaide Lending Service lent 316,575 books in 1967–68, and the Country Lending Service, 199,951. The Library has an active programme for the publishing of facsimile editions of early Australian texts.

The Research Service specialises in scientific and technical inquiries and supplements the resources of the State Library by borrowing from other libraries and by obtaining microfilm copies of material not available locally. It has an extensive collection of trade catalogues and standards.

The library of the Parliament of South Australia held approximately 60,000 volumes in 1968.

There are 29 local public libraries in South Australia provided by 22 local government and other authorities. The libraries are subsidised on a \$1 for \$1 basis by the State Government. The Libraries Board of South Australia, through the State Library of South Australia, provides various central services. Book-stocks are pooled in the State Library of South Australia and are interchanged between the libraries.

At the end of June 1968 these local public libraries contained 233,193 books. There were 143,147 registered borrowers. During 1967-68, 1,942,494 books were lent.

Western Australia. In 1955 the Library Board of Western Australia was made responsible for all public library services throughout the State to which the State Government contributes funds. The Board has the following major functions: to encourage local authorities throughout the State to establish public libraries and to provide as a State subsidy all books and bibliographical services necessary for such libraries; to administer the State Reference Library; to advise the Government on all matters relating to libraries: and to provide for the training of librarians.

Local public libraries are subsidised on a \$1 for \$1 basis, the local authority providing accommodation and staffing and the Board all books and related services. The Board provides at least one volume per head of the population. All non-fiction books may be made available at any public library throughout the State on request to the Board. All cataloguing is done by the Board. The first library under this scheme was opened in August 1954. By 31 December 1968, 111 libraries had been established

The State Reference Library, established in 1887, is the reference division of the Library and Information Service of Western Australia. In addition to providing the normal facilities of a reference library for the metropolitan area, it extends its service throughout the State through local public libraries. It is divided into three divisions responsible for service in the subject fields of Western Australian history, science and technology, and the humanities.

The State Bibliographical Centre and the Central Music Library are housed in the State Reference Library Building, and there is also a commercial information centre. The State archives are maintained by the State Reference Library and managed by the staff of the Battye Library. The State Reference Library is fully equipped with microfilm and photocopy apparatus.

The book-stock of the Board at 30 June 1968 was: 858,997 volumes, comprising circulation stock (including books in public libraries), 606,379 volumes; State Reference Library, 236,230 bound volumes; Central Music Library, 3,665 books on music and 12,723 scores.

There are over 130 special libraries in government departments and industrial firms. Union catalogues of periodicals and books received in the libraries in Western Australia are maintained by the Library Board of Western Australia in the Bibliographical Centre in the State Reference Library building.

Tasmania. The Tasmanian Library Board administers the State Library in Hobart, the extension of library services throughout the State and State aid to libraries, and controls the State Archives. State Government expenditure on library services in 1967-68 was \$553,933

Through the State Library, the Board provides reference and information services, documentary film and recorded music libraries, and arranges recorded music recitals, film screenings, displays, exhibitions. etc. Two bookmobiles, based in Hobart, provide a library service to the rural areas of fourteen southern municipalities. All municipalities receive loans of children's books, the number of books being dependent on the child population of each municipality.

To qualify for State aid for an adults library, a municipal council is required to spend on library services an amount equal to a rate of 0.25 cents in the dollar of the assessed annual value of all rateable property in the municipality. In 1968 all municipalities except Glamorgan received assistance. The Board's aid consists of the loan of collections of books at least equal in value to municipal expenditure from rates. Most of the books supplied this way are exchanged by the Board each year.

A regional library, formed by the Board to give a more efficient and comprehensive service, operates in the north-western municipalities of Penguin, Burnie, Circular Head, Wynyard and Waratah, with headquarters in Burnie. The regional scheme has a reference library in Burnie, small libraries in the larger towns and a bookmobile for rural areas.

The Hobart City Council library service is amalgamated with the State Library in Hobart and is run by the Board. In addition, a bookmobile serves schools in the metropolitan area. The libraries of the cities of Glenorchy and Launceston are administered by the Board; a bookmobile serves municipalities close to Launceston. At 30 June 1968 the State Library in Hobart held 115,593 reference volumes and 102,888 lending volumes. Municipal libraries (which include Launceston and Glenorchy) had 381,256 books, of which 162,835 were children's books. The State Library works closely with the Parliamentary Library and provides a reference officer to help with Members' queries when Parliament is in session.

University libraries

These libraries provide material not only for the education of graduates and undergraduates, but also for research workers and practical investigators all over the continent. Much of the material they contain is not available elsewhere, for although in most cases smaller, they are in many directions

LIBRARIES 539

more highly specialised than the public libraries. They lend to one another and to State and private institutions as well as to individual investigators. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professorial staff.

The following table shows the volumes held, accessions during the year, and expenditure of the Australian university libraries.

UNIVERSITY LIBRARIES

University			Volumes (a)	Accessions during year (b)	Expenditure (c)
			'000	'000	\$'000
Australian Nation	al .		478	45	798
Sydney			1,141	87	1,201
New South Wales			460	47	780
New England .			246	18	266
Newcastle .			125	11	205
Macquarie .			156	62	289
Melbourne .			536	30	803
Monash			291	49	886
La Trobe			76	20	340
Queensland .			556	71	820
Adelaide			472	31	574
Flinders			112	16	285
Western Australia			324	19	416
Tasmania	•	•	166	11	250
Total .			5,139	517	7,915

(a) 30 June 1968. (b) Year ended 30 June 1968. (c) During year ended 31 December 1967.

Australian National University, This library comprises three main sections attached to the Institute of Advanced Studies, the School of General Studies, and the Centre of Oriental Studies. The Advanced Studies collection of some 260,000 volumes is closely related to the special interests of the six Research Schools in the Institute. It has a wide range of periodical literature and is strong in the fields of anthropology and linguistics, mathematics, mathematical statistics, physics, chemistry and the non-clinical medical sciences, and has sought to acquire a good working collection of secondary material of high standard in the social sciences. The General Studies collection (135,000 volumes) is designed to further teaching at all levels in the Faculties of Arts, Economics and Science, and to provide research facilities in the humanities. The Oriental collection (mainly Chinese, Japanese and Indonesian) is primarily a research collection and at present contains 82,000 volumes. Branch libraries have been established to serve the Faculty of Law (22,000 volumes), the John Curtin School of Medical Research, the Research School of Physical Sciences, the Research School of Chemistry the Research School of Biological Sciences, the Department of Astronomy at Mount Stromlo and the New Guinea Research Unit at Port Moresby. The resources of the National Library of Australia are available to members of the University, who also have access to many specialised collections of material held by government instrumentalities in Canberra.

University of Sydney. The library consists of the central collections, housed in the Fisher Library, eleven branch libraries including the Law Library, the Medical Library, the Badham Library in agriculture, biology and veterinary science, the Wolstenholme Library in economics, the Engineering Libraries, and a number of departmental libraries. The University Library holds a total of more than one million volumes.

The first books were acquired in 1851, and shortly afterwards the library of Sydney College was added. The collection of Nichol D. Stenhouse was acquired in 1878 as the gift of Thomas Walker. In 1885 Thomas Fisher bequeathed the sum of \$60,000, the income from which is used as a book fund. The Fisher Fund was matched in 1961 by establishment of the W. H. and Elizabeth M. Deane Library Fund. Perhaps the finest collection in extent and importance which has been given to the University is that of Sir Charles Nicholson. There have been numerous other benefactions, among which may be mentioned the library of Sir Francis Anderson, the W. H. Deane collection of books and manuscripts and the Dalley-Scarlett music library. In 1961 the University acquired the English literature collection of the late Hugh Macdonald, and the late Professor J. Stewart's library, an outstanding collection on archaeology and numismatics, was acquired in 1963. The Sydney University Library has an extensive collection of mediaeval manuscripts and early printed books.

University of New South Wales. The libraries in this university consist of the Central Library and a Bio-medical Library at Kensington. There is also a library at Wollongong University College and the Broken Hill Division.

University of New England. The library was founded in 1938, when the New England University College was established. Sir William Dixson was its first benefactor. The library is adding to its collection at the rate of approximately 20,000 volumes a year. It receives approximately 5,500 current periodicals annually. It is housed in a three-storied, air-conditioned building, which also makes provision for a bindery and photographic and archives division. A post-graduate and research library is planned as an extension of the present building. The library has its own lecturer in bibliography and library service and conducts formal courses in librarianship. A multi-copy collection of 36,000 volumes for external teaching is housed in the Public Library of New South Wales in Sydney.

University of Newcastle. Beginning in 1951 with science-technology materials and associated, through common staffing and housing, with Newcastle Technical College Library until 1961, the library now has a collection of 135,000 volumes and is increasing at the rate of about 13,000 volumes per year. More than 4,000 periodicals are received regularly by subscription and donation. The resources of the library are used extensively on inter-library loan both within the Newcastle district, particularly by local industries, and increasingly, as the library's resources grow, by the other research libraries of the country.

The first stage of the permanent library building was completed in January 1968. To it will be brought, as the departments move to Shortland, the one-eighth of the collection still at Tighes Hill. There are no departmental libraries.

Macquarie University. The library began in 1965 to acquire books and to plan for its opening in 1967. It occupied temporary quarters in North Sydney until mid-1967, when it moved into the first stage of a new air-conditioned building, which is centrally situated on the university site at North Ryde and planned to house eventually 800,000 volumes. The library subscribes to 2,583 serials and has an audio-visual area. When the library opened in March 1967, approximately half of its total collection of 70,000 volumes had been donated by private individuals, firms and other libraries. On 1 January, 1969 its stock stood at 189,481 and its acquisition programme was still being heavily supported by donors. The library staff conducts an extensive programme of lectures and tutorials in bibliography and library use for both undergraduate and post-graduate students.

University of Melbourne. Early in 1854 the first allocation for books was made, but the library was housed in temporary quarters until 1959. The W. L. Baillieu Trust made available the first instalments of a \$200,000 gift for building purposes, which have been followed by subsequent gifts and substantial grants from the Commonwealth and State Governments, and a new building was occupied at the beginning of 1959, the first in the university to be designed specifically for library purposes. Since 1959 the use of the library has increased fourfold, and during the academic year admissions of readers to the building averaged 8,000 a day. The building has become inadequate for all purposes and a doubling of its present floor area is required urgently. The resources of the library are also used extensively on inter-library loan by government instrumentalities, industries and other organisations throughout Australia. The University Library, including 13 branch libraries in various departments, is administered from the centrally situated Baillieu Library. The large medical branch library is especially rich in periodicals.

Monash University. The library contains about 310,000 volumes and subscribes to some 7,000 journals. It has been decided that the library organisation will develop into four large units—the main library, a bio-medical library, a law library, and a library for the physical sciences and technology. The physical sciences and technology library has been named the Hargrave Library and was opened in December 1962. The main library, catering mainly for the humanities, was occupied in November 1963. The bio-medical library was occupied in 1966, and the law library in February 1968.

La Trobe University. The university was founded in December 1964 and the first books were acquired in 1965. The library was opened in February 1967; it is a three-storey air-conditioned building which is designed to be extended horizontally. The first stage has accommodation for about 130,000 volumes and 420 readers. By the end of 1968 the library had acquired about 89,000 volumes and received about 2,000 periodicals and serials, catering for the Schools of Agriculture, Biological Sciences, Humanities, Physical Sciences and Social Sciences.

University of Queensland. The library was founded in 1911. There is a main library and a number of departmental libraries at St Lucia, and medical libraries at the Medical School and at teaching hospitals. The library receives more than 15,000 current periodicals. It has notable collections in geology, the history, development and culture of the Pacific region, and tropical aspects of agriculture, veterinary sciences and biological sciences.

University of Adelaide. The main library is the Barr Smith Library which commemorates its first benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the university

LIBRARIES 541

over \$100,000 for the library. Seats are provided for 1,000 readers, including 270 in the main reading room. There are branch libraries for medicine, law and music, with seats for 450 readers. The South Australian branches of the Australian Medical Association, the Australian Physiotherapy Association and the Australian Dental Association make annual contributions towards the maintenance of the medical library in return for borrowing privileges for their members. The Waite Agricultural Research Institute has a separately administered library of about 23,500 volumes in agricultural science. Some 15,716 serial titles are received.

The Flinders University of South Australia. The acquisition of books for the library commenced in 1963 when the first library staff were appointed. By the time teaching began in March 1966 a collection of some 60,000 volumes had been assembled. At the end of 1968 the collection contained over 121,000 volumes. Approximately 20,000 volumes are being added each year, and the library receives currently about 3,700 periodical titles. During the early development of the library emphasis is being placed on material to support the current teaching and research programmes of the university. Special attention is being paid to fields where little material is available elsewhere in Australia, for example Spanish literature. The first stage of the library building was occupied at the end of 1965, and the second stage extension which completed the building was finished late in 1967.

University of Western Australia. The first full-time library staff was appointed in 1927. Provision for a permanent library building was not possible when the university moved to its present site, and space and facilities were inadequate for many years. A new four-storey building was completed at the end of 1963 and named the Reid Library after the late Chancellor of the University, Sir Alex Reid. The building has seating accommodation for 1,000 readers and facilities for photo-copying and the reading of microfilms. The University Library developed very slowly in the early years, but recently has been adding about 20,000 volumes a year to its stock. In addition to the Reid Library there are a number of departmental libraries of which the more important are engineering, agriculture, preclinical medicine, music and law. There is also a medical library, in accommodation provided by the Royal Perth Hospital, for the use of the Medical School.

University of Tasmania. Although the University of Tasmania was established in 1890, library development was slow and the University Library could not be said to have existed in an organised way until 1913. The present collection numbers about 180,000 volumes and over 4,000 current serial titles. Apart from the main library, where central services are located, there are three branch libraries, five departmental collections on the Sandy Bay campus, and a Clinical Library within the Clinical School of the Faculty of Medicine which is associated with the Royal Hobart Hospital. The University Library also collects private and business archives and has a rare book collection.

Children's libraries and school libraries

New South Wales. Children's libraries are being developed as departments of municipal and shire libraries. The Education Department maintains a school library service for the fostering of State school libraries, which are maintained partly by parents and citizens associations and partly by departmental subsidy. Secondary and central schools, and an increasing number of primary schools, have teacher librarians.

Victoria. Throughout Victoria an essential feature of libraries is the service for children; 134 municipal libraries share in a special children's library grant of \$10,000, and on the staff of the Library Services Division is a professional children's librarian who supervises, and advises on, work with children.

The Education Department is making provision for the building of library rooms in new schools. Where accommodation is available in existing schools, library furniture is provided free of cost to the schools, and the Government subsidises the purchase of books. In June 1968, 670 schools had central libraries. The Education Department has a library service officer with a small staff to advise and assist schools in the establishment and organisation of libraries. A one-year course for the training of teacher-librarians was established at Melbourne Teachers' College in 1955. Approximately 60 teachers are trained each year. A four-year course for the training of teacher librarians for secondary schools was instituted in 1968. There is an annual intake of 25 students for this course.

Queensland. The Library Board of Queensland stresses to local bodies the importance of providing adequate library services for children. There are in Queensland 138 libraries free to children, of which 18 are conducted by the Brisbane City Council. The children's libraries at Rockhampton, Toowoomba and Townsville are particularly active. Country children who are not catered for locally may borrow from the Country Extension Service which possesses a separate children's collection. The purchase of books for State school libraries in Queensland is financed by school committees and parents associations, with a subsidy from the Department of Education on a \$1 for \$1 basis. Trainees at the teachers colleges are instructed in school library organisation and management.

South Australia. A children's library of 38,937 volumes is used by school classes and individual children living in the metropolitan area. In 1967–68, 261,248 books were lent. There is a large collection of historical children's books assembled for the use of research workers. In August 1957 a youth lending service was opened for young people from thirteen to eighteen years of age. It has a stock of 15,292 volumes, and in 1967–68, 111,513 loans were recorded.

Western Australia. The Education Department provides library services, issues of books and subsidies on library books to schools. School libraries are supplied with shelving, furniture, stationery, and library supplies. The Library Services Branch of the department provides advisory services to assist schools in all aspects of library organisation and service. It also relieves schools of the professional and routine tasks of book preparation by providing a central cataloguing service for both new books and those previously uncatalogued in school libraries, a central processing service to cover books in plastic and prepare them for use, and a library book repair and binding service. Book selection in schools is assisted by a model library and by lists of recommended books.

The teachers colleges provide courses in school library organisation and service and have developed college libraries directed by qualified librarians. At the Perth Technical College part-time courses are provided on the syllabus for the examinations of the Library Association of Australia and are attended by many school librarians. The Perth Technical College and technical schools are equipped with libraries, and an allocation of funds is provided annually to each school and college department for the purchase of books and periodicals. Books for technical schools other than Perth Technical College are centrally ordered, catalogued and processed by the Library Services Branch.

All high schools are provided with library accommodation and furniture. New high schools have been provided with a main library, reading room, study room, students' lounge, teachers' lounge and librarian's office. High school libraries are staffed by one or two trained school librarians according to the size of the school and trained library assistants have been appointed to some schools. New high schools are issued with books to a value of \$1,000 in each of their first three years and new primary schools are issued with books to the value of \$400 in their first year. All high schools receive annually an issue of books, as well as being entitled to a subsidy for the purchase of library books, while all non-government schools with post-junior students receive an annual issue of books for matriculation studies. A number of primary schools have organised school libraries in rooms which have become available, or in premises provided by the parents and citizens associations. Annual issues of books are made to all primary schools, varying according to the size of the school, and a subsidy is provided for the purchase of library books. The Charles Hadley Travelling Library provides 500 boxes of books which are circulated to all small schools, mission schools and special classes. Children who are unable to attend school, mainly those in isolated areas, are provided with books from the Correspondence School's library.

Tasmania. All the State's municipal libraries have Lady Clark Memorial Children's Libraries. The Lady Clark Memorial Children's Library in the State Library in Hobart has 24,300 books and serves schools in the Hobart metropolitan area by bookmobile. More than 150 schools which are not close to a municipal library have collections of books on loan from the Lady Clark Memorial Children's Library.

Special libraries

Before the 1939-45 War the number of special libraries, apart from those maintained by government departments, was small, but during recent years many manufacturing, commercial, research and other firms, as well as statutory bodies, have found it necessary to establish special libraries to serve their staff. These libraries, which are most numerous in Sydney and Melbourne, are being increasingly administered by professional librarians.

Archives

General interest in archives in Australia was aroused in 1888, when the Colony of New South Wales celebrated its centenary, the occasion being marked by official publication in 1889–1894 of the *History of New South Wales from the Records* by G. B. Barton and A. Britton, and in 1893–1898 of the series of *Historical Records of New South Wales*, edited by A. Britton and F. M. Bladen. Both publications were based on transcripts of documents in London which had been made by Mr James Bonwick, appointed Archivist by the Government of New South Wales in 1884.

In 1902 Mr F. M. Bladen presented to the Commonwealth Government a report on European Archives, in which he recommended the establishment of a Commonwealth Archives Office and the copying of further official records in London. The copying project continued and some of its results were embodied in the volumes of *Historical Records of Australia*, published by the Commonwealth in 1914–1925, under the editorship of Dr J. F. Watson.

ARCHIVES 543

Measures for the preservation and storage of original documents were not taken until later years. In the absence of duly constituted archives offices, the various major libraries throughout Australia undertook the collection of historical records, both from official and private sources. An Archives Department of the Public Library of South Australia was established in 1920, and other institutions formed archives branches in, 1944 (Commonwealth National Library), 1945 (Public Library of Western Australia), 1948 (State Library of Victoria), 1949 (State Library of Tasmania), 1953 (Public Library of New South Wales), and 1959 (State Library of Queensland). Legislation to govern arrangements for official records was passed as follows: South Australia (1925, 1936), Tasmania (1943, 1965), Queensland (1943) and New South Wales (1960). Since 1961, separate authorities for official archives have been established: Commonwealth Archives Office, 1961; Archives Office of New South Wales, 1961; Archives Office of Tasmania, 1965. A Business Archives Council was established in 1954 to coordinate activities in the field of company records and a number of firms have established their own archives services. Certain churches have also provided appropriate facilities for ecclesiastical records. Other corporate and private archives continue to be collected by several archives offices, libraries and, more recently, universities.

Commonwealth Archives Office

In 1943, following a report by an inter-departmental committee, the Prime Minister directed the formation of a War Archives Committee to arrange for the preservation of war records. This Committee recognised that war archives could not be separated from peace-time archives, and in 1946 the name was changed to the Commonwealth Archives Committee. In 1952 the National Library became the sole archival authority for the Commonwealth and the Chief Archives Officer became the Executive Officer for the Committee. In March 1961, in accordance with a recommendation of the National Library Inquiry Committee, the Archives Division of the National Library was reconstituted as the Commonwealth Archives Office within the Prime Minister's Department. The Archives Office functions, in part, as a central agency for the control of those records created by the Commonwealth Government which are no longer required for frequent use in the day-to-day business of government and which, in many cases, contribute towards the development of a unique record of the heritage of the Australian nation. As a complementary function the Office also provides services for members of the public. These functions are carried out through the following basic activities.

Records and archival management. From 1967, the Office has been responsible for a Central Information Bureau on Records and Archival Management, providing advisory and information services to agencies of the Commonwealth Government.

Registration of record series. The Office maintains the Commonwealth Register of Record Series, in which details of all Commonwealth records are entered, including those in government departments as well as archival holdings. The records of the Commonwealth are particularly varied, ranging from early Customs, Post Office, Defence, and other material transferred from the Australian Colonies and States, to records of territories now under Australian administration, in addition to those of the Commonwealth Government proper from 1901. Some papers from non-official sources are also held, such as the records of enemy firms expropriated during the two World Wars, records of the Chaplain of Norfolk Island, and papers of former Commonwealth ministers and officials.

Control of disposal. No Commonwealth records may be destroyed without the concurrence of the Chief Archivist, whose responsibility it is to safeguard broader national interests as distinct from those of the department which compiled the records. This concurrence is given as far as practicable through continuing disposal authorities which enable Commonwealth departments to destroy certain routine classes of records automatically, but records not covered by such continuing authorities are checked before destruction is authorised. Records selected for permanent preservation are assessed as having evidential or informational value to the nation. In the first category are all records documenting the democratic, constitutional, and legal basis of the Commonwealth Government; the origin, development, organisation, functions, policies, and substantive activities of Commonwealth departments; and the rights and entitlements of Australian citizens. These range from the signed copies of Acts of Parliament to duplicate certificates of naturalisation. The second category, while including many records from the first, also covers source material considered of value to researchers in social, economic, and scientific affairs (such as migrant documentation preserved for demographic purposes) and the nation's cultural and technological heritage (represented, for example, in records of copyrights and patents).

Provision of accommodation. Any records which are no longer in active use but which are considered by the originating department or by the Archives Office to warrant preservation, either permanently as national archives or temporarily for a further specified period, may be transferred to an archives repository. While in archival custody they are analysed, arranged, and described, as resources permit, by a wide variety of processes, so that the broadest range of research interests

may be served by a comprehensive system of information retrieval. At 30 June 1968 the total holdings of the Archives Office throughout Australia amounted to 345,000 shelf feet of records, including 125,000 feet of permanent material, such as files, manuscripts, registers, cards, books, maps, plans, models, paintings, films, photographs, microfilms, recordings and tapes, conservatively estimated to be more than 10,000,000 items.

Regulation of access. The current policy of the Commonwealth is to designate the generality of official records created before 1 January 1923 as 'open' to public access. However, as is customary, a small number of exceptions have to be made to this rule. The examination of records for this purpose and the development of access arrangements generally are the responsibility of the Archives Office.

Provision of information. The Office provides an advisory service to enquirers, both official and public, on appropriate sources of information for particular topics including material held by the Office itself, by other Commonwealth agencies and elsewhere. Records in the custody of the Archives Office are available for use by depositing and other departments of the Commonwealth Public Service. During 1967-68 some 272,000 items were lent to departments. The Office also provides departments with special searches and information from the records in its custody (13,200 requests in 1967-68). In accordance with the Commonwealth Government's access rules, the Office also supplies information to members of the public engaged in academic or other forms of research. Records may be consulted by holders of a search ticket in the public search rooms provided and 40 public search tickets are currently valid. During 1967-68 enquiries were received from 235 researchers. There were 6,400 daily visits to archives search rooms and repositories by officials and the public, and 24,600 items were produced for consultation.

The headquarters of the Commonwealth Archives Office is in Canberra, and there are branches in Sydney, Melbourne, Brisbane, Adelaide and Perth. Regular visits are made to areas not yet served by Commonwealth Archives repositories, and in 1968 records surveys were conducted in the Northern Territory, Papua and New Guinea, Norfolk Island and Christmas Island. The Office maintains liaison with similar organisations in overseas countries and is the Australian national member of the International Council on Archives, established under the auspices of UNESCO.

Archives Office of New South Wales

Prior to 1961 the State archives were in the care of the Public Library of New South Wales, first in its Mitchell Library but from 1954 in an Archives Department. Under the Archives Act 1960, the Archives Authority of New South Wales was established in 1961 as a statutory corporation of nine members, appointed by the Governor, to have the custody and control of the State archives. These are preserved in the Archives Office of New South Wales which was also established under the Act as an office and repository for that purpose. The Principal Archivist is the chief executive officer of the Authority.

The Act requires that before any public records of the State are destroyed or disposed of, notice must be given to the Archives Authority which may then require any such records to be made available to it. Records transferred to the Authority become State archives and are generally 'open' when 35 years old, to holders of a reader's ticket.

The State archives at 31 December 1968 occupied 30,816 feet of shelving. This excludes more than 16,000 maps and plans besides other records which can not be readily measured statistically. In addition there were about 100,000 feet of permanently valuable records housed mainly in the Government Records Repository.

Archives Office of Tasmania

The Archives Office of Tasmania operates under the Archives Act 1965, No. 47. The statutory authority under the Act is the Tasmanian Library Board. No records of state and local authorities may be destroyed or otherwise disposed of except on the written authority of the Principal Archivist. A survey of Tasmanian records is concentrating at present on municipal councils and local courts.

The holdings of the Archives Office amount to about 10,000 feet (including non-public records) housed in part in the State Library building completed in 1962 and in part in the vaults beneath the nineteenth century Public Buildings, Franklin Square. On the completion (probably in 1971) of the second phase of the State Library Building the archives will be accommodated in the tower block. The storage space will be air conditioned and will provide an ideal environment for records.

A publication programme has produced three parts of a Guide to the Public Records of Tasmania and five further record groups are being inventoried with a view to producing additional publications.

A file lending service is conducted for the benefit of departments and authorities which have deposited semi-current records in the Archives Office. Research workers have access to records in the search room and a mail reference service is provided for country and interstate enquirers.

Business Archives Council of Australia

The Business Archives Council of Australia (New South Wales Branch) was established in 1954 to promote activity in the field of business records. A Victorian branch of the Council was established in 1957. Both branches work for the preservation of business records and promote the writing of business history. The Council itself does not collect business records. The main collecting centres are the Archives of the University of Melbourne, The Australian National University and the University of Sydney. Melbourne and the Australian National University hold the largest collections of business records in the British Commonwealth.

The University of New England also collects business records. Whereas the collections at Melbourne and the A.N.U. span a wide range of business activity, New England concentrates on rural industries. In addition, Melbourne holds a strong collection of legal records, and the A.N.U. a strong collection of trade union records.

Museums and art galleries

In 1964 an annual collection of statistics on a uniform basis was commenced from Australian museums and art galleries. The following paragraphs provide summarised results of the collection and refer individually to the more important museums and art galleries.

A museum or art gallery is considered to be a building, group of buildings or parts of buildings, managed as a unit and intended predominantly for the permanent display of objects of interest (museum) or objects of art (art galleries) to the general public. Institutions displaying live exhibits are excluded (the more important of these are mentioned on pages 549-50), as are buildings used for temporary displays (exhibitions, commercial galleries exhibiting only for sale) without a permanent stock of exhibits; permanent exhibitions which are ancillary to other activities such as exhibits at council chambers, libraries, hotels, and other commercial enterprises providing services to tourists and sightseers; collections which are not readily accessible to the general public, such as university collections for the use of students and research workers; and historic homes, etc. not specifically intended for the permanent display of objects of interest (i.e. where the building itself and its normal fittings are essentially on display).

Museums and art galleries, 1968

The following table classifies by States and Territories and by ownership the institutions in Australia which have been identified in 1968 as museums and art galleries (branches of museums and art galleries are not shown separately).

MUSEUMS AND ART GALLERIES: STATES AND A.C.T., AND OWNERSHIP, 1968 (Number)

		Major instit	utions		Other instit	utions		All institutions
		Museums	Art galleries	Mixed institutions	Museums	Art galleries	Mixed institutions	
State or Territory—								
New South Wales		3	1		4	3	2	13
Victoria	•	ž	î		į	5	2 2	12
Queensland	•	ī	i			ž		- 5
South Australia	•	i	i		6	Ĭ		9
Western Australia	•	ĵ	i		ž	i	- :	Ś
Tasmania	•	•	•	ż	•	•		ž
Northern Territory .	•	••	• • •	~	• •	• • •	• •	~
Australian Capital Territory	:	· i	• • • • • • • • • • • • • • • • • • • •	'n	ï			
Ownership—								
Commonwealth Government		1		1				2
State Governments .	•	1	´ .	;		• •	· i	18
Municipal authorities .	•	0	3	•	3		1	12
Private trusts	•	• •	• •	1	3	٥	ì	12
	•	• • •	• •	• •		7	i	8
	•	• •		• •	į	;	1	6
Private	٠	• •	• •	• •	3	1		0
Total museums and art								
galleries		9	5	3	15	13	4	49

The following table sets out particulars of staff, display areas and expenditure for all museums and art galleries identified in 1968.

MUSEUMS AND ART GALLERIES: STAFF, DISPLAY AREA, ATTENDANCE, AND EXPENDITURE, STATES AND A.C.T., 1968

			N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
Total staff—										
Museums			177	146	32	78	55	• •	19	507
Art galleries			. 52	173	21	36	20	::	::	302
Mixed institutions .			. 17	9		• •		48	67	141
All institutions			246	328	53	114	75	48	8 6	950
Display area used—										
Museums		'000 sq f	105	71	28	57	12		11	284
Art galleries		,, ,	51	86	20	33	12			202
Mixed institutions .		,, ,	12	13				77	80	183
All institutions		,, ,	, 169	170	48	90	24	77	91	669
Estimated attendance	during	vear								
Museums		. '000	694	735	139	266	178		180	2,192
Art galleries		. ,	403	509	145	147	118			1,322
Mixed institutions .		,	63	65				161	525	814
All institutions		. ,	. 1,160	1,309	284	413	296	161	705	4,328
Estimated expenditure	during	y vear(a)—	_							
Museums		. \$'ÓO		433	126	236	244		60	1,714
Art galleries			102	302	99	170	128			881
Mixed institutions .		,	60	50				187	358	655
All institutions			, 857	785	225	406	372	187	418	3,250

⁽a) Excludes certain funds not controlled by the institution, for which information is not available.

The following table gives figures for staff, display area, etc., for each of the seventeen institutions identified in 1968 as major because of the size of their exhibits, their popularity and the extent of the information and investigation services they provide.

MUSEUMS AND ART GALLERIES, MAJOR INSTITUTIONS: OWNERSHIP, STAFF. DISPLAY AREA, ATTENDANCE, ETC., 1968

	Aus- tralian War Memo- rial, Canberra	Aus- tralian Institute of Anatomy, Canberra	Aus- tralian Museum, Sydney	Museum of Applied Arts and Sciences, Sydney(a)	Geolo- gical and Mining Museum, Sydney	Art Gallery of N.S.W., Sydney	National Museum of Vic- toria, Mel- bourne	Institute of Applied Science of Vic- toria, Mel- bourne	National Gallery of Vic- toria, Mel- bourne
Ownership	Cwlth	Cwlth	State	State	State	State	State	State	State
Scientific, professional, teaching, preparational Administrative and clerical,	8	10	39	27	10	11	55	59	41
attendants, cleaners, other .	59	7	46	35	12	29	19	9	117
Total staff	67	17	85	62	22	40	74	68	158
Display area used . '000 sq ft Annual attendance . '000 Number of lectures . Total attendance at lectures . '000 Field-work . man-days Books, periodicals, etc. in library	80 525 53 1	9 175 	51 n.a. 626 35 950	29 246 4,952 75 138	11 32 89 4 44	(b)350 133 4	11 n.a. (b)300 12 288	26 395 1,125 65 8	378 202 9
'000	78	7	36	8		5	n.a.	4	n.a.

	Queens- land Museum, Brisbane	Queens- land Art Gallery, Brisbane	South Australian Museum, Adelaide	National Gallery of South Australia, Adelaide	Western Australian Museum, Perth	Western Australian Art Gallery, Perth	Tasmanian Museum and Art Gallery, Hobart	Queen Victoria Museum and Art Gallery, Launceston
Ownership	State	State	State	State	State	State	State	Municipal
Scientific, professional, teaching, preparational Administrative and clerical, attendants, cleaners, other	11 21	3 13	35 21	8 17	17 33	9 10	7 18	8 15
Total staff	32	16	56	25	50	19	25	23
Display area used '000 sq ft Annual attendance '000 Number of lectures Total attendance at lectures '000 Field-work man-days	28 139 186 10 102	7 125 	41 195 148 5 300	28 119 103 6	7 143 351 13 741	9 109 27 1	(b)90 n.a. n.a. 120	36 71 189 4 40
Books, periodicals, etc. in library '000	39	1	26	n.a.	11	1		12

⁽a) Includes branches at Albury, Bathurst, Broken Hill and Goulburn.

Some descriptive detail follows in respect of the seventeen major institutions listed in the foregoing table.

Australian Capital Territory

The Australian War Memorial, Canberra. The memorial comprises the national collection of war relics and the building in which these are preserved. The building was opened in 1941. The memorial is administered by a director responsible to a board of twelve trustees. There is a collection of 4,000 art works and a museum collection of more than 40,000 war relics, the gathering of which began on the battlefields of the 1914–18 War and was continued during the subsequent campaigns in which Australian forces have participated. The collection has been enhanced by gifts of relics from the governments of Great Britain, the sister dominions and allied countries, and also by presentations made by ex-servicemen and relatives of those who died. The collection consists of items such as tanks, aeroplanes, submarines, field-guns, boats, and the widest possible range of war trophies down to the smallest items, each relic dependent for its value on its historical background. The works of art, all by Australian artists, depict battle scenes, individual officers and men, etc., and include oil and water colour paintings, drawings, statuary, bronzes, dioramas, and mosaics. There is also a library, which is described on page 535.

The Australian Institute of Anatomy, Canberra. The Institute is described in the chapter Public Health, page 470. It contains displays of biological and anatomical aspects of man and the anatomy of Australian animals. A display of Aboriginal and Melanesian artefacts from the National Ethnographic Collections is temporarily housed in the Institute.

New South Wales

The Australian Museum, Sydney. Founded in 1836, this is the oldest museum in Australia. It is administered by a director and a board of twenty-five trustees as a government department attached to the New South Wales Department of Education. It has fine collections of all groups of animal, including insect, fossils as well as mineral and ethnological collections, particularly in relation to Australia and the Pacific.

Museum of Applied Arts and Sciences, Sydney. This museum, with branches at Bathurst, Goulburn, Broken Hill, and Albury, is administered by a director and a board of seven trustees appointed by the Governor of New South Wales. The museum specialises in applied arts (ceramics, glass, oriental arts, costumes, musical instruments, furniture, etc.), applied science and technology (engineering, transport, textiles, electronics, etc.), and among its special features are a Watt beam engine of 1785, No. 1 New South Wales locomotive, Lawrence Hargrave models, colour television, and a planetarium.

Geological and Mining Museum, Sydney. This museum is administered as a branch of the Department of Mines by a curator under the control of the Director, Geological Survey of New South Wales. The display contains a unique collection of ores and economic minerals from New South Wales with material from the other States and from overseas for comparison. Its most important functions are the identification of mineral and rock specimens, several thousands of which are received annually, and the supply of some 20,000 to 30,000 specimens free of charge to schools.

Art Gallery of New South Wales, Sydney. The Gallery originated in the Academy of Art founded in 1871. It is administered by a director and secretary under a board of thirteen trustees responsible to the New South Wales Minister for Education. The gallery has over 8,000 exhibits, including nearly 1,700 oils and 170 pieces of sculpture. Australian art and modern European painting and sculpture are featured. An Aboriginal art collection includes a unique set of large Melville Island graveposts. Assistance is provided to governments and private organisations in the design of books, coins, notes, etc., the preparation and judging of exhibitions, and the supply of research material and information.

Victoria

National Museum of Victoria, Melbourne. The museum was founded in 1854. It is administered by a director and board of seven trustees. It houses substantial collections in the fields of zoology, geology and anthropology. There is a small branch at Tidal River, Victoria.

Institute of Applied Science of Victoria, Melbourne. The Institute was founded in 1870. It is administered by a director and board of seven trustees. Its collections are concerned with aspects of application of all science subjects, but with special emphasis on engineering, transport, astronomy, physics, biology, public health, arms and agriculture. The Institute has a planetarium, an observatory and a radiocarbon dating laboratory.

National Gallery of Victoria, Melbourne. The gallery is administered by a director and board of nine trustees. Its large collections of over 20,000 items feature paintings by Rembrandt, Tiepolo and the Flemish primitives, Dürer engravings, Blake drawings, and English 18th century furniture.

In the first half of 1968 the National Gallery occupied its new building in the Victorian Arts Centre. The new Gallery was opened to the public in August of that year.

Queensland

Queensland Museum, Brisbane. The museum, founded in 1855, is the State Museum of Natural Science. It is administered by a director as a sub-department of the Queensland Department of Education. The collections are in the fields of the natural sciences, ethnology and history, and include extensive collections of fossil vertebrates.

Queensland Art Gallery, Brisbane. This gallery was established in 1895. It is administered by a director and board of thirteen trustees. The gallery especially features Australian art of all periods, British modern art, French sculpture, and French paintings from the Rubin collection. The Art Gallery has 1,859 display items, including 573 oils.

South Australia

The South Australian Museum, Adelaide. The museum is a department of the South Australian Public Service and is administered by a director and board of five trustees. It features natural science and anthropological collections. The latter refer to the Australasian and Pacific regions and include an outstanding collection of Aboriginal artefacts.

National Gallery of South Australia, Adelaide. The gallery originated in 1881. It is administered by a director and board of seven trustees. Apart from the usual art gallery collections, devoted chiefly to British and Australian works, it features a large collection of prints containing examples from European, British, Oriental, and Australian schools, and a numismatic collection which is widely regarded as the finest in Australia. It also contains the South Australian Historical Collection and a small collection of weapons. It has 56,996 exhibits, including 2,132 oils and watercolours, and 12,144 engravings and prints.

Western Australia

Western Australian Museum, Perth. The museum was established in 1895. It is administered by a director and board of five trustees appointed by the Western Australian Government. The zoological collections cover all vertebrate and most invertebrate fields, particularly marine. There are collections relating to vertebrate palaeontology and meteorites, fossil invertebrates, and some fossil plants. There are extensive collections of Aboriginal artefacts and European arms and armour.

The Western Australian Art Gallery, Perth. The gallery was established in 1895 and is administered by a director and government-appointed board of five trustees. It features especially collections of Australian paintings, drawings, ceramics and sculpture, a fine collection of Australian contemporary art, and a major Henry Moore sculpture. It has collections of coins and of Western Australian stamps. Altogether there are 3,698 items, including 464 oils and 51 pieces of sculpture.

Tasmania

Tasmanian Museum and Art Gallery, Hobart. Opened in 1887, the Tasmanian Museum and Art Gallery is administered by a board of seven trustees. It has a branch at Zeehan, namely the West Coast Pioneers' Memorial Museum. The museum part contains zoological, anthropological and geological displays relating to Tasmania and special displays relating to Tasmanian Aborigines and Macquarie Island. The art displays contain an excellent holding of Tasmanian historical works.

Queen Victoria Museum and Art Gallery, Launceston. This institution, opened in 1891, is owned and administered by the Launceston City Council through a director and a sub-committee of aldermen. It has a branch at Cradle Mountain. Attention is concentrated on collections relating to the natural, biological and historical environment of Tasmania, featuring Tasmanian fauna, Aboriginal relics and historical material. The arts associated with Tasmania are represented by an excellent collection of early colonial period painting and also by a fine collection of costumes, lace and ceramics.

Other museums and art galleries

A short description of some of the thirty remaining museums and art galleries is given in the following paragraphs. The institutions are grouped into those owned by the States, by municipalities and private trusts, by universities, and by private persons.

State-owned institutions. The Dixson and Mitchell Libraries (sections of the Public Library of New South Wales) have galleries in which paintings, drawings, engravings, photographs, coins and postage stamps, all related to Australian and south-west Pacific history, are exhibited. The main area of display comprises 7,051 square feet. Only a fraction of the many thousands of items can be shown. There is a geological museum, maintained by the Victorian State Mines Department, with a comprehensive collection of geological specimens. In South Australia there is a small museum of local and tourist interest—the Old Government House, Belair, displaying furniture, etc. of the colonial era.

Municipal and private trust institutions. In addition to the Queen Victoria Museum and Art Gallery in Launceston, eleven institutions are owned by local government authorities throughout Australia, one of which, in Warrnambool, Victoria, is closed pending construction of new premises. The largest of them are the Newcastle Art Gallery in New South Wales and the Museum and Art Gallery at the Mildura Arts Centre in Victoria. Institutions are also maintained in major provincial cities by private trusts. These and the municipal institutions often exhibit artistic, historical and other terms of special local interest, and as a rule there are associated with them various local societies devoted to the exploration and encouragement of the arts, local history and the like. Thus the Lionel Lindsay Art Gallery and Library at Toowoomba, Queensland, is administered by a board of trustees, originally appointed in 1959 by deed of trust.

University institutions. Most university collections, some of them comprehensive and containing unique material, are reserved essentially for the use of students and research workers, and are therefore not included as museums or art galleries. However, the John Darnell Art Gallery of the University of Queensland, originating from a bequest in 1930, the Macleay Museum of Natural History at the University of Sydney, stemming from a gift to the university in 1888, and the Nicholson Museum of Antiquities at the University of Sydney are open to the public.

Private museums and art galleries. Only six establishments of this nature are included here as museums or art galleries. Five are in South Australia and one in the Australian Capital Territory.

Botanical and zoological gardens

In addition to the zoological gardens referred to in the following paragraphs there are numerous privately owned zoos and sanctuaries, many of them at tourist resorts, which maintain collections of Australian flora and fauna. There are also various national parks, forests, reserves, etc., dedicated for public use, which are preserved largely in their natural condition.

New South Wales

The Sydney Botanic Gardens are situated on the shores of Farm Cove, Sydney Harbour, close to the heart of the city and on the site of the first farm established in 1788 by Governor Phillip. Now occupying sixty-six acres, they contain a large and varied collection of flowering plants, shrubs and trees as well as hothouses of orchids and ferns.

The Zoological Gardens at Taronga Park, on the northern side of Sydney Harbour, were opened in 1916. The area is about seventy acres. The natural formation has been retained as far as practicable, with the object of displaying the animals in natural surroundings, and an aquarium has been built within the gardens. In 1967–68 admissions to the grounds were 883,262 and to the aquarium 324,464. The receipts of the zoological department of the Taronga Park Trust amounted to \$494,156 in 1967–68, excluding an annual State grant of \$50,000, and expenditure amounted to \$493,101. Exhibits at 30 June 1968 comprised 1,010 mammals, 2,746 birds, 261 reptiles, and 1,085 fish.

Victoria

The main botanical gardens in the State are the Royal Botanic Gardens, an area of eighty-eight acres within one mile of the centre of the City of Melbourne, containing over 12,000 species of plants, of which there are some 30,000 individual specimens. Many species of native birds breed on islands in lakes within the gardens.

The Zoological Gardens are situated in Royal Park, and contain a wide selection of animals, birds and reptiles. A wild life sanctuary is also maintained at Healesville.

Queensland

Botanical gardens have been established in Brisbane and in several other cities. The Brisbane Botanic Gardens were established in 1855 by the Government of New South Wales. In 1925 the Queensland Government transferred them to the Brisbane City Council. They occupy approximately forty-six acres on the banks of the Brisbane River in the central city area and are noted for their collections of palms, tropical trees and shrubs, and succulents; they contain over 7,500 species.

South Australia

The Botanic Garden was established in 1855 and opened to the public in 1857. It covers forty-five acres, on which are established collections of Australian and exotic plants from low rainfall and sub-tropical regions. In a large range of glasshouses are collections of tropical, ornamental, and economic plants. Special collections include cacti and succulents, bromeliads, and begonias. An up-to-date and comprehensive botanical and horticultural library is maintained.

Mount Lofty Botanic Garden, of approximately 180 acres, was established in 1960 and is to be opened to the public in the early 1970s.

The State Herbarium was established in 1952 and moved to the present building in 1965. It contains about 250,000 specimens.

The Zoological Gardens, opened in 1883, have an area of approximately 19 acres, and contain a fine collection of animals, reptiles, and birds.

Western Australia

A botanic garden and arboretum for the native plants of Western Australia were commenced in 1962 and officially opened in October 1965. The site of this development is in King's Park, a reserve of almost 1,000 acres close to the centre of Perth. The Botanic Garden is the counterpart of the Museum in the botanical field, maintaining living collections of plants for scientific and educational purposes. The West Australian collections at present comprise a total of 1,200 species of trees and wildflowers. Virtually all trees native to the southern half of the State, with the exception of some rare mallees, are represented in the arboretum.

Parties from the Botanic Garden are regularly in the field for the collection of propagating material and contribute to the botanical exploration of the State. Special attention is devoted to locating rare species or species threatened with extinction. Vegetation maps of the State are being built up. Seed of native plants collected is distributed to botanical institutions throughout the world and to private growers and nurserymen. A seed list which normally offers from 900 to 1,000 species is published annually. In 1967-68 almost 5,000 packets of seed were distributed.

Research on propagation of native plants is carried on in the nursery and information acquired is passed on to growers through State branches of the Society for Growing Australian Plants, using the medium of the Society's journal. Within Western Australia members of the staff regularly lecture and demonstrate, and the nursery is open to conducted parties at regular intervals. Official guides may be engaged by parties of visitors, and as the Botanic Garden develops it is designed to become of value for nature study groups. A Wildflower Exhibition is held in the Park each spring. Facilities are provided for the employment and ancillary training of students enrolled in the three-year course for the Western Australian Certificate of Horticulture and Park Administration.

The Zoological Gardens, which were opened in 1898 at South Perth, have an area of 44 acres and are under the control of the Acclimatisation Committee. Animals, birds and reptiles are exhibited. During the year 1967-68, 190,952 adults and 171,101 children visited the zoo.

Tasmania

The Royal Tasmanian Botanical Gardens adjoining Government House on the Queen's Domain contain a fine collection of exotic trees and shrubs and a small aviary. The gardens are controlled by a board appointed by the State Government, which supports the gardens by annual grants.

There are two privately owned wildlife sanctuaries and zoos, each with a few exotic animals. One is at Granton near Hobart, the other is at Punch Bowl near Launceston. The Launceston City Council keeps a small collection of animals and birds at City Park.

Northern Territory

The Darwin Botanical Gardens were established in 1873 and were planted with exotic plants and trees. The gardens now occupy eighty acres and feature tropical plants of both native and overseas origin. They are controlled by the Darwin City Council.

Australian Capital Territory

The Canberra Botanic Gardens have been under development on the lower slopes of Black Mountain since 1950. The gardens are on a 100-acre site and are being developed by the Department of the Interior for the study of the botany, propagation, and cultivation of Australian native plants with the aim of promoting scientific and educational interest in these plants. The gardens were opened for public inspection in 1967 and will be officially opened in 1970.

Book publishing

Australian book publishing

Statistics about Australian book publishing are prepared from data supplied by the National Library of Australia (see page 533). Through the deposit provisions of the Copyright Act 1912–1966, its overseas collection agents and its own efforts, the National Library receives practically all books and pamphlets published in Australia (including the External Territories), although not necessarily in the year of publication. Where the statistics compiled and shown hereunder are classified according to the year of publication, the figures are subject to revision as publications come to hand subsequent to the year of publication.

The method of counting conforms with international practice. Each title is counted as one unit. The figures cover all non-periodical publications published in Australia. They refer to all publications of five pages or more and include pamphlets, new translations and re-editions. They include government publications, educational textbooks, published university theses, etc., but exclude publications not available to the general public, advertising material, publications of transitory interest, musical works, and maps and charts.

Number of publications

The first table following shows the number of books and pamphlets published in Australia during the years 1964 to 1968 and *cumulative* number received by the National Library, and the second table the number published during the years 1964 to 1968 classified according to State or Territory of publication.

NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1968) RECEIVED BY THE NATIONAL LIBRARY

Receive			Published during—								
Nation to the c			1964	1965	1966	1967	1968				
1964	•		1,385								
1965			1,934	2,039							
1966			2,117	3,180	1,712						
1967			2,123	3,306	2,659	2,339					
1968			2,123	3,306	(a)2,744	(a)3,038	(a)2,646				

⁽a) Incomplete—see text in first paragraph of section.

NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1968) RECEIVED BY THE NATIONAL LIBRARY, BY STATE OR TERRITORY OF PUBLICATION

				Publish	Published during—								
State or Territory				1964	1965	1966 (a)	1967 (a)	1968 (a)					
New South Wales				723	1.263	1,203	1,216	1,004					
Victoria				539	710	603	782	726					
Queensland .				208	286	183	195	213					
South Australia				146	252	163	211	181					
Western Australia				105	168	63	113	139					
Tasmania .				59	98	48	51	42					
Northern Territory				9	19	9	7	4					
Australian Capital	Ter	ritory		313	478	447	420	316					
Papua-New Guinea	ı			21	30	20	35	21					
Nauru	•		•		2	5	8						
Total .				2,123	3,306	2,744	3,038	2,646					

⁽a) Incomplete—see text in first paragraph of section.

The next table shows the numbers of books and pamphlets published during the years 1964 to 1968 and received by the National Library, classified by subject-matter.

NUMBER OF AUSTRALIAN PUBLIC	CATIONS (1964 TO 1968) RECEIVED
BY THE NATIONAL LIBRARY, BY	SUBJECT-MATTER(a): AUSTRALIA

	Publish	ed during-	_		
Subject-matter	1964	1965	1966 (b)	1967 (b)	1968 (b)
Bibliography, libraries, general.	42	101	111	103	75
Philosophy, psychology	18	23	19	15	22
Religion	78	117	65	83	62
Social sciences	775	1,233	954	1,257	1,023
Philology	32	45	64	48	43
Science	215	302	282	271	237
Technology, business	428	607	475	502	426
Art, amusement	115	142	174	140	159
Literature—					
Criticism, anthologies, school					
editions	20	137	45	17	16
Australian poetry	33	29	34	46	48
Australian drama	22	5	4	4	3
Australian fiction	156	236	186	195	158
Australian essays	4	2	3		1
Australian humour and mis-					
cellany	3	12	9	14	8
Other literature	20	21	72	93	89
Total, literature	258	442	353	369	323
Travel, biography, history .	162	294	247	250	276
Total	2,123	3,306	2,744	3,038	2,646

⁽a) The classification is based on the divisions of the Dewey Decimal Classification. (b) Incomplete—see text in first paragraph of section.

Commonwealth Literary Fund

In 1908 the Commonwealth Government, under Alfred Deakin, first established the Commonwealth Literary Fund. The Fund was entirely a compassionate one devoted to literary pensions for aged or infirm authors, for the families of literary men who died in poverty, and for writers who were unable for financial reasons to continue their activities.

In 1939, in an endeavour to encourage the development of Australian literature and to foster appreciation of it, the Commonwealth Government greatly enlarged the scope of the Fund. The Fund now awards fellowships each year, assists in the publication of manuscripts of high literary merit, makes annual grants for lectures in Australian literature, and awards pensions to writers who have achieved a nation-wide reputation for their work in the field of creative literature. The fellowships are awarded each year to writers who have proved their capacity in the field of creative literature and to writers of promise, to enable them to devote their time to working on a literary project they specify. A fellowship carries a maximum value of \$6,000 a year. The Fund does not seek out people on whom to bestow fellowships, but considers only those who submit applications.

The Fund also assists in the publication of manuscripts which have outstanding literary merit, but which, in the opinion of publishers, may constitute a commercial risk. This assistance takes the form of a guarantee of assistance to the publisher. The Fund does not itself enter the field of publishing, nor does it make outright grants to authors to enable them to arrange publication.

From 1940 to 1965 the Fund made grants to universities for special lectures in Australian literature. In 1940, with rare exceptions, universities ignored Australian writing, but by 1964 the majority of them were actively engaged in its study, and Australian literature had become an accepted field of university scholarship. The Commonwealth Literary Fund lectures played an important role in stimulating interest in Australian literature. At present universities may apply for a grant to enable lectures to be given on special occasions.

In 1956 the Fund initiated a scheme of lectures to the general public and to schools, mainly in country areas, with the co-operation of State adult education authorities and Education Departments. All States receive grants for this purpose. The Fund also assists certain literary magazines of recognised literary value.

The Fund is administered by a committee consisting of one representative of each of the three main political parties in the Parliament, the chairman being the Prime Minister. The committee is advised on all literary matters by an advisory board of six persons with literary qualifications.

Commonwealth assistance to Australian composers

In 1967 the Commonwealth Government appointed an advisory board to advise it on projects to encourage Australian composers. The purpose of Commonwealth aid in this field is to assist any project which will facilitate the performance of Australian compositions and to promote a better understanding of Australian music, thereby improving the status of Australian composers.

National Literature Board of Review

On 1 January 1968 the Commonwealth Government introduced legislation to provide for a National Literature Board of Review of nine members. The Board replaced the Commonwealth Literature Censorship Board and Appeal Board, both of which were advisers to the Commonwealth only in respect of imported literature. A brief history of these Boards appears in Year Book No. 53, page 646.

The National Literature Board of Review was established following Commonwealth-State agreement in 1967, to achieve uniformity in the administration of laws relating to blasphemous, indecent or obscene publications of *prima facie* literary, artistic or scientific merit. In terms of the Agreement the Board is established under the Customs (National Literature Board of Review) Regulations. Appropriate Ministers of any State may, under the Agreement, refer works published or distributed locally to the Board for advice. Subject to retention of final responsibility by each Minister it is the intention of the Governments concerned not to act against a publication of merit which the Board advises is suitable for distribution in Australia.

Film production

Australian film production

Australia was one of the pioneers in the history of film-making, Soldiers of the Cross, a multireel story film, having been made in 1900, three years before America's The Great Train Robbery, which is generally considered to be the first genuine story-film. It has been claimed that The Kelly Gang, made in 1905-6, was the first full-length feature film produced in the world. Following the outbreak of the 1914-18 War a series of short patriotic films was produced. In 1917 the first of a successful series of rural comedies was made, featuring a family called the Hayseeds. In the same year The Kelly Gang was remade and the first film version of For the Term of His Natural Life appeared. A first film version of C. J. Dennis's The Sentimental Bloke was made in 1919.

The year 1920 was notable for a number of productions with an authentic Australian flavour: On Our Selection a first version of Robbery Under Arms, another remake of The Kelly Gang, and C. J. Dennis's Ginger Mick. Production continued at about the same level until the coming of sound in 1928. Altogether, approximately 255 theatrical films were produced by Australian units in the silent period (1900–1930). Lack of equipment hampered the commencement of production of sound films in Australia, but during the 1930's nearly 60 sound films were produced.

During the 1939-45 War, commercial film producers combined with the Commonwealth Government in making films. Since the war, a number of British and American companies have made films in Australia. Altogether, about 140 feature films were produced in Australia between 1930 and 1968.

Australian National Film Board

The Australian National Film Board was inaugurated in April 1945, on the recommendation of a Commonwealth Government inter-departmental committee. It was attached for administrative purposes to the Department of Information. With the abolition of that Department in March 1950, administration of the Board was transferred to the News and Information Bureau, Department of the Interior.

In November 1950 the Board was reconstituted as an advisory body to the Minister for the Interior on matters concerned with the production, acquisition and distribution of films required by Commonwealth departments for use within Australia on important matters of national interest and welfare, such as school and adult education, rehabilitation, social development, international understanding, trade and tourist expansion, and immigration; and for dissemination abroad to expand trade and commerce with other countries, to encourage tourist traffic with Australia, to improve Australia's relations with other countries and, where necessary, to explain Australia's national policies, and to encourage immigration.

The constitution provides for a membership of twelve, with the Director of the News and Information Bureau as chairman and the remainder representative of Commonwealth departments, State government instrumentalities, and organisations interested in the production, distribution or utilisation of films for national publicity.

Commonwealth Film Unit

Official government film production originated with the appointment in May 1913 of a cinematographer and photographer in the Department of External Affairs. A later development was the establishment, in Melbourne in 1920, of the Cinema and Photographic Branch of the Department of Commerce, and a Government film unit has existed in one form or another to the present day. Early in the 1939-45 War the newly-established Department of Information was made responsible for the operation of the Cinema Branch and for an Official War Photography Unit. When the Australian National Film Board was established in 1945, the Film Division of the Department of Information became the official film production and distribution agency for Commonwealth departments and instrumentalities. In 1950, with the closing down of the Department of Information and the transfer of its functions, the Division became the Film Division of the News and Information Bureau then set up within the Department of the Interior. It is referred to in Australia as the Commonwealth Film Unit, and internationally as the Australian Commonwealth Film Unit. Theatrical and television distribution of Film Unit productions in Australia and overseas is organised by the Commonwealth Film Unit or its representatives at Australian official posts. Non-theatrical distribution in Australia is arranged in co-operation with State film distribution agencies, and through the National Library, Canberra.

Since 1946 the Film Unit has produced films for general exhibition, as well as training and special purpose films. In 1968-69 the Film Unit produced approximately 110 reels of new films and 150 reels of foreign versions of existing films. Prints are distributed through 70 overseas embassies and diplomatic posts. While many films are released commercially abroad, the emphasis is on distribution of educational and information films through non-theatrical circuits. Films are frequently shown on television in Europe, Asia and North America. Selected films have been recorded in most Asian and European languages and in Esperanto and Pidgin.

In addition to films made on its own initiative, the Commonwealth Film Unit produces films under the sponsorship of, or with the co-operation of, Commonwealth departments and other government instrumentalities. It competes regularly in international film festivals and has been awarded many distinctions. It also participates in other cultural events such as those surrounding the Olympic Games in Mexico and Expo '70 in Japan.

With a staff of 148, the Commonwealth Film Unit is the largest producer of documentary and information films in Australia.

Film censorship

Legislation. The Commonwealth Government's powers over censorship of films extend only to imported films and imported advertising matter, and stem from the Customs Act. Under that Act the Customs (Cinematograph Films) Regulations provide for the appointment of a Film Censorship Board whose function is to ensure that films and related advertising material coming within certain defined categories are not admitted into Australia. Under those regulations the Film Censorship Board may pass films in their original form, reject them, or pass them after eliminations have been made. Legislation passed by the State Governments of Victoria, Queensland, Western Australia, and Tasmania names the Commonwealth Film Censorship Board as the censorship authority and vests in it the power to classify films as suitable for general exhibition or not. The State Acts give the Commonwealth Board the authority to censor films made in Australia for commercial exhibition and advertising matter made in Australia.

The censorship organisation comprises a Censorship Board of seven persons and an appeal censor, the headquarters being in Sydney. Importers have a right of appeal to the Minister against decisions of the Board and the Appeal Censor.

Thirty-five mm films for exhibition in motion picture theatres. In 1968, 1,617 films comprising approximately 5.5 million feet were censored. This represented approximately 1,070 hours screening time. Of these films, 568 originated in the United Kingdom, 404 in the United States of America, and 645 in other countries. Principal suppliers among the last mentioned were: U.S.S.R. 105, Italy 79, Greece 78, France 47, Japan 33, Germany 26, Sweden 15, Poland 13, Switzerland 12 and Hungary 11. Included in these figures were 549 full-length feature films which constitute the main theatrical attractions. This was an increase of 72 over imports for 1967. Feature films mainly came from: the United States of America, 161; the United Kingdom, 85; Italy, 61; U.S.S.R., 54; France. 40; Greece, 38;

Japan, 14; and Sweden, 12. Thirty-five feature films were rejected and cuts were made from 141. There were 29 appeals, 18 against rejection, 9 against cuts and one each against classification and the rejection of advertising matter. Two appeals were allowed and 27 were disallowed.

Feature films classified as suitable for general exhibition numbered 184, and 330 were considered not suitable for children. Of the latter, 100 carried the special condition that all advertising should indicate that they were suitable only for adults. These classifications are advisory only and are designed to enable picture-goers and particularly parents to obtain a general idea of the nature of any particular film. In addition to these imported films, 172 35 mm films of 161,975 feet produced in Australia were cleared. These were mainly newsreels and documentaries intended for commercial exhibition or export.

Sixteen mm films. Excluding those imported for television use, 7,696 16 mm films of approximately 6 million feet were examined. These were films commercially produced for screening in theatrettes used by business undertakings for advertising and instructional purposes, and for screening in churches, schools, and universities. They also included home movies and a number of 16 mm theatrical features, some of the latter having been previously imported in 35 mm. Six were rejected.

Eight mm and 9.5 mm films. Approximately 240,000 feet of these small dimension type films were examined. One hundred and sixty-four films with an approximate footage of 13,000 feet were rejected.

Television films. In 1968, 7,476 films, all 16 mm, of approximately 10 million feet, for use on television, were censored. The number of films is not a true indication of volume because many of these were of short duration. In terms of screening time the films censored for television amounted to approximately 4,670 hours. On a footage basis the United States of America supplied 70 per cent of the total imports and the United Kingdom 19 per cent. Thirty-four television films were rejected outright and an additional 38 were classified as unsuitable for televising. Eliminations were made from 933. There were 21 appeals, 7 against rejection and 14 against classification, of which 6 were allowed and 15 disallowed.

Foreign language films. Countries other than the United Kingdom and the United States of America supplied 645 of the 35 mm films imported for theatrical exhibition, of which 303 were feature films. Generally, the dialogue is in a foreign language with explanatory English captions. A few have an English commentary and in some cases English 'dubbed' dialogue. Of 7,696 16 mm commercial films censored, 1,674 originated from non-English speaking countries. The chief supplying countries were: France, 399; Germany, 269; Japan, 193; Italy, 89; Czechoslovakia, 75; Switzerland, 71; Israel, 69; U.S.S.R., 60; Sweden, 51; Holland, 47; Belgium, 37; India, 31; Denmark, 26.

Export of films. The quantity of films exported for the year was approximately 2.5 million feet, consisting mainly of newsreels, advertising films and documentaries. This footage included in many cases several prints of the one film. It also included large quantities of exposed negatives sent overseas for processing.

Cultural organisations

Arts Council of Australia

Patterned on the Council for the Encouragement of Music and Arts which operated in the United Kingdom during the Second World War, an Australian organisation was brought into being in 1943. In 1945 it became The Arts Council of Australia. Originating in New South Wales, divisions are active now in the Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, and Tasmania. The New South Wales Division has over 50 branches, Queensland has over 40, South Australia 12 and Tasmania 8. A Federal Council was re-formed in 1964 and received financial assistance from the Australian Council for the Arts in 1969.

The Arts Council Divisions receive State Government grants through the Departments of Education in New South Wales, Queensland and South Australia. From 1963 to 1966 substantial contributions were received from a private organisation. Some activities of the Council are supported financially by non-metropolitan local government bodies, and grants were made by the Gulbenkian Foundation in 1964 to 1966 to help re-establish the Federal Council. The New South Wales Division is represented on the Adult Education Advisory Board in that State, representing the 'live art' section of adult education, and on the Music Committee of UNESCO. The Tasmanian Division is represented on, and works closely with, the Adult Education Board of that State.

Activities of the Arts Council are directed towards decentralisation of the arts for the benefit of country centres and metropolitan and country schools. It is greatly concerned with taking the arts to children as a basic cultural development. Tours of high standard companies in opera, ballet, drama, puppets, etc. are operating throughout the year. The Arts Council works closely with the Australian Ballet, the Trust Opera and the Old Tote Theatre Company in organising country tours for these bodies.

The Council handles a wide range of art exhibitions, both for city and country areas. Summer schools and other courses for drama, painting, pottery, music, and other arts are an established feature of the work of the New South Wales and Queensland Divisions, as are weekend schools of drama, music, painting and pottery.

Yearly drama festivals are conducted. In 1965 the New South Wales Division sponsored the first arts festivals for Sydney (North Side Arts Festival), with a wide range of cultural activities concentrated on the north side of Sydney Harbour. The festival is now a biennial event with the fourth festival being planned for August 1969. Also in 1965 the Queensland Division of the Arts Council organised a Summer School of the Arts which has become an annual event.

School tours are organised, particularly in New South Wales, where over 450,000 school children saw live performances in 1968, and in Queensland over 186,000 children attended live performances.

Australian Elizabethan Theatre Trust

Inaugurated in 1954 to commemorate the first visit to the Commonwealth of Her Majesty the Queen, the Australian Elizabethan Theatre Trust has since presented drama, opera, ballet and puppetry throughout the Commonwealth. The Trust receives annual grants from the Commonwealth Government, the State Governments and city councils. Its income also includes subscriptions from members and donations from business houses.

In the field of drama it has presented, *inter alia*, about 35 works of Australian playwrights, including plays which were subsequently presented overseas. The Elizabethan Trust Opera Company has given seasons of opera and has presented overseas guest artists, conductors and producers. From 1956 to the end of 1968 more than 1,400 performances of opera have been given by the Trust Opera Company in all States and the Australian Capital Territory. Thirty-four operas have been the repertoire in this period. The Australian Ballet, which commenced its inaugural season in November 1962, has visited all mainland capitals and New Zealand and has presented world premiere productions of seven commissioned ballets since 1964. The Commonwealth Government gave financial assistance for the Ballet to represent Australia at the Commonwealth Festival of Arts in Britain in 1965. The company also danced at Baalbek, Nice, Paris, Berlin, Copenhagen and Honolulu. It toured New Zealand, Canada and major Latin American cities during 1967 and a number of Asian countries during 1968. The Trust has also been associated with commercial managements in the presentation of overseas attractions and large-scale musicals.

In 1965 the Trust and Arts Council of Australia jointly formed the Marionette Theatre of Australia to promote puppetry, and one puppet company with sponsorship from the Department of External Affairs completed a twelve-nation tour of Asia during 1966-67.

Country areas have been visited by Trust companies presenting opera, drama, ballet and puppetry, in association with the Council of Adult Education in Victoria and the Arts Council of Australia. Each year a number of special companies present Shakespeare and other curricular plays for schools in all States, similar work having been undertaken annually since 1958. Units of singers and dancers perform a similar educational function in bringing opera and ballet to school audiences.

In Victoria the Trust is associated with the University of Melbourne in the Melbourne Theatre Company (formerly known as the Union Theatre Repertory Company). It is also associated with the University of New South Wales Drama Foundation in the Old Tote Theatre Company. The corresponding activity in Adelaide, the South Australian Theatre Company, was introduced by the Trust in 1965. Assistance is given to the Adelaide Festival of Arts, the Festival of Perth, the Perth Playhouse, the National Theatre and Fine Arts Society of Tasmania, and other companies. From a special commissioning fund the Trust commissions theatrical works in all major forms from Australian creative artists.

An important activity of the Trust is its association with the University of New South Wales and the Australian Broadcasting Commission in maintaining the National Institute of Dramatic Art, which they jointly established. This provides a training ground for young Australian actors, producers and technicians. Performing a similar function for selected ballet students, the Australian Ballet School is maintained by the Trust in Melbourne.

Australian Council of National Trusts

The Australian National Trusts were founded to further the general objectives of preservation and conservation of lands, places, buildings, works, and articles which are of national importance by reason of educational, aesthetic, historic, architectural, artistic, scientific, cultural, or other special interest.

The first Australian National Trust, the National Trust of Australia (New South Wales), was formed in 1945. Since then National Trusts have been formed in each of the other States. The Trusts in New South Wales, Queensland, South Australia, and Western Australia have statutory authority,

and those in Victoria and Tasmania are incorporated under the Companies Acts of their respective States. The Australian Council of National Trusts was incorporated in 1965 to co-ordinate the activities of the State National Trusts and represent them at the federal level and internationally.

Membership of the National Trusts is open to all individuals and organisations. Total membership throughout the Commonwealth is approximately 24,000. The Trusts are financed by members' subscriptions and donations from individuals and commercial and industrial organisations, the proceeds of charges for entry to Trust properties and the fund-raising activities of members, including inspections of historic houses. In some States the Trusts are subsidised by the State Governments.

The number of properties owned or controlled by the Trusts exceeds sixty. These include houses, natural reserves, a powder magazine, a police station, two paddle steamers and a hulk, a joss house, and a garden. The Trusts have also established a register of buildings (totalling several thousand) including public buildings, churches and buildings in private ownership which they consider should be preserved in the national interest because of their historical and or architectural significance.

Historic Memorials Committee

The Historic Memorials Committee was established in 1911 for the purpose of securing portraits of distinguished Australians who had taken an active part in Federation. Later the Committee decided to obtain portraits of all Governors-General, Prime Ministers, Presidents of the Senate, Speakers of the House of Representatives, and other notable Australians. In addition the Committee has commissioned paintings recording special events connected with the Commonwealth Parliament.

The Committee comprises the Prime Minister (Chairman), the President of the Senate, the Speaker of the House of Representatives, the Vice-President of the Executive Council, the Leader of the Opposition, and the Leader of the Opposition in the Senate. An Art Advisory Board, comprising a group of artists, was established in 1912 to assist the Committee by advising on portraits to be commissioned by the Committee.

Commonwealth Art Advisory Board

Since its beginning in 1912 the Art Advisory Board has always consisted of artists. At present there are five members. As well as assisting the Historic Memorials Committee the Board advises the Government on the purchase of works of art for inclusion in the National Collection. In 1968-69 \$100,000 was provided for this purpose. The National Collection now contains over 2,000 works of art.

The Board, on behalf of the Government, organises and finances exhibitions of Australian art in overseas countries. In addition, it financially assists the showing in State Art Galleries of major exhibitions from abroad or assembled by one or more State Art Galleries. In 1968-69 \$14,000 was provided to meet the costs involved in these exhibitions.

SCIENTIFIC AND INDUSTRIAL RESEARCH IN AUSTRALIA

A special article on Science and Technology in Australia, prepared by the Commonwealth Scientific and Industrial Research Organization of Australia, was included in Year Book No. 49 (see page 781). A short account of the development of research in Australia and of the governmental and university organisations engaged in research was included in Year Book No. 53 (see pages 650-2).

The following is a brief description of the research activities of selected Commonwealth Government agencies and scientific societies.

Australian Industrial Research and Development Grants Board

Research in industry has expanded somewhat in recent years, though not at the same rate as in Government agencies or the universities. There is a trend for larger firms to establish their own laboratories, and appreciable sums are being spent on research in the chemical, metals, sugar, and paper industries. To encourage this trend the Government introduced the *Industrial Research and Development Grants Act* 1967. The legislation, administered by the Australian Industrial Research and Development Grants Board, provides for the payment of grants on a dollar for dollar basis to Australian manufacturing and mining companies for increased research and development expenditure.

Companies employing professional research staff are assisted in the performance of their own research and development, but the Act also makes provision for companies to contract research and development with approved research organisations.

The first grants to industry under this Act were made in 1968 and the Government has made available \$6 million a year for this purpose. Special taxation concessions also apply to expenditure on research and development.

Commonwealth Scientific and Industrial Research Organization

The Commonwealth Scientific and Industrial Research Organization (C.S.I.R.O.) is Australia's largest civil scientific body. Established as the Council for Scientific and Industrial Research (C.S.I.R.) in 1926, it was re-organised in 1949 under the Science and Industry Research Act and now has a staff of over 6,000 including some 1,800 professional scientists. An account of the organisation and work of the former Council, and the earlier Commonwealth Institute of Science and Industry from which the Council was formed, was given in earlier issues of the Year Book. (See No. 14, page 1061 and No. 37, page 1183.)

The principal function of C.S.I.R.O. is to carry out scientific research for the primary and secondary industries of the Commonwealth and its Territories. C.S.I.R.O. does not conduct defence research, medical research or atomic energy research. The other powers and functions of C.S.I.R.O. as defined in the Science and Industry Research Act of 1949, include:

the training of scientific research workers and the awarding of scientific research studentships and fellowships:

the making of grants in aid of pure scientific research;

the recognition or establishment of associations of persons engaged in any industry, for the purposes of carrying out industrial scientific research and the co-operation with, and the making of grants to, such organisations;

the testing and standardisation of scientific apparatus and instruments and the carrying out of scientific investigation connected with standardisation;

the collection and dissemination of information relating to scientific and technical matters; the publication of scientific and technical reports, periodicals and papers.

Organisation

C.S.I.R.O. is a statutory corporation operating under its own Act of Parliament and exercising its powers subject to the regulations and the approval of the Minister for Education and Science.

The governing body of the Organization is the Executive, which consists of nine members appointed by the Governor-General. There are five full-time members, one of whom is chairman, and four part-time members. At least five of the members must possess scientific qualifications. The Executive is responsible to the Minister for the policy and the work of the Organization.

For carrying out its research work, C.S.I.R.O. is divided into four major group laboratories and a number of Divisions and Sections. The four group laboratories are the Animal Research Laboratories comprising four Divisions, the Chemical Research Laboratories comprising five Divisions, the National Standards Laboratory comprising two Divisions, and the Wool Research Laboratories comprising three Divisions. There are also twenty-one independent Divisions in other research fields and an additional five independent Sections. The Head Office is in Melbourne and regional administrative offices are located at Brisbane, Canberra, Melbourne, and Sydney. The Organization also maintains the Australian Scientific Liaison Office in London and the Office of the Scientific Attaché in Washington.

Since the Organization's activities are Commonwealth-wide and often involve extensive field work, a number of branch laboratories and field stations have been established in various parts of Australia. The more important of these are included in the following lists.

Laboratories and Divisions

Animal Research Laboratories, consisting of the following four Divisions.

Animal Genetics, Sydney, with a branch laboratory and field station at Rockhampton, Queensland, and field stations at Armidale and Badgery's Creek, New South Wales.

Animal Health, Melbourne, with branch laboratories in Sydney and Brisbane, and field stations at Jimboomba, Queensland, and Tooradin North and Werribee, Victoria.

Animal Physiology, Sydney, with a laboratory and field station at Armidale, New South Wales, and a branch laboratory in Brisbane.

Nutritional Biochemistry, Adelaide, with a field station at O'Halloran Hill, South Australia.

Chemical Research Laboratories, Melbourne, consisting of the following five divisions.

Applied Chemistry.

Applied Mineralogy, with branch laboratories in Perth and Sydney.

Chemical Engineering.

Chemical Physics.

Mineral Chemistry, with a branch laboratory in Sydney.

National Standards Laboratory, Sydney, consisting of the following two Divisions.

Applied Physics.

Physics, with an optical observatory at the Solar Observatory, Culgoora, New South Wales.

Wool Research Laboratories, consisting of the following three Divisions.

Protein Chemistry, Melbourne.

Textile Industry, Geelong, Victoria.

Textile Physics, Sydney.

The other Divisions are as follows.

Building Research, Melbourne, with an office in Port Moresby, New Guinea.

Computing Research, Canberra, with subsidiary installations at Adelaide, Melbourne, Sydney, Brisbane, Perth and Griffith, New South Wales.

Dairy Research, Melbourne.

Entomology, Canberra, with branch laboratories in Sydney, Brisbane, Hobart, Perth and at Armidale, New South Wales, and Townsville, Queensland.

Fisheries and Oceanography, Cronulla, New South Wales, with branch laboratories in Melbourne, Perth and Redcliffe, Queensland.

Food Preservation, Sydney, with branch laboratories at Gosford, New South Wales, (operated jointly with the New South Wales Department of Agriculture), and in Brisbane.

Forest Products, Melbourne.

Horticultural Research, Adelaide, with a field station at Merbein, Victoria.

Irrigation Research, Griffith, New South Wales.

Land Research, headquarters in Canberra, and field stations and laboratories at Alice Springs, Katherine and Darwin, Northern Territory, and Kununurra, Western Australia.

Mathematical Statistics, Adelaide, with officers stationed at a number of Divisions and Sections and at the University of Melbourne.

Mechanical Engineering, Melbourne.

Meteorological Physics, Melbourne.

Plant Industry, Canberra, with branch laboratories in Perth, Hobart, and Brisbane, and at Deniliquin and Armidale, New South Wales, field stations and experimental farms at Canberra and Deniliquin, New South Wales and Baker's Hill, Western Australia, and a tobacco research institute at Mareeba, Queensland.

Radiophysics, Sydney, with the Australian National Radio Astronomy Observatory at Parkes, New South Wales, and a radio observatory at the Solar Observatory, Culgoora, New South

Soil Mechanics, Melbourne, with a branch laboratory in Adelaide.

Soils, Adelaide, with branch laboratories in Brisbane, Canberra, Perth, Hobart, and Townsville, Queensland.

Tribophysics, Melbourne.

Tropical Pastures, Brisbane, with branch laboratories at Townsville and Lawes, Queensland, and field stations at Mundubbera, Samford and Woodstock, Queensland.

Wildlife Research, Canberra, with branch laboratories in Perth, Western Australia and Alice Springs, Northern Territory

Sections

Editorial and Publications, Melbourne.

Ore Dressing Investigations, Melbourne.

Physical Metallurgy, Melbourne.

Upper Atmosphere, Camden, New South Wales.

Wheat Research Unit, Sydney.

The Organization's total budget for 1968-69 was about \$49,000,000. Nearly four-fifths of this was provided by the Commonwealth Government, while much of the remainder was provided by trust funds which have been set up by various primary producer groups. The largest of these is the Wool Research Trust Fund, but the wheat, dairy, meat, and tobacco industries also contribute substantial amounts. The funds are derived from a levy on produce matched by a Government contribution.

Mount Stromlo and Siding Spring Observatories

Mount Stromlo Observatory and Siding Spring Observatory are the two astronomical research stations of the Research School of Physical Sciences, Australian National University. The staff of the observatories are academic staff of the University's Institute of Advanced Studies. The permanent headquarters of the observatories is located at Mount Stromlo, together with the library, laboratories and offices of the scientific staff. The older telescopes are located on Mount Stromlo, the newer ones on Siding Spring Mountain. At Siding Spring there is a lodge to house the astronomers, permanently based at Mount Stromlo, who visit for short periods to make observations there.

The observatories constitute the principal centre of optical astronomical research in the southern hemisphere. Their research facilities are second only to the great observatories of the south-western United States, and because of their geographical latitude observations can be made on parts of the sky permanently inaccessible to northern astronomers. The functions of the observatories are to carry out original investigations (both observational and theoretical) in astronomy and astrophysics, and to provide post-graduate training for future Australian astronomers.

The direction of the researches conducted depends on the steadily widening interests of the staff and scholars as the subject of astronomy itself rapidly progresses. Areas of permanent interest to which the observatories have made important contributions include the evolution of stars and of stellar systems, the study of the Magellanic clouds and their globular star clusters, the chemical composition of the stars and the study of pulsating stars. The results of the work carried out at the observatories are published in the international scientific periodicals, principally in the Monthly Notices of the Royal Astronomical Society and the Astrophysical Journal.

Mount Stromlo Observatory is situated at 35° 19′ 16″ south latitude and 149° east longitude at an altitude of 2,560 feet. It is on the summit of a ridge of low hills in the Australian Capital Territory seven miles west of the city of Canberra. The first regular scientific work was started at this site in 1925, and the Observatory was incorporated in the Australian National University in 1957. The main instruments are 30-inch, 50-inch and 74-inch reflecting telescopes and associated spectrographs, photometers and spectral scanners.

Siding Spring Observatory was established in 1965. It is located at 31° 16′ south latitude and 148° 41′ east longitude at an altitude of 3,820 feet and occupies the summit of Siding Spring Mountain in the Warrumbungle Ranges, near Coonabarabran, New South Wales. This site has one of the best climates for astronomical research to be found anywhere in Australia—considerably better than that at Mount Stromlo. The instruments at present operating at Siding Spring Observatory include a 40-inch and a 24-inch reflector.

Australian Atomic Energy Commission

Establishment and functions of the Commission

In November 1952 a Commission of three members was appointed to control the Commonwealth's activities in relation to uranium and atomic energy, and in April 1953, upon the enactment of the Atomic Energy Act 1953, the Commission was established as a statutory authority with powers and functions as defined in the Act. Under amending legislation the number of Commissioners was increased to five in April 1958. The Commission is a corporate and autonomous body controlling its own service. It functions under the direction of the Minister for National Development.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium and is empowered to co-operate with the appropriate authorities of the States in connection with these and related matters. Secondly, it is authorised to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research, and generally fostering the advancement of atomic energy technology.

Uranium prospecting and mining

Production of uranium concentrate in Australia is now confined to the Rum Jungle Plant, Northern Territory. Since 1953, mining and treatment operations here have been conducted for the Commonwealth by a mining company. Mining of presently known reserves of uranium in this area was finished in 1963, but treatment of stock-piled ore has continued. Australia's own domestic requirements of uranium oxide to the end of the present century are expected to be greater than currently known reserves. Because of this the Commonwealth has continued exploration for uranium in the Rum Jungle area and has encouraged private producers to resume exploration.

Research

The Commission's Lucas Heights Research Establishment is Australia's atomic energy research centre. Its research programme is concerned with the development of nuclear power, the production and utilisation of radioisotopes, and other related fields. It is directed towards the long-term development of national resources.

The research programme centres on a technical and economic assessment of a natural uranium fuelled, heavy water moderated reactor. This type of reactor system is now considered to be most suitable for future installation in Australia for the economic production of nuclear power. Particular attention is being devoted to the possibility of making reactor fuel by refining and fabricating uranium from Australian mines. During 1967 some twenty-six members of the Commission's technical staff were sent to Britain and Canada on long-term postings, in order to participate directly in development and construction of power reactors of this type.

The use of radioisotopes is increasing rapidly in Australia in scientific research and development, in treatment of diseases, and in agriculture and industry generally. Most of these, especially short-lived radioisotopes which cannot be imported, are being produced in the Commission's high flux research reactor HIFAR at Lucas Heights. Since 1967, a widening range of radio-pharmaceutical products has been produced to stringent standards for medical use and these are in considerable demand. The A.A.E.C. is also producing the majority of cobalt 60 teletherapy sources for cancer treatment in Australia, and is exporting high activity sources to New Zealand and to Asia. The Commission is promoting research into radioisotope applications and is co-operating with universities, industry and governmental bodies in making available the most up-to-date techniques involving the use of radioisotopes in every field.

Large-scale hydrological investigations using radioactive tracers have been conducted by the Commission. These have included sand tracing in Botany Bay and silt tracing in Newcastle Harbour and the Hunter River in association with maritime and development authorities.

Extensive research and development work on the technical and scientific applications of gamma radiation is also being carried out. The possibilities of radiation for such purposes as industrial sterilisation, production of new and improved materials, and the control of fruit fly and other insect pests are being investigated. Scientists at Lucas Heights are also studying the biological effects of radiation and questions of health and safety.

The Research Establishment has developed facilities for the absolute standardisation of radioisotopes and has participated in international intercomparisons in the health and safety field. Work is directed to various aspects of radiation dosimetry, to radiation biology, and to aspects of the toxicology of beryllium compounds.

Lucas Heights is a centre of specialised equipment and information. In addition to the research reactor HIFAR, used for testing materials and producing radioisotopes, there is much other equipment unique in Australia. All these facilities are available to universities and other institutions under suitable conditions. In these endeavours the Atomic Energy Commission is working in close cooperation with the United Kingdom Atomic Energy Authority, under arrangements which give Australia access to results of British research on peaceful atomic energy uses. Results of research in Australia are in like manner available to Britain. Work in Australia, though constituting a self-contained programme, is co-ordinated with the British programme to avoid overlapping of research objectives and duplication of investigations. Australia also has bilateral arrangements with the United States, Canada and Japan, and has accredited a diplomatic mission to the European Atomic Energy Community (Euratom). Australia is also taking part in the promotion of the peaceful uses of atomic energy through the International Atomic Energy Agency. For the year 1967-68 the Commission placed \$112,129 worth of research contracts mainly within Australian universities on matters related to the research programme at Lucas Heights.

Civil Nuclear Explosives

Considerable potential exists in Australia for application of nuclear explosives for large civil engineering and mining projects. The Commission has kept in close touch with the development of the United States Plowshare programme. A United States expert visited Australia in 1962, and two others made a preliminary survey in 1968. In 1963 an Australian technical mission visited the United States of America to make a detailed examination of the use of nuclear explosives for peaceful purposes and the Commission has been represented at a number of field tests in the United States.

The Australian Institute of Nuclear Science and Engineering comprises the Australian Atomic Energy Commission and Australian universities. The Institute's operations are financed by membership subscriptions and a Commonwealth Government grant which amounted to \$150,000 in 1967-68. The purpose of the Institute is to stimulate research and training in nuclear science and engineering within the universities and to arrange access for university research workers to the highly specialised equipment at the A.A.E.C. Research Establishment.

The Australian School of Nuclear Technology is jointly sponsored by the Commission and the University of New South Wales. Courses are being offered in nuclear technology, production and use of radioisotopes, radiological safety, health physics, and other related topics.

Scientific societies

Royal Societies

The following table contains the latest available statistical information regarding the Royal Societies in each State and in the Australian Capital Territory.

ROYAL SOCIETIES, DECEMBER 1968

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Canberra
Year of charter	1866	1859	1884	1880	1913	1844	1930
Number of members .	395	578	326	266	240	595	159
Volumes of transactions							
issued(a)	101	81	79	92	57	102	
Number of books in library	33,180	32,500	70,596	24,000	7,190	36,600	
Societies on exchange list.	400	336	301	345	244	315	

(a) Cumulative total.

Australian Academy of Science

The Australian Academy of Science is the national institution representing science in Australia. Constituted by Royal Charter in 1954, the Academy promotes scientific knowledge and research, maintains standards of scientific endeavour and achievement in the natural sciences in Australia, and recognises outstanding contributions to the advancement of science. The Academy represents Australian science and scientists at the national and international level, organises meetings of scientists, holds symposia, and arranges for visits of scientists from other countries to Australia.

In its functions it is comparable with the Royal Society of London and national academies of science of many other countries. Its Fellows (designated F.A.A.) are eminent in some branch of the physical or biological sciences in Australia, occupying professional positions in universities, the Commonwealth Scientific and Industrial Research Organization, other research organisations, and industry. A very few places are reserved for Fellows who have rendered conspicuous service in the cause of science. No more than six new Fellows are elected in any one year. Its present membership is about 120 Fellows.

The Academy co-ordinates Australian contributions to such co-operative ventures as the International Geophysical Year, the International Year of the Quiet Sun, and the International Biological Programme. Representation is provided at the general assemblies of the International Scientific Unions and similar bodies relating to astronomy, geophysics, geology, physics, crystallography, mathematics, biochemistry, physiology, geography, biological sciences, chemistry, Antarctic research, space research, and oceanic research.

As the Australian Academy of Science is too young a body to be financially self-sufficient, the Commonwealth Government makes annual grants of general purpose funds without affecting the autonomy of the Academy. These grants, together with substantial private benefactions, enable the Academy to continue its work. Research fellowships provided by industry are administered. The Academy is managed by an elected council comprising a president, treasurer, two secretaries and eight ordinary members who are drawn equally from the physical sciences and biological sciences. Chief administrative officer is the Executive Secretary, who is not a Fellow. Its conference centre in Canberra was opened in 1959.

Australian and New Zealand Association for the Advancement of Science (ANZAAS)

This Association was founded in 1887. Its objects are 'to advance the knowledge and to promote a spirit of co-operation between scientific workers and scholars and those in sympathy with science and scholarship generally, especially in Australia and New Zealand'. The 41st ANZAAS Congress was held in Adelaide on 18 to 22 August 1969, and the 42nd Congress will be held in Port Moresby, 17 to 21 August 1970.

The ANZAAS Central Office is in Sydney and Divisions are operating in both New South Wales and Western Australia.

Other scientific societies

The Linnean Society of New South Wales, with headquarters in Sydney, was founded in 1874 for 'the cultivation and study of the science of natural history in all its branches'. Sir William Macleay, who died in 1891, during his lifetime and by his will endowed the Society to the amount of \$134,000, which has been increased by investment to approximately \$260,000. The objects of the Society are achieved by holding meetings, by publishing proceedings, by maintaining a library, and by offering research fellowships. The Society publishes annual volumes of the proceedings, issued in three parts, in which are printed papers read at the general meetings. Ninety-two volumes of such proceedings have been issued and the Society exchanges with about 300 kindred institutions and universities throughout the world. The library has some 19,000 volumes. The Society offers annually to graduates of the University of Sydney, who are members of the Society and resident in New South Wales, a research fellowship (Linnean Macleay Fellowship) in various branches of natural history. The membership at the end of 1968 was 307.

The British Astronomical Society has a branch in Sydney, and in each of the States there is a branch of the Australian Medical Association.

There are more than 200 other learned societies devoted to the study of particular sciences. Some of these, including the Royal Australian Chemical Institute and the Institution of Engineers, Australia, are qualifying bodies, admission to which is by qualification only. Others, such as the Institute of Food Technologists, are open to any interested person. Some societies, such as the Australian Biochemical Society, have annual symposia of a very high standard. A great many of these bodies publish appropriate journals.

